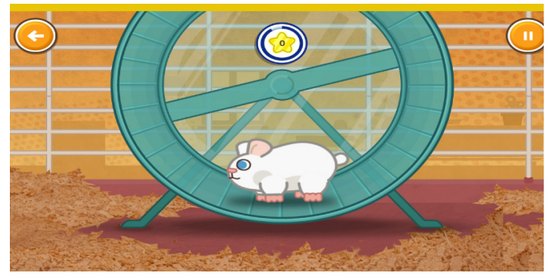
Bear With Me

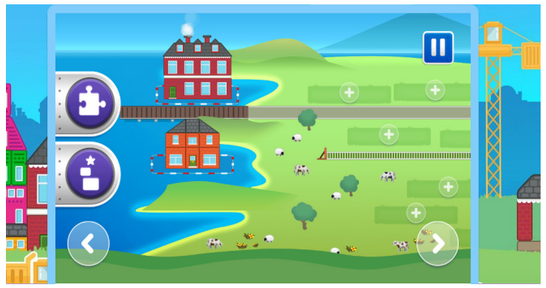
Emily Stringer

Research

My Pet and me

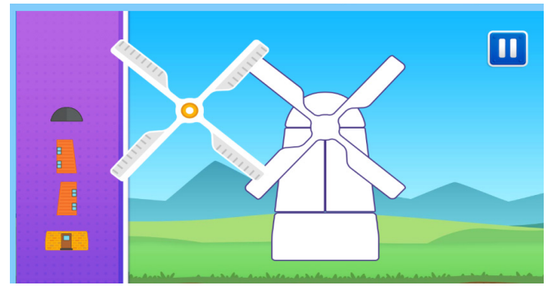
This game has a very simple appearance. The premise involves adopting either a kitten or a hamster and looking after it. The game consists of a main screen where you can see your pet with very simple stats, but then bulks out with mini games to raise said stats. The game teaches the joys of keeping a pet as well as responsibility in the way you have to take care of the pet. There are also





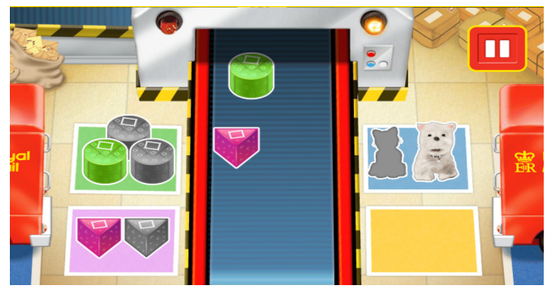
Get building

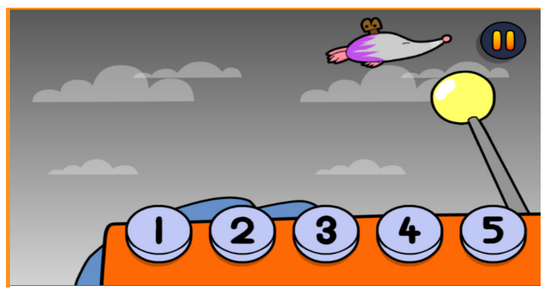
Again, this game has a very simple appearance. The aim of the game is to make buildings in order to fill a town. The player can choose to either building their own using a myriad of shapes, or to build a building from a drag and drop puzzle. This helps children learn shapes and how they fit together to create objects and buildings. The game has a very bright and varied colour-scheme making it interesting and appealing to younger children. The controls are also simple since it just uses the



Pat's parcel sort

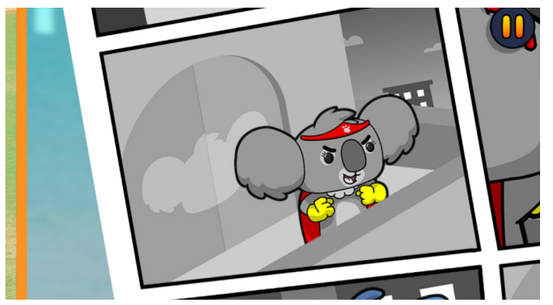
This game has a simple premise, put the correct item that comes down the conveyer belt in the correct outline. The parcels are all different shapes and are all colour coded in order to help the player. This teaches children how to sort and to recognise colours and shapes. The game is once again very bright and friendly with recognisable characters.





Flying moles of mischief

This game presents itself in a comic book style, with the intro cut-scene consisting of scene shown within a comic book. The game itself is simple and involves selecting the right number of enemies on screen in order to turn them into good guys. The game helps children with counting as the aim of the game is to select the right number. It's presented in a fun, interesting way with bright colours and characters.



Teletubbies day out

This game revolves around the idea that the Teletubbies have gone on a day out on a train and the player has to make sure they day goes smoothly. There are mini challenges along the way as you follow the train, like placing shapes in the right place to create a bridge and opening presents. These help teach children about shapes and how they fit together. Completing these tasks gradually fill the screen with custard so show how far along you are. There are also rewards towards the end of the game when you get decorate butterflies, ensuring that the game is fun. If the game is left idle when on a mini game, an arrow will appear to give a hint as to what to do, which could be helpful with children. The game

Illustrators

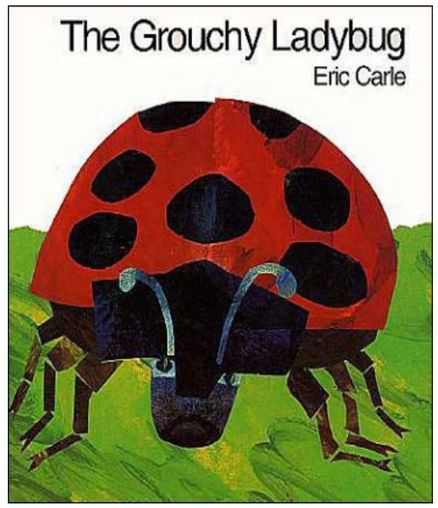
Lola's rabbit made a squeaking noise ...

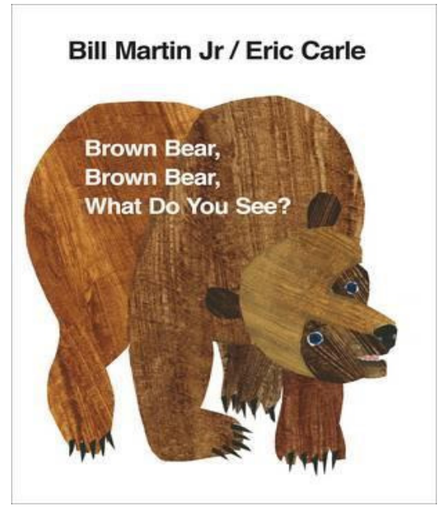
Lauren Child

Lauren Child is an author and illustrator best known for the "Charlie and Lola" series. She uses a plethora of techniques to create her artwork including collage, material and magazine cuttings and watercolours. This creates a distinct, unique style.

Eric Carle

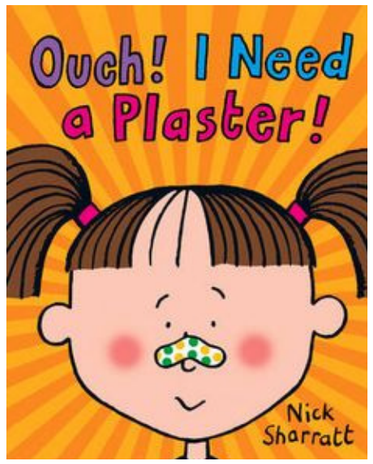
Eric Carle is an artist best known for the book "The very hungry caterpillar".He has a very distinct and recognisable style which he achieves via a collaging technique. He uses hand pained paper, which he cuts and layer to create the images. This gives the illusion of a texture and ensures the pictures are bright and colourful. His books all have the same theme of animals and nature and through the bright colours he teaches the reader about nature.

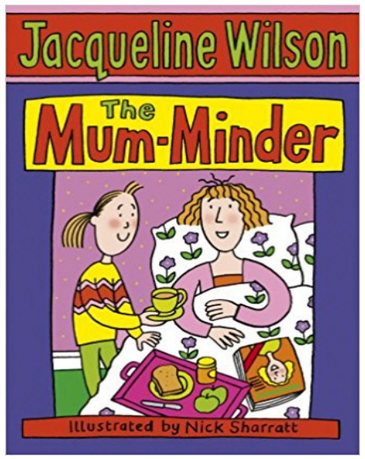




Nick Sharratt

Nick Sharrat is an illustrator most well known for his work with Jacqueline Wilson books especially Tracy beaker. He has also written his own books for a younger audience. His characters all have a distinct style with small eyes and an overall cartoonish appearance. They are all coloured with block colours making them stand out to younger audiences.





Quentin Blake

Quentin Blake was the illustrator for Roald Dahl and drew many images for his books. He has a very sketchy style and the drawings are always with bumpy lines and noe perfect. The colour he uses is very much smudgy to an aspect as it is always with multiple layers and not just plain colour. It is usually textured to an extent and sometimes not coloured to the line, this is to appeal to the style of the kids to make it look similar to the drawings produced by the kids.

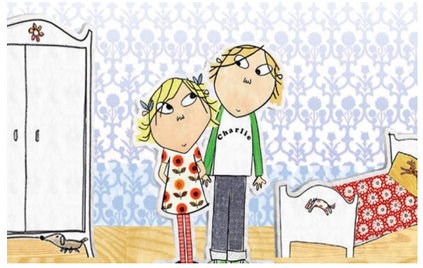
Style research

Cel shading

Cel shading is a technique in which 3D models are rendered to simulate cartoon/comic art and is characterised by prominent outlines and block colour in order to appear 2 dimensional.

Collage

Collage involves collecting various materials likes fabric and paper and compiling them to create an image or design. This can create a very messy but funny look, this style is great for childrens games



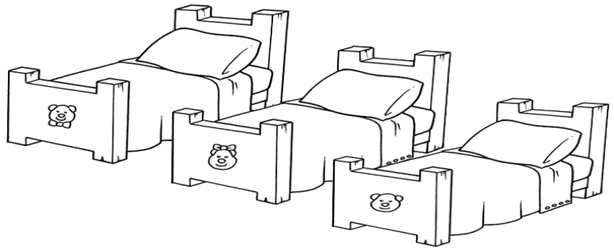
Pixel

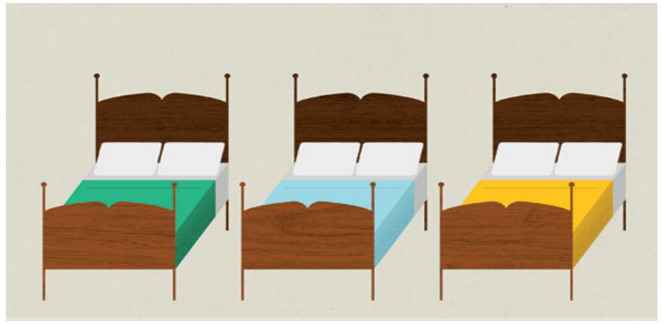
Pixel art is a technique where individual pixels are combined in order to make an image. In video games the pixel style originated early on when system capabilities were much lower forcing games to have either 2D pixel or vector graphics

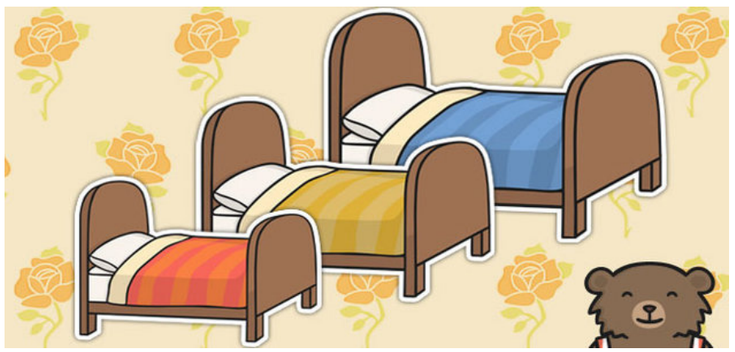
Realistic

A Realistic style often uses extremely high resolution textures and also very high detailed models to create a lifelike visuals, this is very intensive but looks incredible.

My Level







"Next Goldilocks went upstairs, where she found three beds. There was a great big bed, a middle-sized bed and a tiny little bed. By now she was feeling rather tired. so she climbed into the big bed and lay down. The big bed was very hard and far too big. Then she tried the middle-sized bed, but that was far too soft. so she climbed into the tiny little bed. It was neither too hard nor too soft. In fact, it felt just right, all cosy and warm. and in no time at all Goldilocks fell fast asleep."

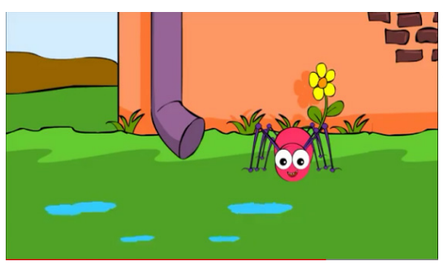
Fairy tale research

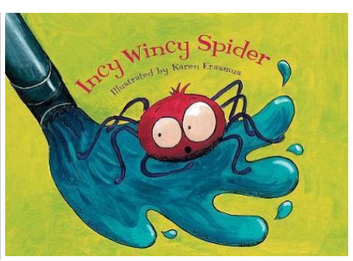
The moral of Incy Wincy Spider is to keep trying even in you fall down

Incy Wincy spider climbing up the spout
Down came the rain and washed the spider out
Out came the sun and dried up all the rain
Now Incy Wincy spider went up the spout again!

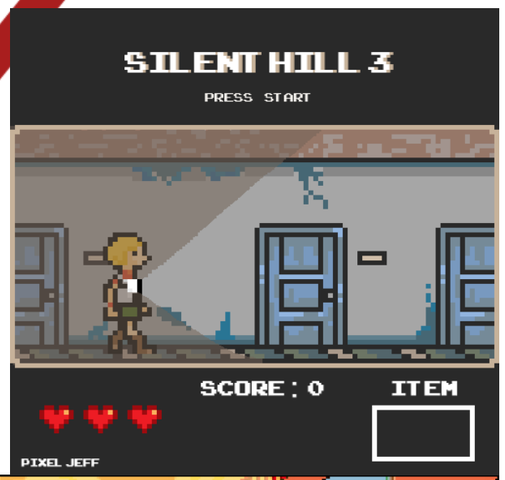
The moral of Goldilocks is to respect other's privacy and

Once upon a time, there was a little girl named Goldilocks. She went for a walk in the forest. Pretty soon, she came upon a house. She knocked and, when no one answered, she walked right in.
At the table in the kitchen, there were three bowls of porridge. Goldilocks was hungry. She tasted the porridge from the first bowl. "This porridge is too hot!" she exclaimed. So, she tasted the porridge from the second bowl "This porridge is too cold," she said So, she tasted the last bowl of porridge. "Ahhh, this porridge is just right," she said happily and she ate it all up. After she'd eaten the three bears' breakfasts she decided she was feeling a little tired. So, she walked into the living room where she saw three chairs. Goldilocks sat in the first chair to rest her feet. This chair is too big!" she exclaimed. So she sat in the second chair. "This chair is too big, too!" she whined. So she tried the last and smallest chair. "Ahhh, this chair is just right," she sighed. But just as she settled down into the chair to rest, it broke into pieces!
Goldilocks was very tired by this time, so she went upstairs to the bedroom. She lay down in the first bed, but it was too hard. Then she lay in the second bed, but it was too soft. Then she lay down in the third bed and it was just right. Goldilocks fell asleep. As she was sleeping, the three bears came home. "Someone's been eating my porridge," growled the Papa bear. "Someone's been eating my porridge," said the Mama bear. "Someone's been eating my porridge and they ate it all up!" cried the Baby bear. "Someone's been sitting in my chair," growled the Papa bear. "Someone's been sitting in my chair," said the Mama bear. "Someone's been sitting in my chair and they've broken it all to pieces," cried the Baby bear. They decided to look around some more and when they got upstairs to the bedroom, Papa bear growled, "Someone's been sleeping in my bed," "Someone's been sleeping in my bed, too" said the Mama bear "Someone's been sleeping in my bed and she's still there!" exclaimed Baby bear. Just then, Goldilocks woke up and saw the three bears. She screamed, "Help!" And she jumped up and ran out of the room. Goldilocks ran down the stairs, opened the door, and ran away into the forest. And she never returned to the home of the three bears





Pixel artist research



Pixel Jeff.
Pixel Jeff is a pixel artist from Taiwan. He takes popular TV and films and creates pixel GIFs showcasing them. He was inspired by other pixel artists and how the art style was “simple but amazing”.

His art is vibrant and detailed and shows the full potential of pixel art.

Initial ideas

1. Stairs

Teaching - Literacy

Spell words to finish a sentence to progress up the chair to reach the top.

2. Porridge

Teaching - Science

Use the thermometer to measure the temperature to see whether its edible.

3. Beds

Teaching - Maths

She has to count sheep and then say how many sheep she counted before moving onto the next bed.

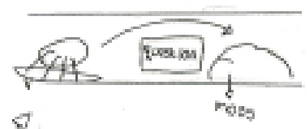
4. Escape

Teaching - Final Quiz

Goldilocks has to run away from the 3 bears, asking questions from all aspects to jump over obstacles.

1. Incy Climbs Pipe

Answer questions to avoid rain drops



2. Incy gets Wet

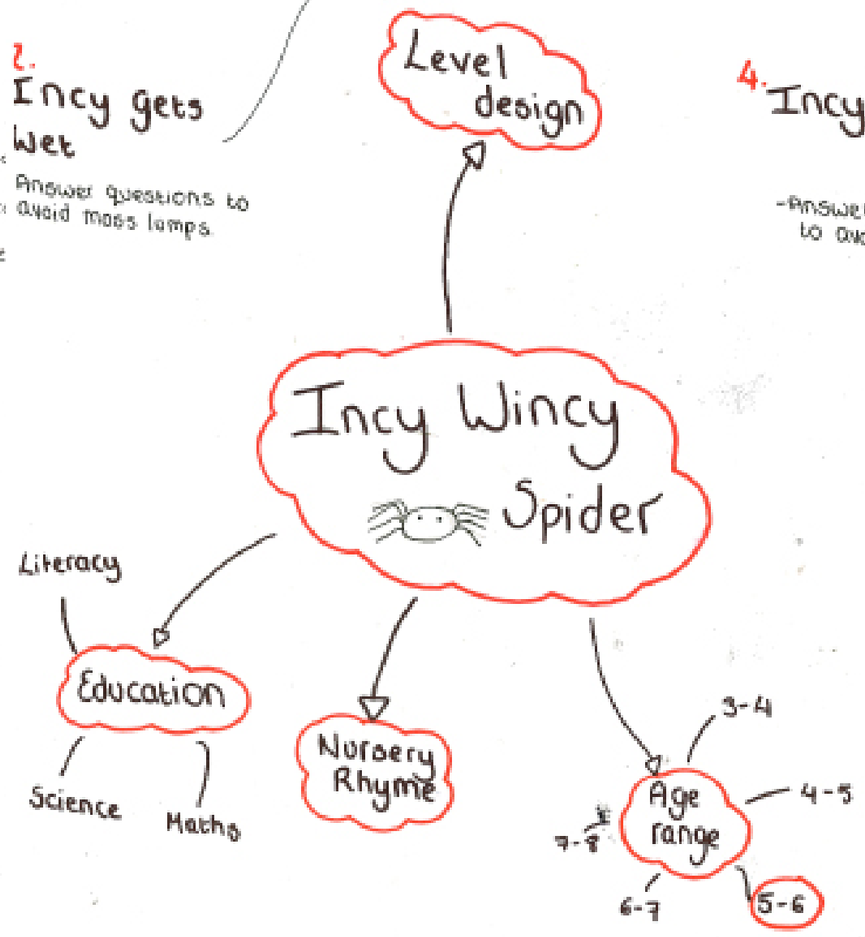
Answer questions to avoid moss lamps

3. Incy dries in the Sun

- Answer questions to collect sun rays.

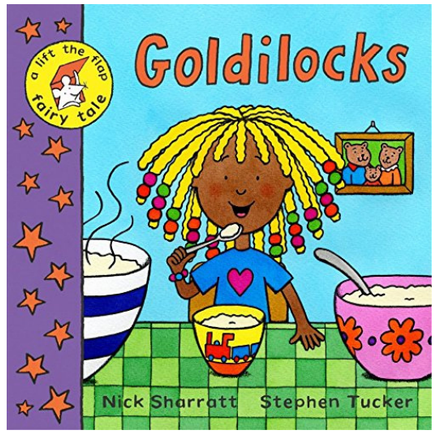
4. Incy Climbs back up

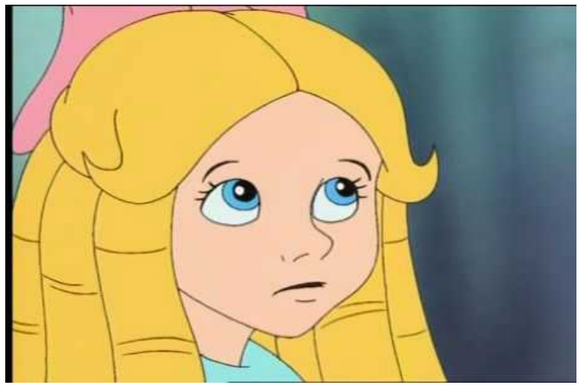
-Answers questions to avoid leaves.

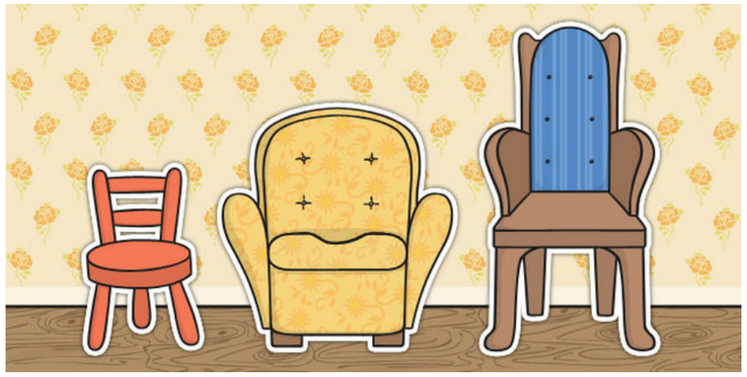


Moodboard


Kiddo Stories
Goldilocks and the Three Bears


a lift the flap fairy tale
Goldilocks
Nick Sharratt Stephen Tucker

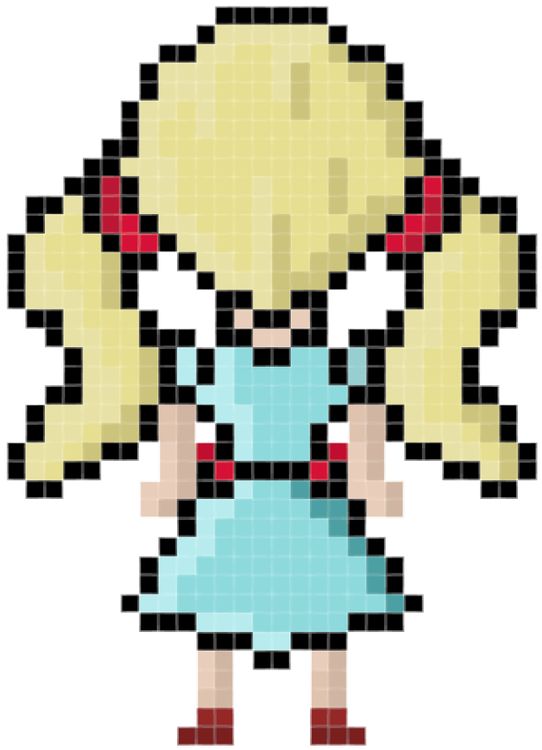




Moodboard Beds

Style sheet

Adam Westwood



We have chosen the style of Pixel Art for our art style of the game as we wanted something that would be easily replicable and that we could have an easy standard to it to follow. We also had not drawn in this style before so it would be a new thing for all of us, putting us all at the same level of quality as each other. For this we were mostly inspired by terraria as it works in a pixel art style and also included a similar size pixels to what we wanted to achieve, we looked into minecraft too but decided that the pixel size of minecraft was too large for us.

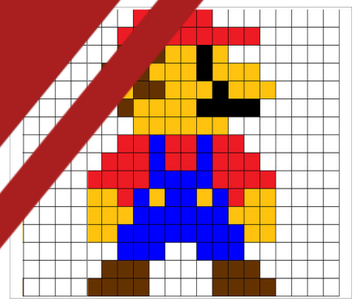
We are going to follow a standard that we will follow so that the pixel art is all of similar size on the game, we'll be working off the idea of roughly 25 pixels for drawing items that are 1 foot tall and using that scale. For example if an object was 2 feet tall then the drawing of this would be 50 pixels tall. We will also be going off the idea of 695 pixels by 450 pixels for the background.

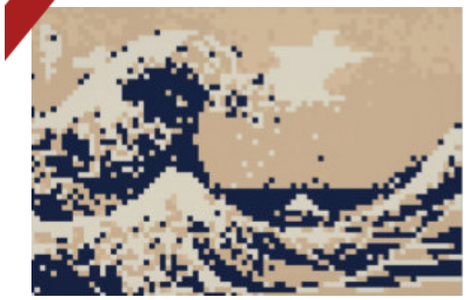
We will also need to include some more traditional aspects to the game so we will include some mixed media in the designs. We will use this in the way to make it still look like pixel art by importing the texture while the Photoshop file is still very small. Then we can size this up to make the quality not poor when imported into unity. Although the full texture will not be visible, it will still be a mixed media piece and will look more like the actual image than if we had to create this ourselves.

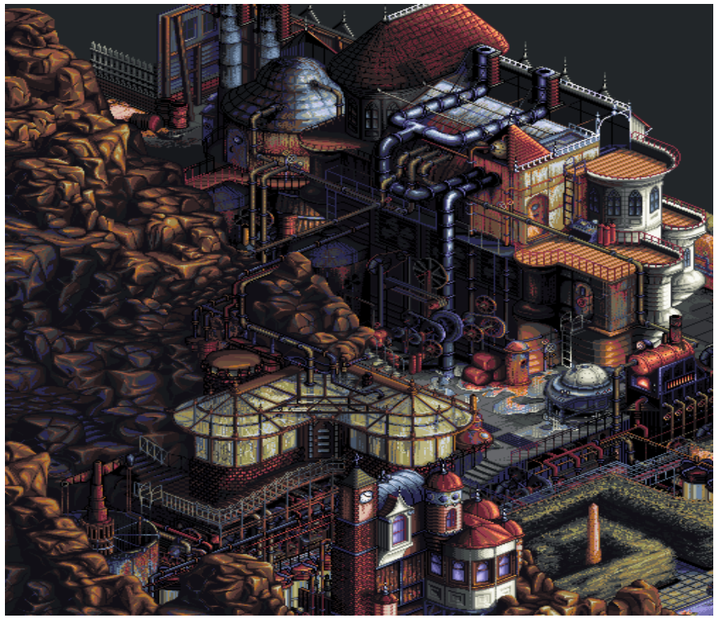
Colour palettes

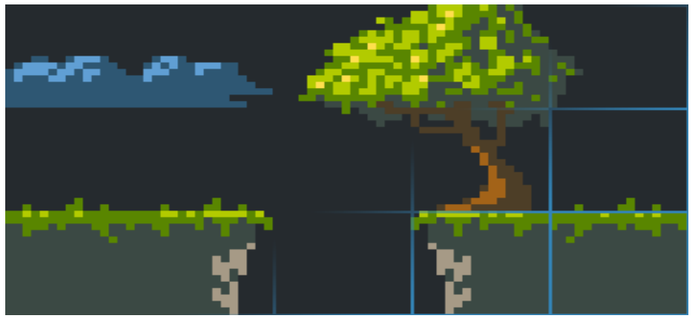
Adam Westwood

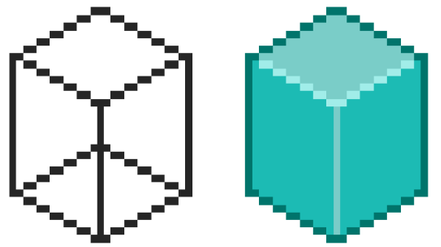
Pixel Art

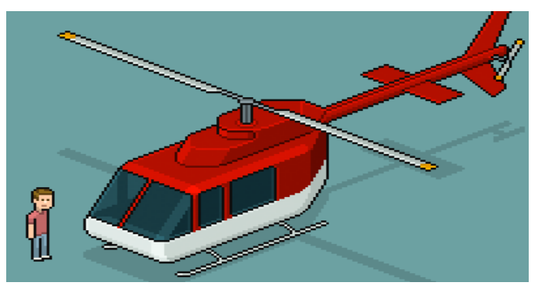


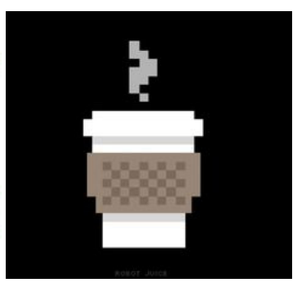


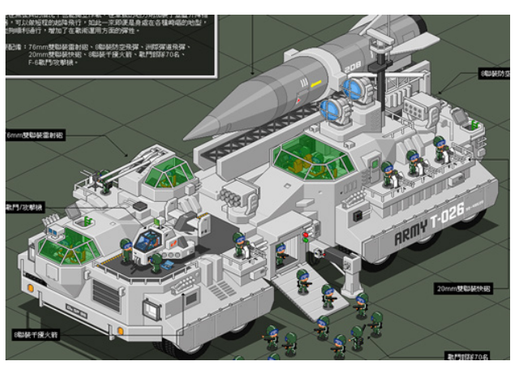


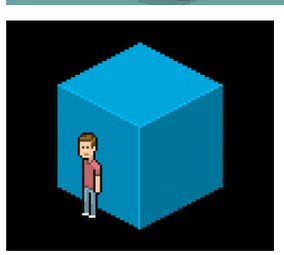




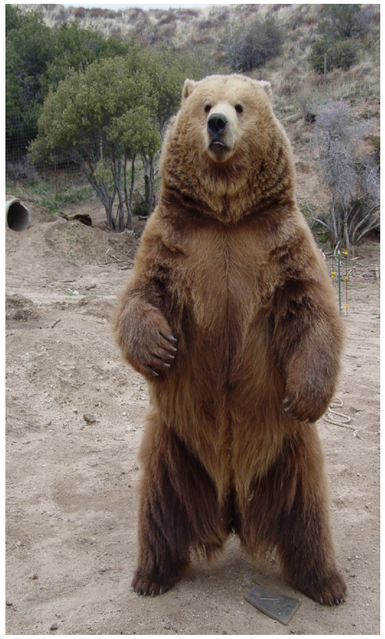


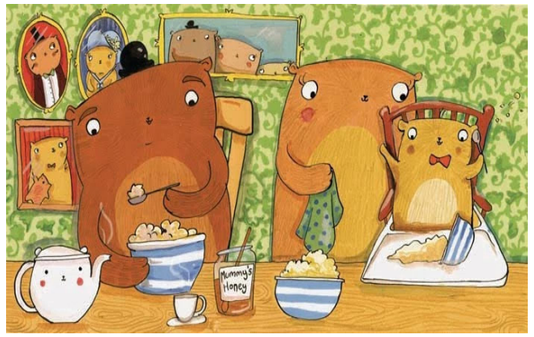


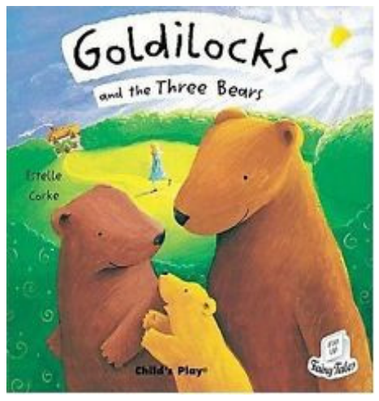




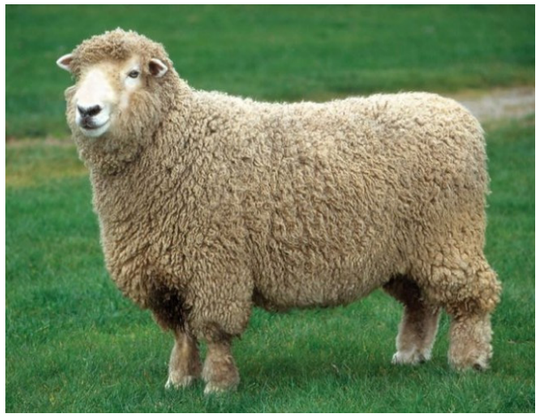
Moodboard- Bears

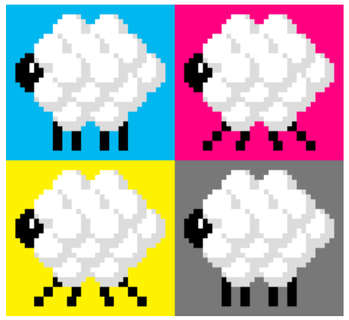


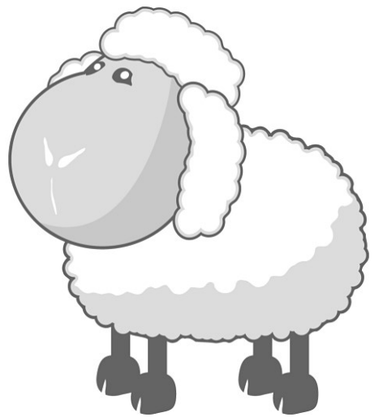




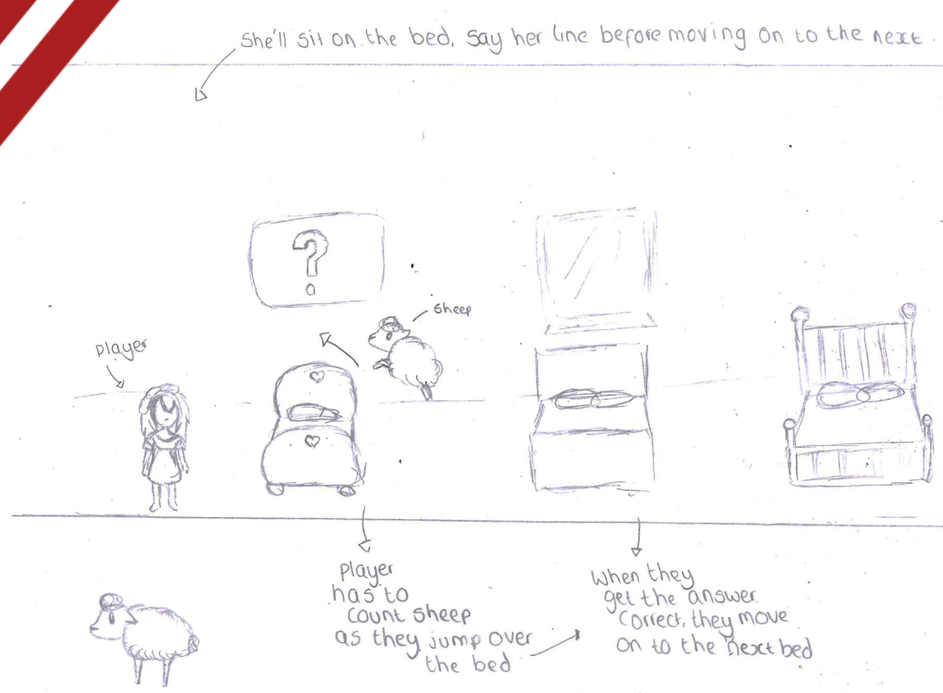
Moodboard- Sheep

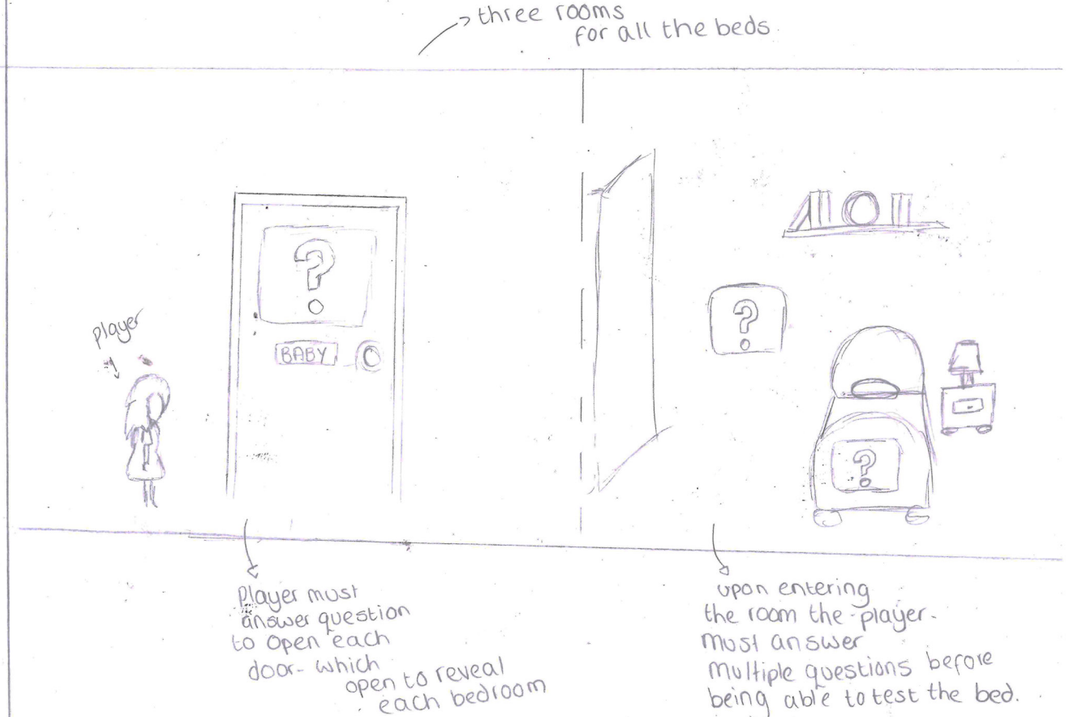


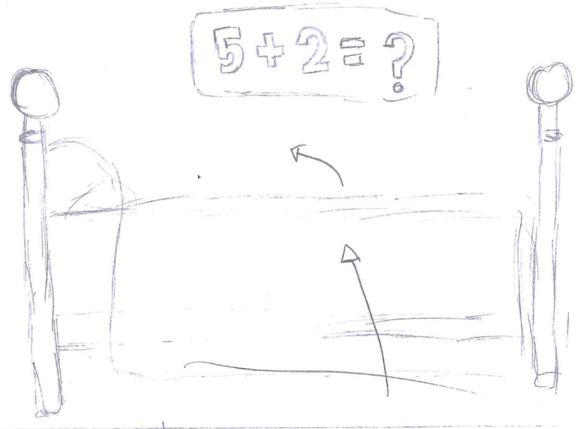


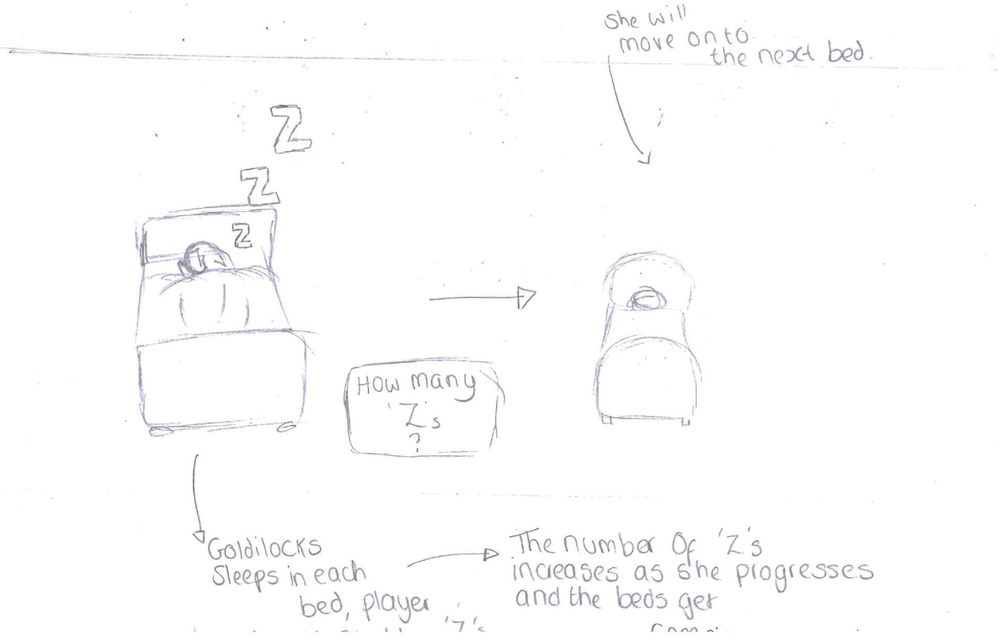


Initial Level designs

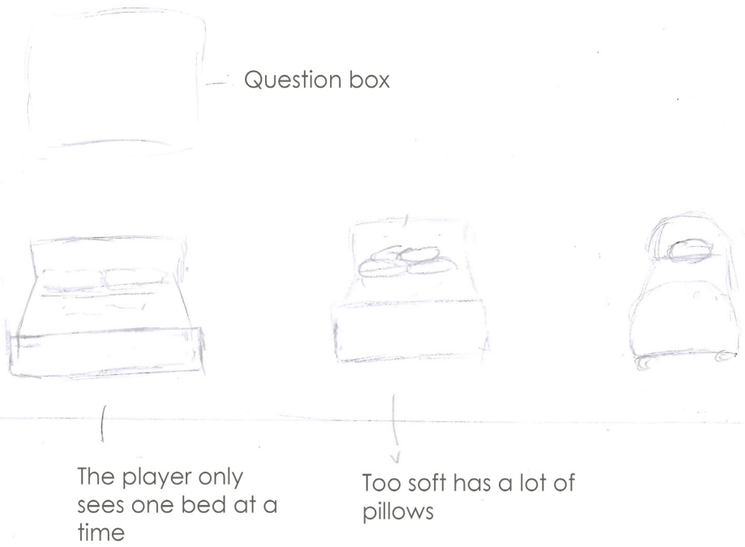


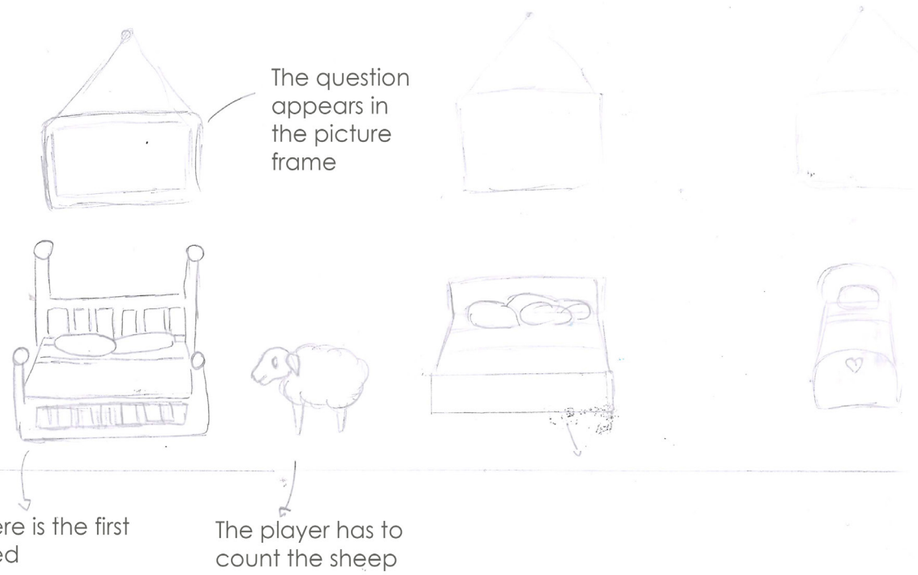


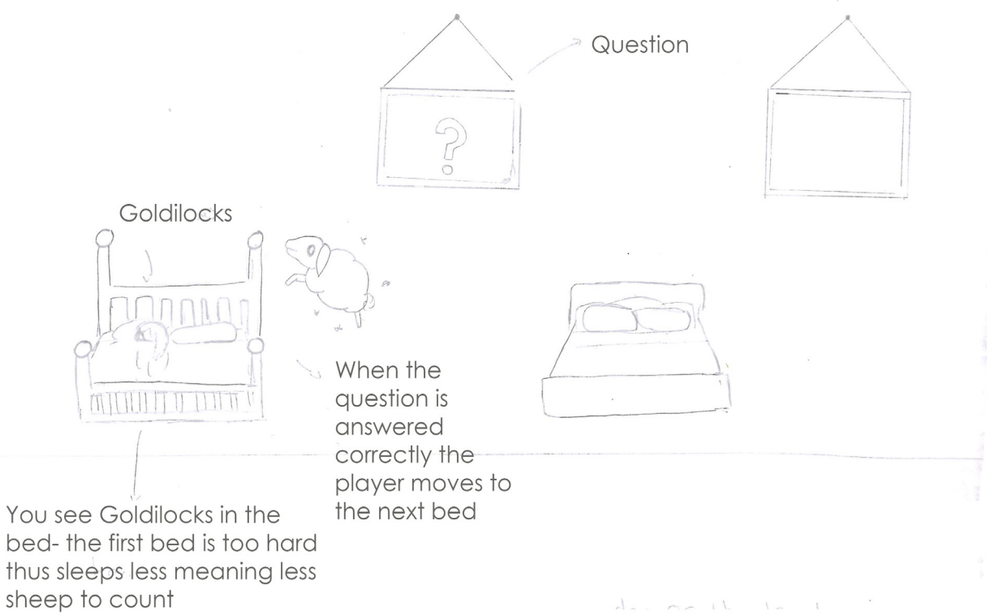




Level Development

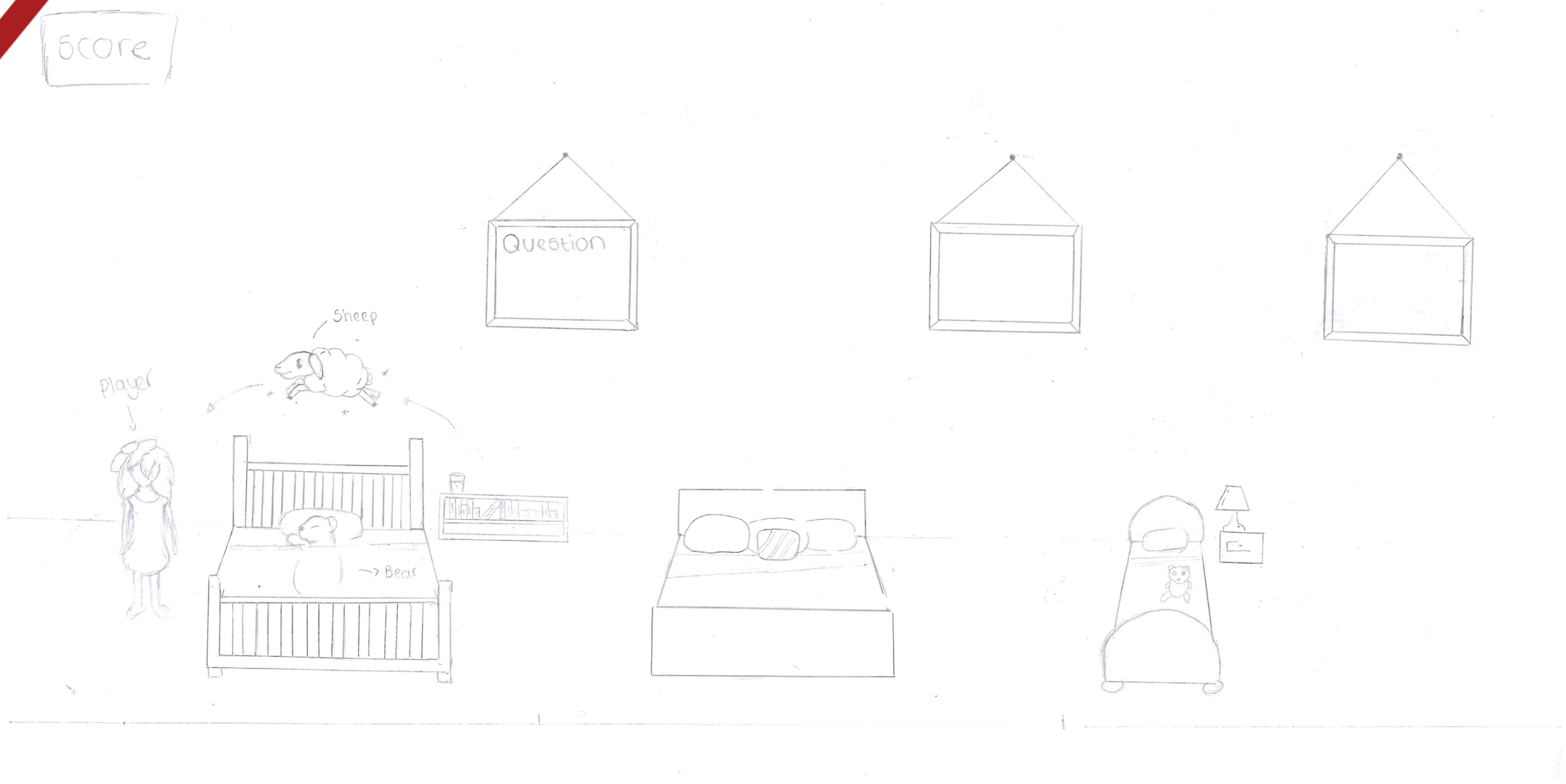






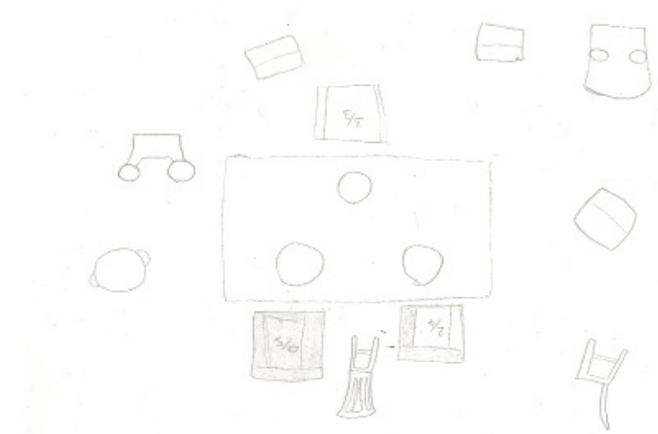
Final level design

My level is set in the bedroom of the bear's house. Goldilocks will test each bed out and whilst she is trying to sleep the play will have to count the number of sheep that jump over the bed. The number of sheep increase as the beds get comfier.

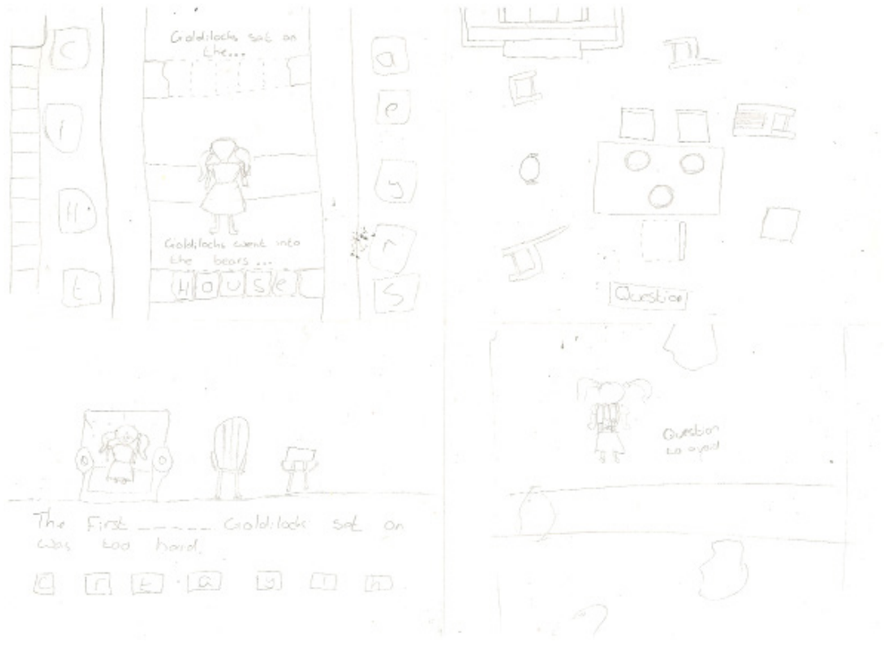


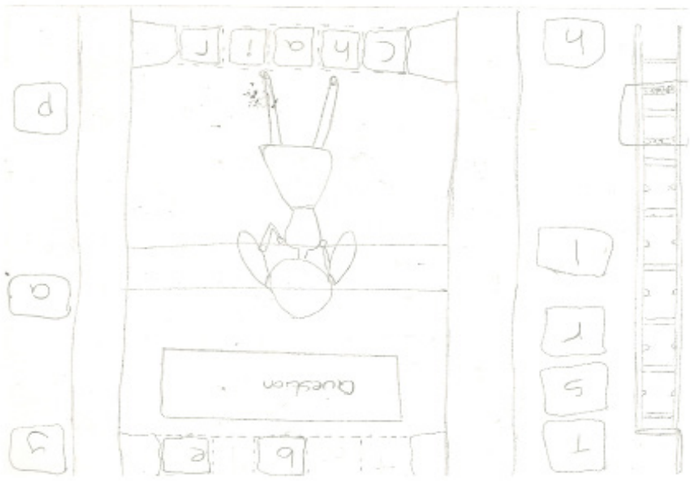
We then updated our ideas so that Goldilocks is helping the bears, so I redesigned my level accordingly.

Adam Westwood

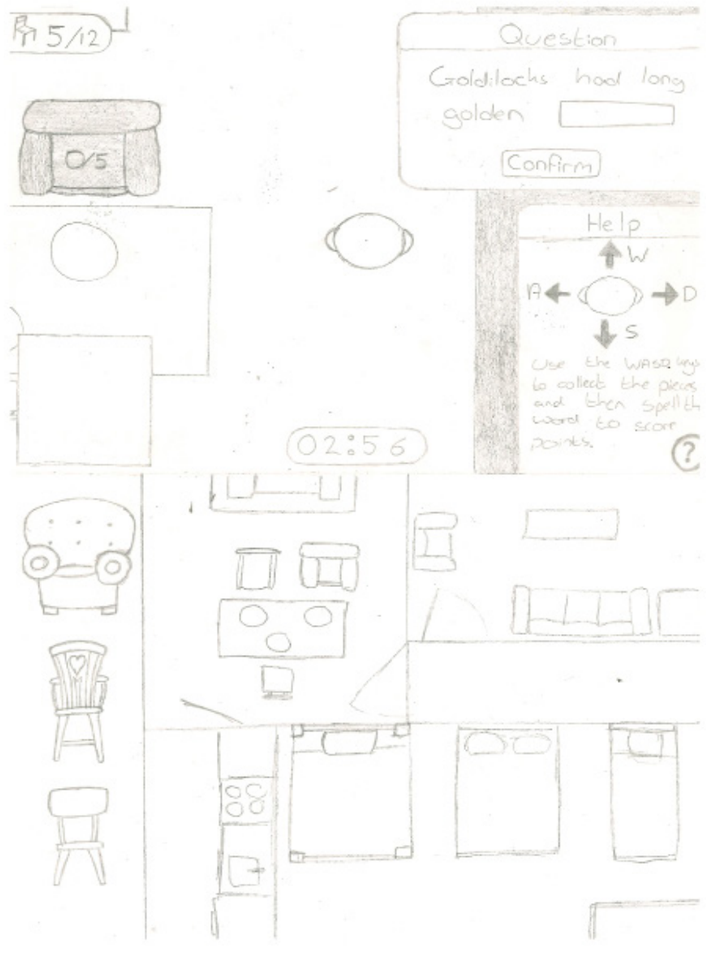


Initial



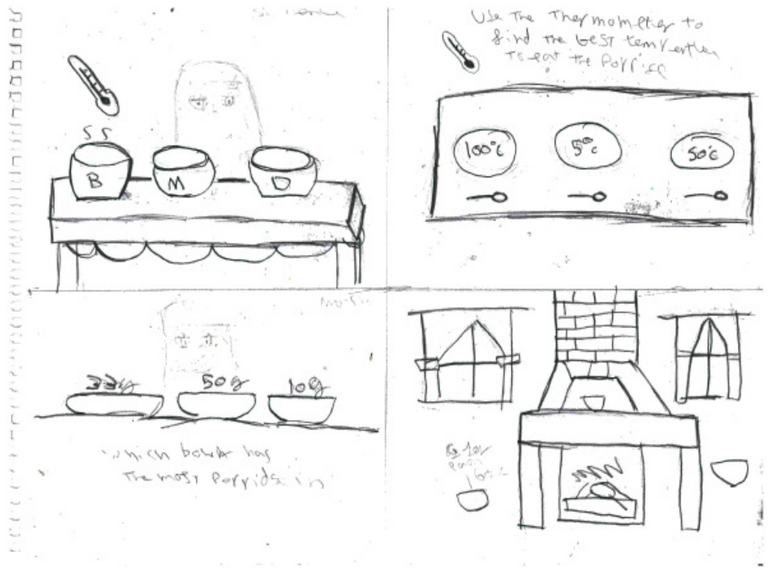


Developments

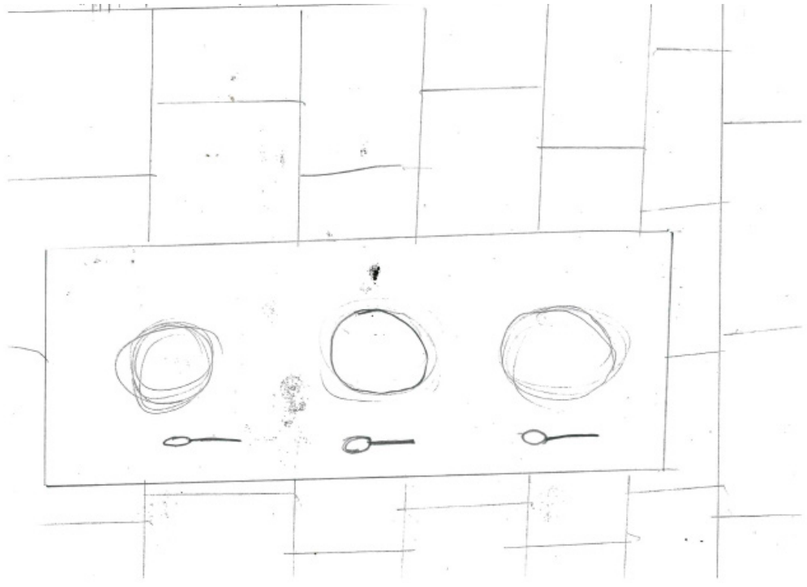


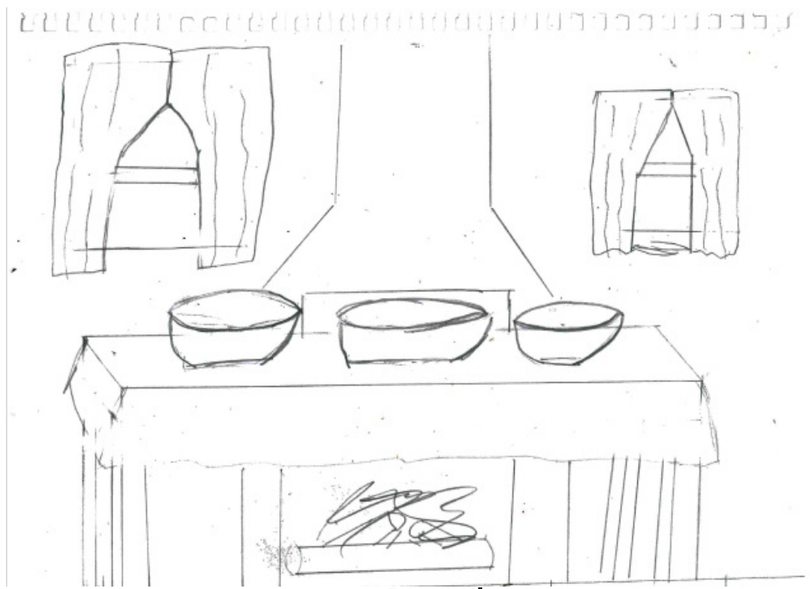
Final

Isaac Murphy

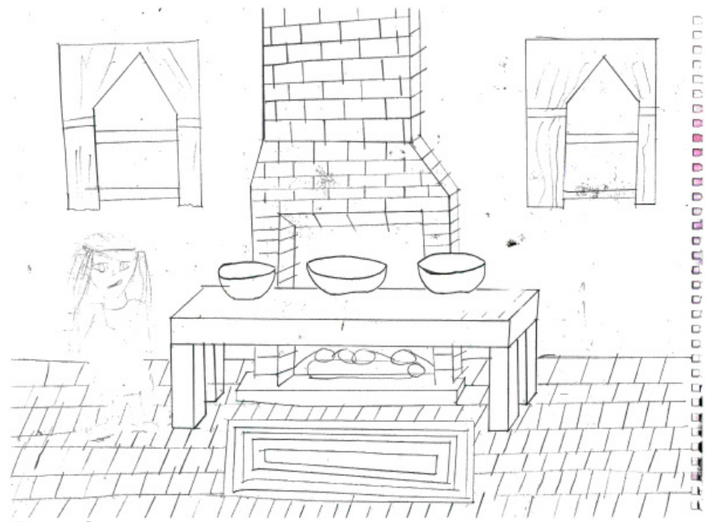


Initial



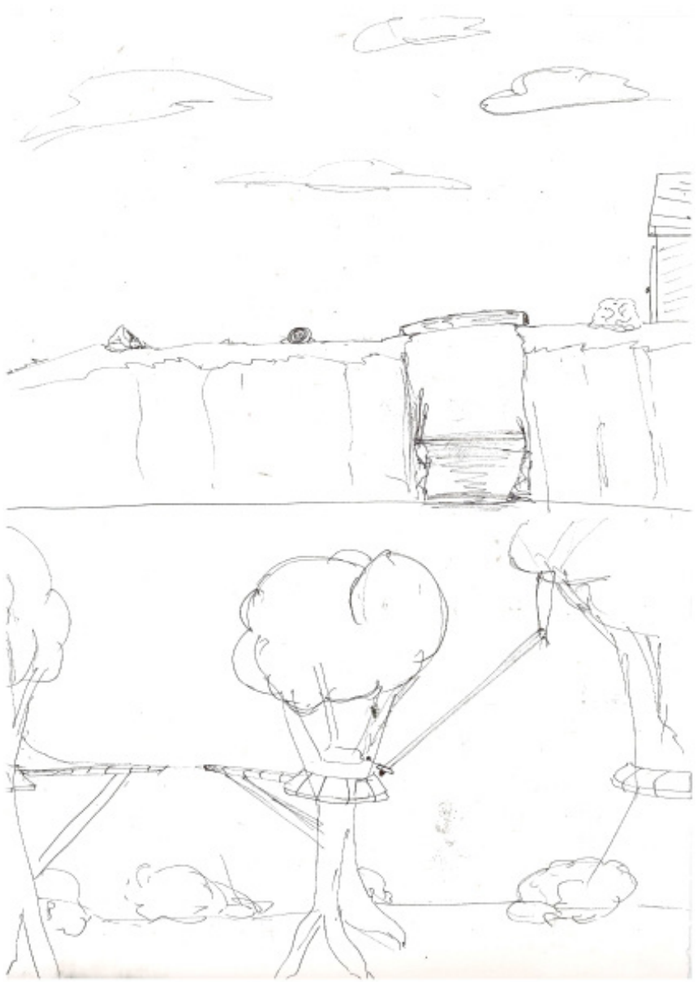


Developments

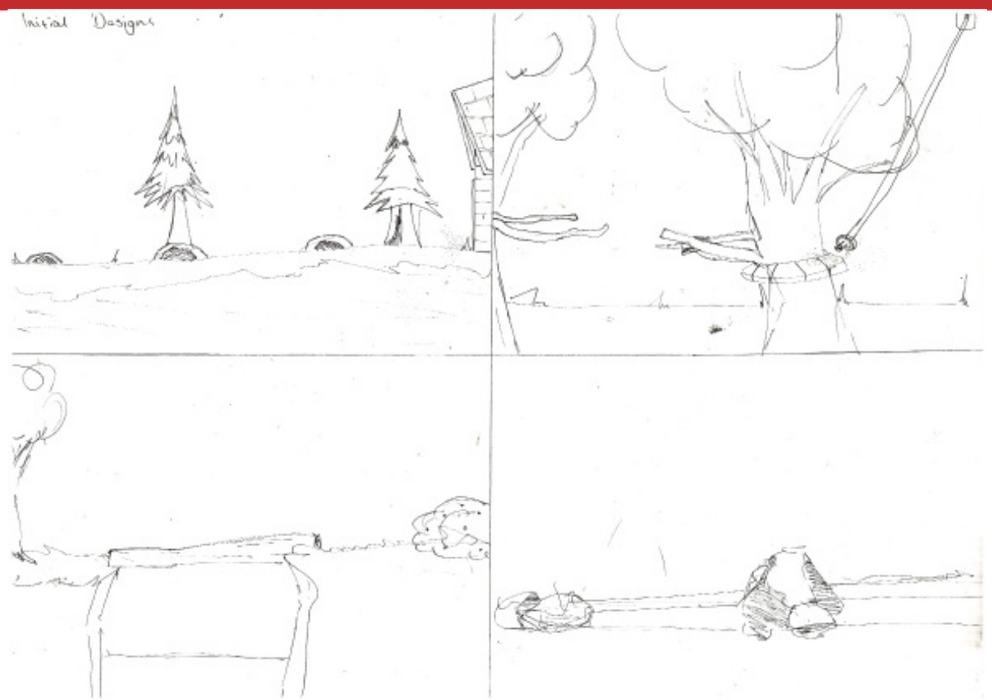


Final

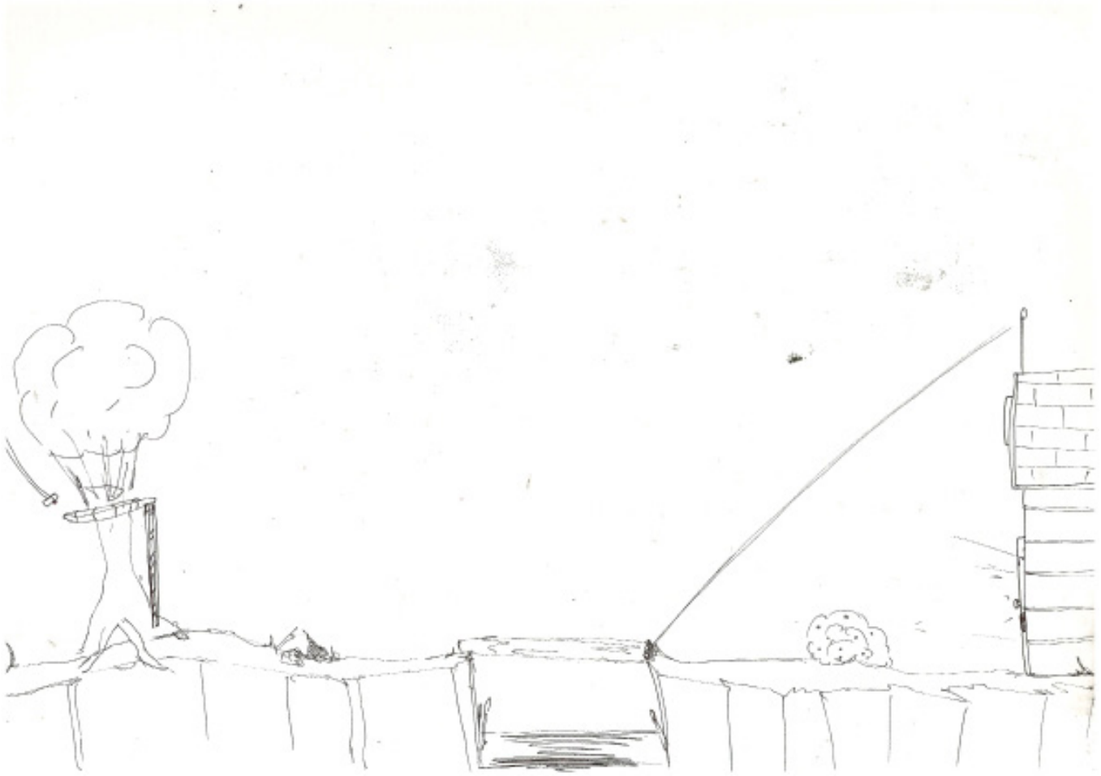
Jamie McFarlane



Developments



Final



Initial

Level description

-Goldilocks and the three bears
-Maths- addition or counting
- My level is the third out of four
- My level involves the bed scene in the story of Goldilocks, before this there is a level orientated around porridge and one around building chairs, which have themes of maths and literacy.

- My level takes place in the bedroom, which is on the same floor as the previous rooms. Like in the fairy tale, there are three beds, one she finds too hard, one she finds too soft and one that's just right. The player uses the left arrow key to move left where they are confronted by the first bed. Goldilocks climbs into the bed where the player has to count a number of sheep and then type in the answer in order to progress to the next bed. With each bed the longer she tries to sleep and the more sheep there are to count, there could also be an addition element to make the game more challenging for our target audience of 5-6 year olds. When the sheep have been counted on the last bed Goldilocks falls asleep and there is a cut scene to the next level. There isn't a score as such since the player has to answer the questions to progress rather than there being a variable. The number of sheep should vary with each play-through, but stay within a range appropriate for the bed. The player only sees a single bed on screen until they are able to move on to the next, the sheep appear from the left side of the screen, where the player can't see. The room itself is decorated with a myriad of objects on shelves to reinforce the idea of a bedroom, each bed has items themed to the specific bear who it belongs to and each bed is differently designed to reflect how Goldilocks feels. The first bed is has iron posts and looks hard and uncomfortable, the second is a more modern bed with too many pillows on it and the third is a traditional arched single bed with a single pillow. The question they have to answer will displayed in a picture frame above the bed in order to blend into the environment, before the question is displayed it could be a family picture of the bears or a landscape. There will also be some sort of indicator as to why Goldilocks can't sleep in the bed, for example a thought bubble that says "No, this one's too hard".
There will be a pause menu where the player can return to the main menu or change the settings. There could be a timer implemented into the level to add to the difficulty or there could be three images of beds that disappear when the player manages to get into to show them how many beds are left and so they know when they're in the last bed- like a counter.

I then changed the level slightly. I scrapped the idea of having sheep in favour of having collectable 'Z's. When the player collects these, they have to answer a question in order to be able to move again and progress.

Questions

Number – addition and subtraction

Statutory requirements

Pupils should be taught to:

- read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ☐ – 9.

Number – multiplication and division

Statutory requirements

Pupils should be taught to:

- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

It was decided that my level would involve maths, so I looked at the curriculum in order to find out what 5-6 (Year one)are learning. Opposite are screenshots of these documents. My level has elements of addition and subtraction.

Below are the sums I have chosen. I decided to change the operator with each set of questions. The first is addition, second is subtraction and the last is a mix of the two. I decided to make the last harder, bringing in numbers over ten.

7+9 2+8 5+6 10-3 8-4 9-6 16+4 12+5 17-9

Game design sheet

Adam Westwood

Game Title:
Bear With Me

Format (Perspective and Platform):
Our games format is a 2D perspective game with one element of top down perspective, we chose this style as it was in the brief for us to create a 2D game and looking at what the children are used to playing, we decided this was the way they would understand the best. The top down element was chosen by one of our team members to give some diversity and unique nature to the game, which also worked best with one of his most favourite designs.

Genre:
The objective of this project is to create an educational game for a selected age group of children, the ages we chose were 5-6. This required us to teach them Maths and/or English with questions appropriate for their age group, with the questions getting increasingly more difficult but not exceeding what they are capable of. The mechanics of the game have to be relatively simple as not to confuse the children and so that it is not so difficult they cannot play the game, but while still giving them a challenge in order to progress their skills.

Market Research:
For us to understand what is appropriate for a children's game, we he had to do some research by playing a selection of games already created for that audience from well known and respected children's websites. As well as this, we also watched a selection of children television programs from sources such as Cbeebies, CBBC, Citv and Cartoon network to see what styles were best suiteed towards children. We took inspiration and design ideas from these sources and thought of ways on how we could incorporate them into our game and our individual levels.

Target Audience:
Our target audience is children aged 5 to 6 in the key stage 1 group of the UK education system. We took great care in reading through and incorporating the requirements from the governments educational requirement criteria. With our chosen age group being year one and just starting to learn basic sums including simple multiplication, we had to make our questions challenging to keep them interested but not so much that they could not answer them. This was a big part of our game as it gave us the backbone of the whole idea, of what we could and could not include etc, even down to the ideas of how the game mechanics would work.

Game design sheet

Adam Westwood

Language:

The language we have chosen to produce our game in is English, as it is our native language and with the short space of time we have to create our game, adding more languages would be too difficult. Yet if we did have more time to complete this project we would consider translating our questions into other languages in order to have a larger market. This would enable us to reach further around the globe in our game however we would need to not only translate the questions but also make new ones as every countries curriculum is different, so the current questions may not be suitable for the country.

Territories:

Our game will be released for the UK and possibly US and Canadian territory's as they speak and understand the chosen language well. However due to us not knowing the age limits/requirements for the other countries our levels and questions may end up being either too easy or too difficult for their children. Generally though the US teaches similar things in the core subjects at similar ages to us, meaning that we do not need to particularly adapt for them, especially as the questions are about basic Maths and English. If there were to be any geography questions for example, we would then need to look into changing the questions as the geography in the US will be a lot different to what we learn in the UK.

Objective:

The objectives within our game will obviously vary with each level as the game has been developed so the user will face different challenges along the way and objectives that will keep them engaged. The first level will require the child to fix all of the chairs whereas the second will be to collect the porridge bowls. Then moving onto the third level the child will need to collect the Zs in order to work out the most comfortable bed before moving onto the

Theme:

Our chosen theme for our game is Goldilocks and the three bears as when we looked into what kind of game we would like, we wanted to tell a story to the player as they progressed through the game. We also then chose the art style of pixel art as this was a simple yet effective style. Looking at some other children's games we noticed pixel art was popular in some and it was also easy to have a consistency to it. As none of us had used a pixel art style before, we could use this to our advantage meaning we were all starting from scratch and not one level would stand out for being either good or bad, we could replicate a consistency throughout the level using a style sheet which included the details about things such as a standardised size.

Game design sheet

Adam Westwood

Structure:

The way we structured our game was to have it flowing to progress the story. We were going to have 4 levels that when played next to each other in order will tell our own version of the story of Goldilocks. We also wanted the player to select a level to play on the start menu so we implemented a level selection page in the main menu. The first level (presented in a top down view) is about the chairs of the story and Goldilocks will need to help the bears to find the pieces to the chairs and then by answering spelling questions, she will then be able to fix them and get all the pieces back to where they should be. The level will be completed when all of the chairs have been fully repaired. For the second level (presented in a side view), Goldilocks must move forwards in order to collect the porridge bowls, however she needs to answer the 3 questions for each porridge bowl before she is able to pick it up. This level will be completed when you have answered all of the questions from each porridge bowl and then the game will progress to level 3. The third level is based around the bedroom part of the story and in this level Goldilocks needs to bounce on the beds of the bears in order to help baby bear find the most comfortable bed for baby bear. She needs to do this by collecting the Zs and answering questions. She needs to jump up to reach the Zs and then answer the questions before moving onto the final level. For the final level Goldilocks must chase the porridge monster by answering questions before she reaches him. Then you need to answer questions to fight the porridge monster and to kill it. The game is then complete when the level has been finished.

Features:

We will include a soundtrack to our game that will be playing in that background along with some of the other sounds we have. We also may include some future content of which the player can change the colour of Goldilocks' clothes or to add other items of clothing to the bears.

Characters:

The playable character of the game is goldilocks who in turn is the main protagonist. There are 4 other characters to the game; Daddy Bear, Mummy Bear, Baby Bear and the Porridge Monster (of which will be the main villain). The 3 bears are just background characters and will have no interaction with them from the player directly however the Porridge Monster will be a semi-interactable character as this will be needed to be defeated to beat the game.

Mechanics:

The controls for our game are simple and easy to follow as we needed to ensure this simplicity for our chosen age range. These controls just use

Game design sheet

Adam Westwood

that of the arrow keys and space bar of the keyboard as the only things needed to move Goldilocks on any level. Also the buttons on the menus will be used using the mouse pointer and there will be an aspect of typing needed from the player to answer the spelling questions on the first level. All of the levels involve a trigger mechanism to make the question appear which is achieved through either collecting an item or going through a collider box.

Story:

The story of our game is based originally off the story of Goldilocks and the Three Bears but to add a twist to it to make it our own, we made some changes that we think the children playing the game will enjoy. For the bears, we made them into friendly bears for our version which enabled us to play around with the idea of Goldilocks not being bad and breaking into the house but instead being there to help the bears to teach the children about helping out. We also then added the Porridge Monster to give the game a 'baddie'. All good stories and fairy tales have a bad guy or a villain that the main hero must defeat so we decided that we would add the Porridge Monster in to give out game just that.

Environment - where and when is it set?:

Our game is set in a forest somewhere in Germany in the present day. The game will be located in a remote part of the country which is why the bears use very old furniture and cutlery to eat from and they do not have any modern devices such as TVs etc. The first level will be set in the whole house, having to move through and find the pieces will help the children to get a concept of what the game is like and how the style of the old wooden house is. The second level is then set in the kitchen/dinning room, enabling the level to explore the porridge section of the story. This level is set in an angle against a wall that enables you to see the fireplace. The third level is then set in the bedroom, with a different floor to the rest of the house, this level includes lots of picture frames on the wall and some other furniture such as a bookcase. Finally the last level, as this is a chasing level it will be done outside the house. This level will be leading away from the house and along the path that we see Goldilocks walking in on the first cut-scene.

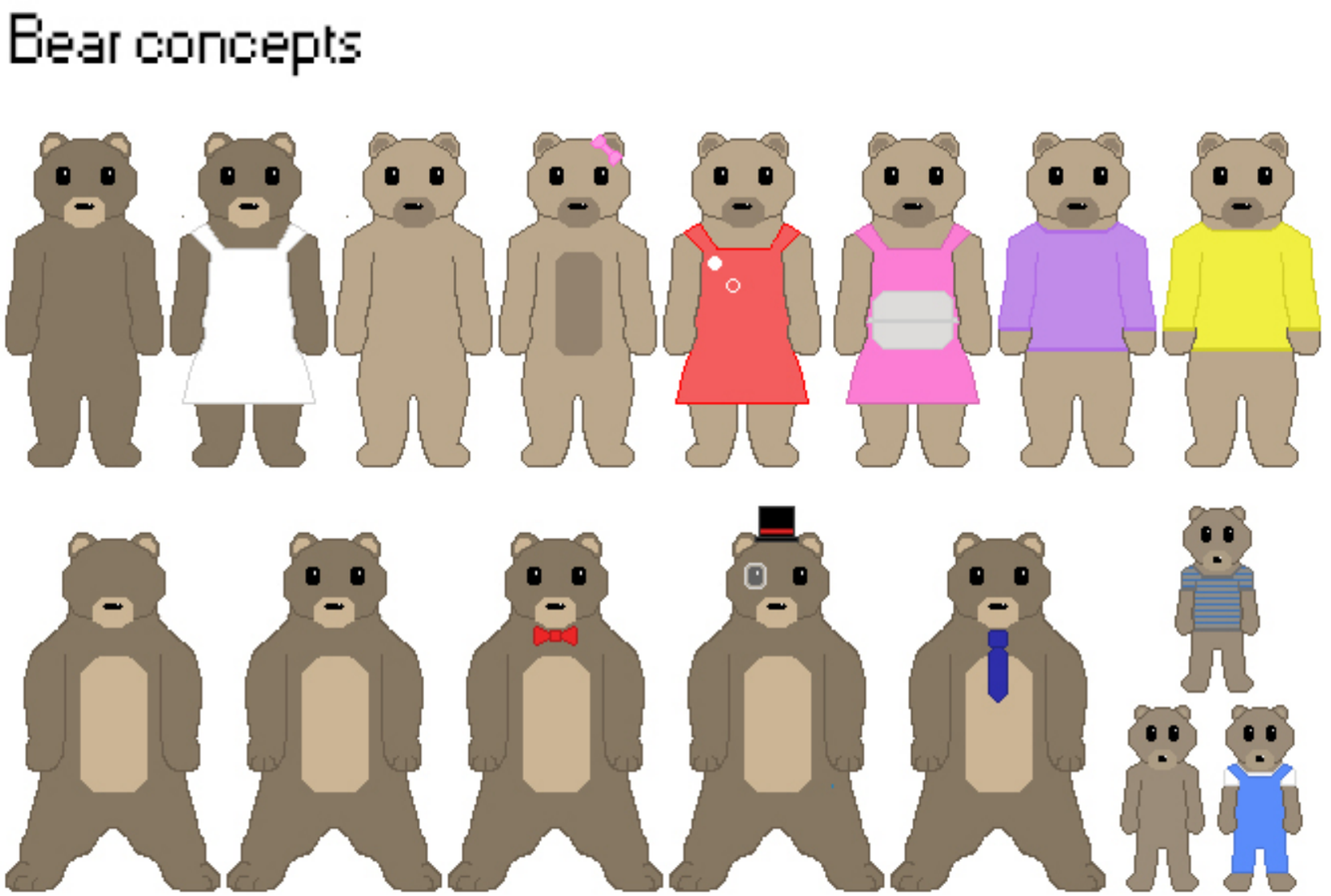
Bear character design

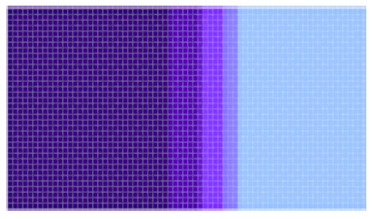
Here I started to design the three bears. I began with drawing blank bears in photoshop and experiment with clothes and colours.

When I decided on a darker colour for the daddy bear, a lighter one for mummy bear and one in-between for baby bear.

When I had chosen these designs, I decided to add smiles in order to make them appeal to the target audience and make them look friendly.

Bear concepts



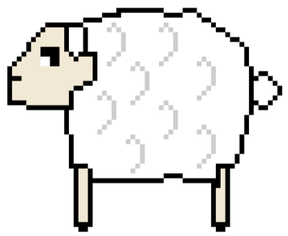
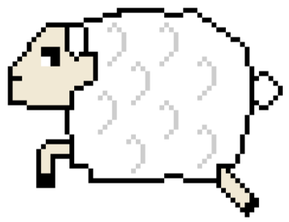


Daddy Bear

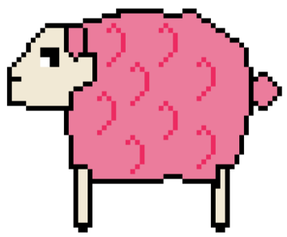
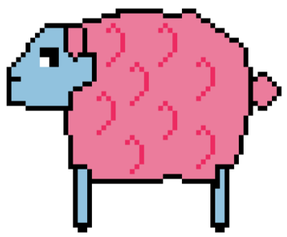
Mummy Bear

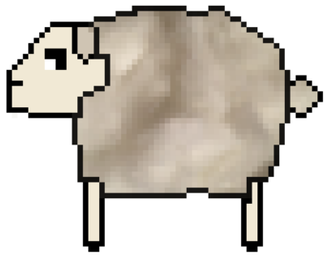
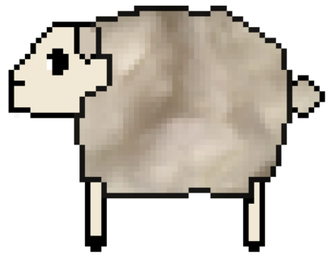
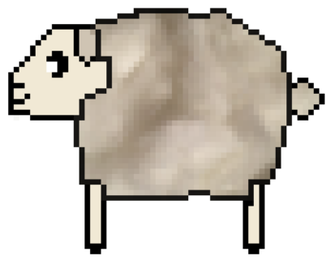
Baby Bear

Item development

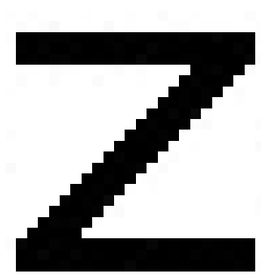
Here I started to experiment with different colours for my sheep

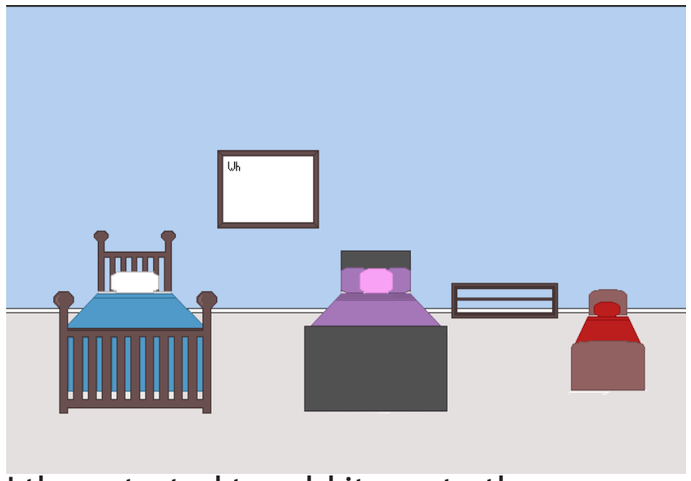
I then added this picture I took of cotton wool to the image of the sheep to an an element of mixed media

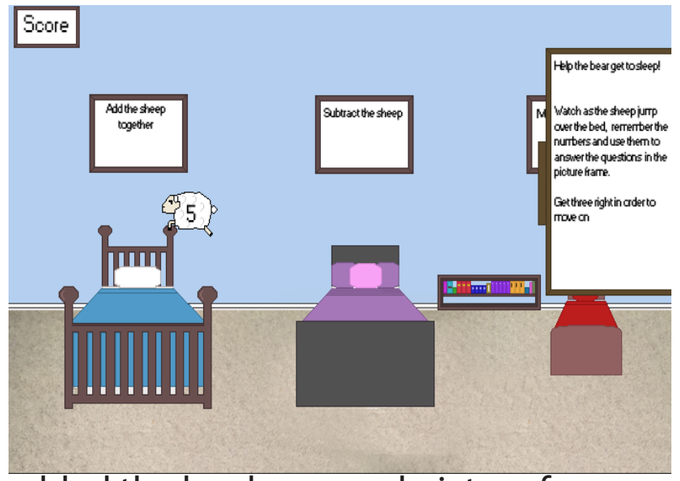
With feedback, I then decided to scrap this idea. To give the player more to do, I decided to add collectables which when collected ask a question. Instead of just watching the sheep, this gives the player something to do, thus making it more entertaining.



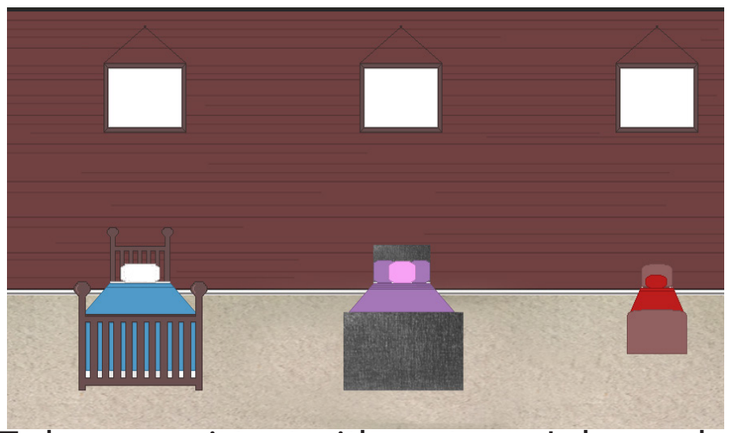
This is the design I came up with, I wanted it to be simple, yet stand out against the background. I decided on a 'Z' as it represents sleep, which goes with the theme of the bedroom

Level Design





I then started to add items to the room make it more interesting to look at. I added the bookcase and picture frame, which will display the questions to the player. I then added the carpet for the floor as a mixed media element, which also makes the level more appealing to the eye. Here I have also demonstrated text with the picture frame and an example of the UI with the menu.



To keep consistent with my team, I changed the wall to make it look more like a bear house

Here I changed my idea slightly. The idea of sheep was seen to be too boring for the target audience, so keeping the level design, I decided to add collecta-bles, which the player would have to collect in order to get and answer a question thus progressing. This adds more of a gameplay aspect to the game making it more interesting to the audience.

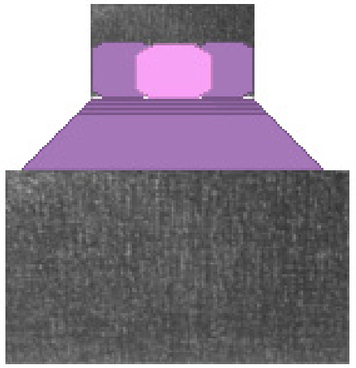
This is the picture of a carpet I used

Assets

With our game style being pixel art, I created all my base assets in a similar way. I used Photoshop with a one pixel square brush and drew from references and mood boards. Detail was add to some assets like the bed, using lower opacity brushes.

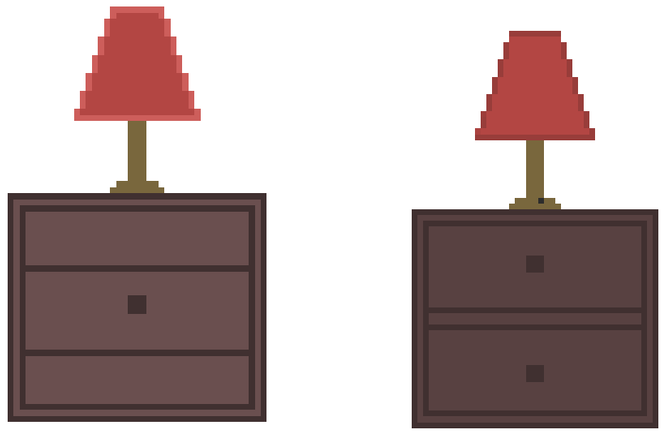
This is Baby's bed, it is the smallest of all the beds as Baby bear in the small est. I also wanted to keep this bed simple

This is Mummy's bed. I decided to add ample pillows to symbolise it being 'too soft' like in the story

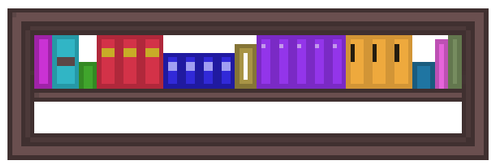


This is Daddy's bed. I decided to make it look bigger as Daddy is the largest of the bears.

Here I have added a texture to my bed to add an element of mixed media and to make it look more interesting. I took the photo off the headboard my own bed and then cropped it down in order to use it on the sprite



One the right is the first bedside table I made, but I didn't like how empty the part above the drawer was so I added more drawers as seen on the left



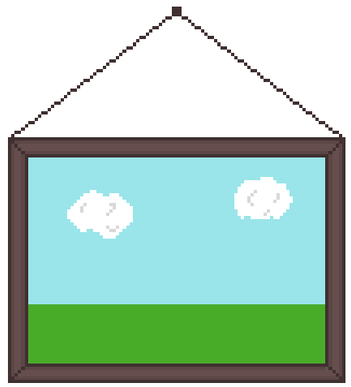
This is the bookshelf

After feedback I decided to change the shape of my pillow to make it look more realistic.

These are the picture frame which house the questions. Here I have created pictures to go in them when there's no questions so they blend into the level .

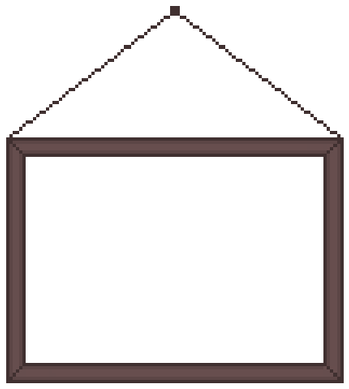
For this picture frame I used a picture I took myself of a beach.

This image is also a primary source

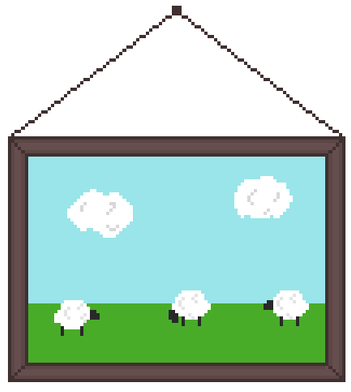


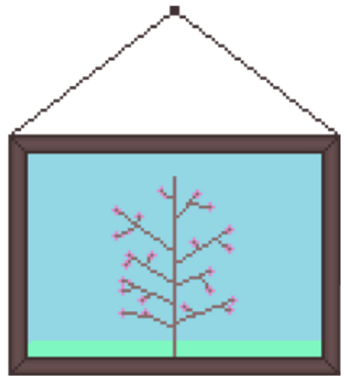
i thought that this scene looked too bland so decided to add sheep

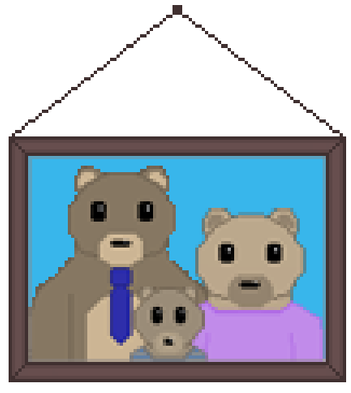
I then made this clock in Photoshop.



This is the base for the frame.

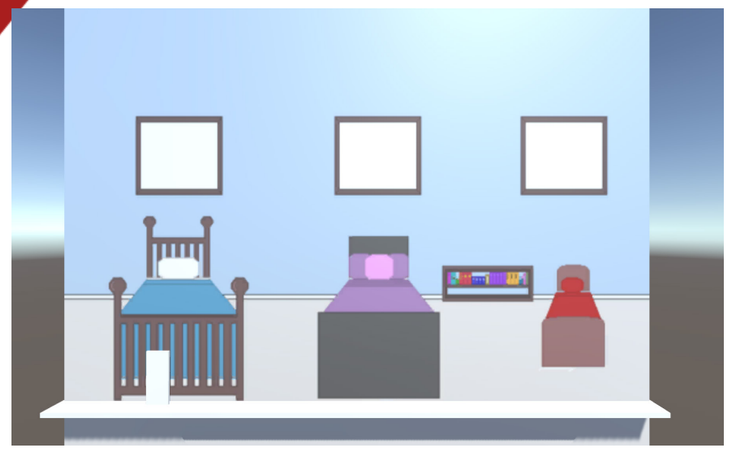




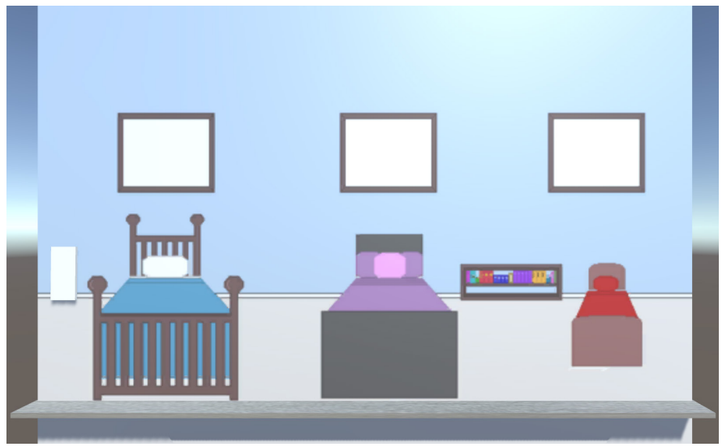


Assets

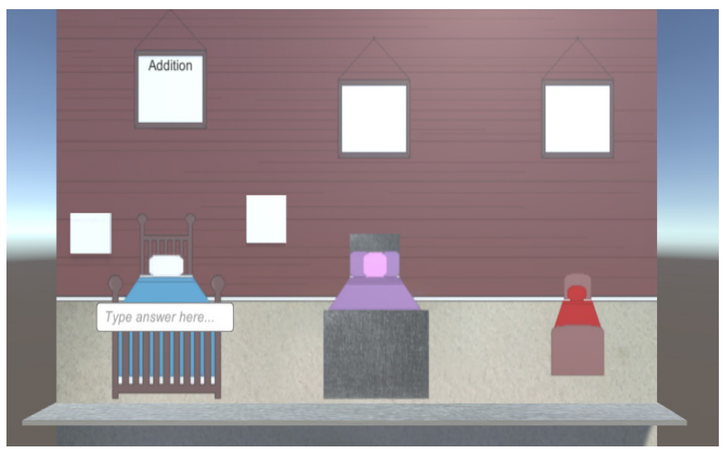
Unity



This is my first basic blocking out of my level. On the background plane is my basic level design, just to get an idea of the layout. There is a basic shape at the bottom which acts as a platform to hold the block which is the place holder for Goldilocks or the bear. This block can move left and right, but is blocked by two vertical invisible blocks on either side of the level.

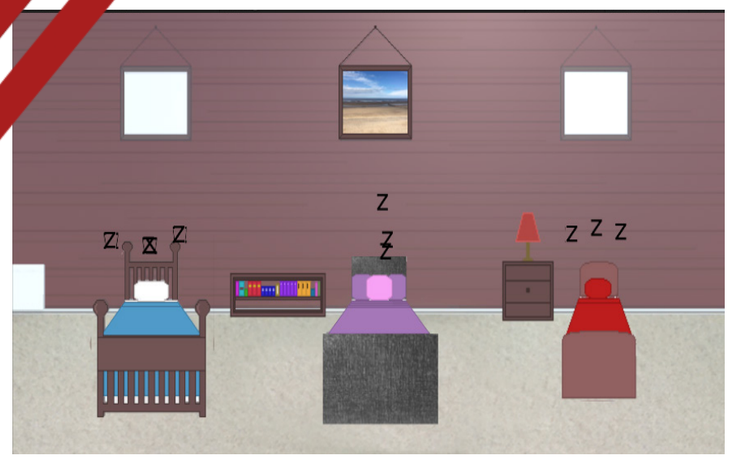


Here I have added a place holder texture to the bottom platform to show how it should blend to the floor, which will be mixed media as an image of carpet. Since the bear will be moving in-between beds, I have moved the player further up the screen to the position of the front of the beds. I have added another invisible block higher up for the plater to stand on, though the beds need to be added as obstructions. I then added a temporary sprite sheet to ensure that the animation code is working correctly



Here I have created the text boxes which will display the questions and the input field that will allow the player to input an answer. When the player hits the trigger now, a sum containing two random numbers appears by the code shown bellow.

```
function OnTriggerEnter (other : Collider) {
    if( other.name== "Q1 Trigger"){
        Q1Canvas.enabled = true;
        var One : int= Random.Range (0,11);
        var Two : int= Random.Range (0,11);
         Question.text= One.ToString() + "+" + Two.ToString();
         Answer= One + Two;
```



I then began to add more elements into the level. I added the bookcase and the drawers in order to make the level look more interesting. I have also added boxes as on the ground and on the bed in order to make different level platforms. Here I have also added the Z in which the player has to collect in order to continue. when one is collected, a question is asked which needs to be answered before the player can progress. To vary the difficulty and keep the target audience entertained, I decided to change the way all the Zs behaved. On the first bed they are static, on the second they are moving horizontally and on the third they are moving vertically, making them harder to reach.

Here i have also begun to add the different pictures to the frame bases. These will be displayed before the questions are asked.

```
#pragma strict
import UnityEngine.UI;

var Q1Canvas : Canvas;
public var Score : int;
var Question : Text;
var Q1Answer :InputField;
var Q2Answer :InputField;
var Q3Answer :InputField;
var WellDone : Canvas;
var Q1 : Canvas;
var Q2 : Canvas;
var Q3 : Canvas;
var Wall1: GameObject;


function Start () {
    Q1.enabled= false;
    Q2.enabled= false;
    Q3.enabled= false ;
    WellDone.enabled= false;
    Score = 0;
}

function Update (){

if(Q1Answer.text== "10"){
    Q1.enabled= false;
    WellDone.enabled= true;
    GetComponent(Move).enabled = true;
    Score= Score + 1;

    }else if(Q2Answer.text == "16"){
    Q2.enabled= false;
    WellDone.enabled= true;
    GetComponent(Move).enabled = true;
    Score= Score + 1;


     }else if(Q3Answer.text == "11"){
    Q3.enabled= false;
    WellDone.enabled= true;
    GetComponent(Move).enabled = true;
    Score= Score + 1;
    }

    }

    if(Score== 1){
    Wall1.gameObject.SetActive(false);
    }
```

This is the script for the first set of questions. Each set has its own script. Each input field is represented with the variable 'Q1Answer' respectively. The variables 'Q1' refer to the canvases the text is displayed on, which includes 'Well done'. At the start, everything's disabled, then everything depends on the collection of the Zs. Each Z has it's own question attached to it in the form of a picture. So when touched, the bottom part of the script with the function 'ontriggerenter' recognises which Z was collected and displays the allocated question. The answer is then dealt with under the function 'update' where the if statement determines whether the answer can be accepted and if the 'well done' text is to be displayed. When the Z is touched the player's movement is also disabled, so they have to answer the question.

```

function OnTriggerEnter (other : Collider) {
    if( other.name== "Collect"){

      Q1.enabled= true;
      WellDone.enabled=false;
      GetComponent(Move).enabled = false;


     }else if(other.name =="Collect 2"){
      Q2.enabled =true;
      WellDone.enabled=false;
      GetComponent(Move).enabled = false;

     }else if(other.name =="Collect 3"){
      Q3.enabled =true;
      WellDone.enabled=false;
      GetComponent(Move).enabled = false;
     }
```

```
#pragma strict



function OnTriggerEnter (other: Collider){

 if(other.name == "Collect")

      {
         Destroy(other.gameObject);

       }

if(other.name == "Collect 2")

     {

          Destroy(other.gameObject);

       }

if(other.name == "Collect 3")


       {

          Destroy(other.gameObject);

       }

if(other.name == "Collect 4")


       {

          Destroy(other.gameObject);

       }

       if(other.name == "Collect 5")


       {

          Destroy(other.gameObject);

       }
```

This is the code that deals with the collision of the Zs. Each one has a different name, which means each has its own if statement

Here i have added code that when all the first Z is collected, the picture frames changed to show the answer and changed back when that set of questions have been answered.

```
var Q1 : Canvas;
var Q2 : Canvas;
var Q3 : Canvas;
var Wall1: GameObject;
var Frame: GameObject;
var ScoreText: Text;

function Start () {
    Q1.enabled= false;
    Q2.enabled= false;
    Q3.enabled= false ;
    WellDone.enabled= false;
    Score = 0;
    GetComponent(Move).enabled = true;
}

function Update (){

 ScoreText.text = Score.ToString();

if(Q1Answer.text== "10"){
    Q1.enabled= false;
    WellDone.enabled= true;
    GetComponent(Move).enabled = true;
    Score +=1;

    }else if(Q2Answer.text == "16"){
    Q2.enabled= false;
    WellDone.enabled= true;
    GetComponent(Move).enabled = true;
    Score +=1;

```

Here I have started to implement the scoring system. I have added the score UI which is consistent throughout all our levels in the top left corner. I put score as a static variable in order to obtain in through all of the scripts.

Here I have added the sprite sheet to the game. I then changed the alpha transparency so that there is no background. There is now also code that disables the

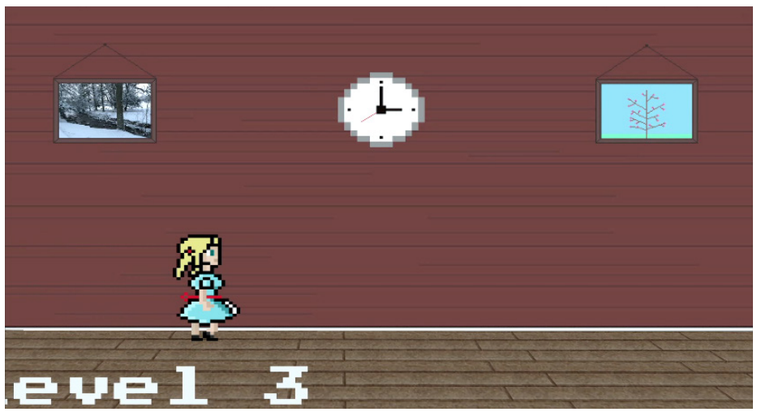
In reference to my action plan, I made changes to my game. I fixed the sprite sheet so that she is transparent and walks properly. I made the Zs freeze whilst the player is answering a question, so they're not distracted and there's no risk of them picking up two. I have also fixed the score so it counts correctly.

```
function Scoref(){

    Score +=1;
    ScoreText.text= Score.ToString();


}
```

This is my updated question code, which now works with the score function to add 1 to the score when the correct answer is input.

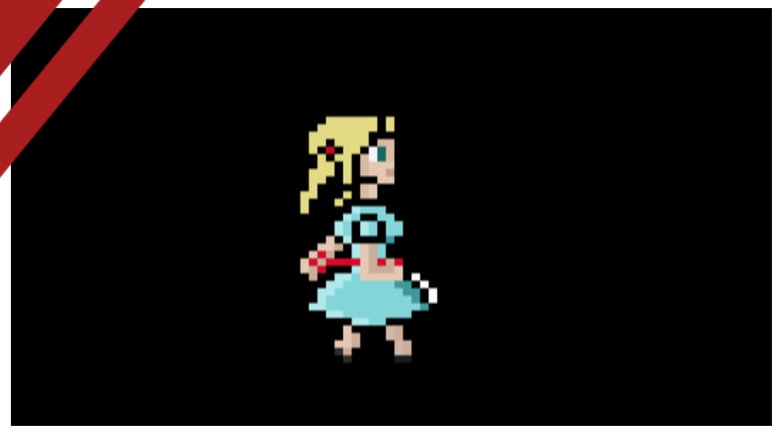
```
if(Q1Answer.text== "10"){
   Q1.enabled= false;
   WellDone.enabled= true;
   GetComponent(Move).enabled = true;
   Frame.gameObject.SetActive(false);
   Q1Answer.text ="";
   Scoref();
   }
```

I then added a new canvas and imported the instruction screen which was kept consistent throughout all of our levels.

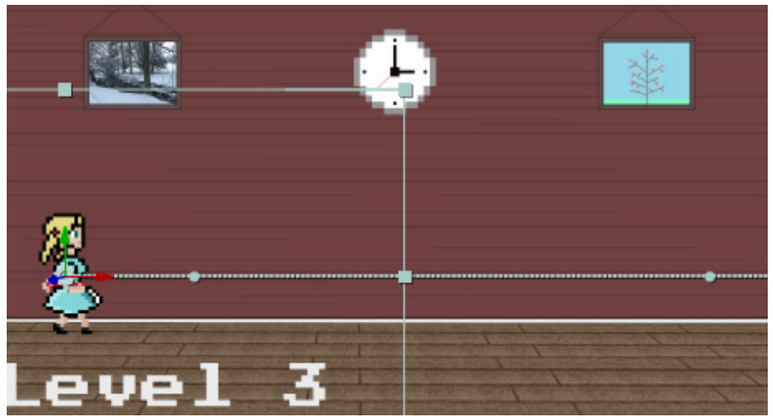


I then imported the movie I made in After Effects and made it so it plays when the level is started. This is also when I added code at the end which switches to the next level or scene

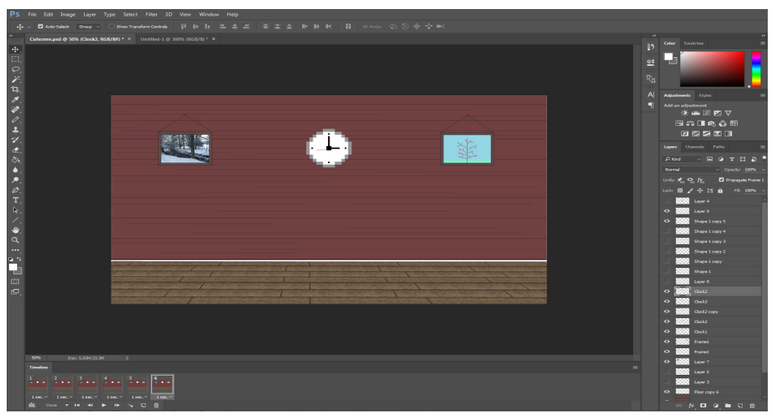
After Effects



I started by importing the Goldilocks sprite sheet into After Effects and then used all of the frames. I then extended the time using time stretch. This was then saved out as a movie.



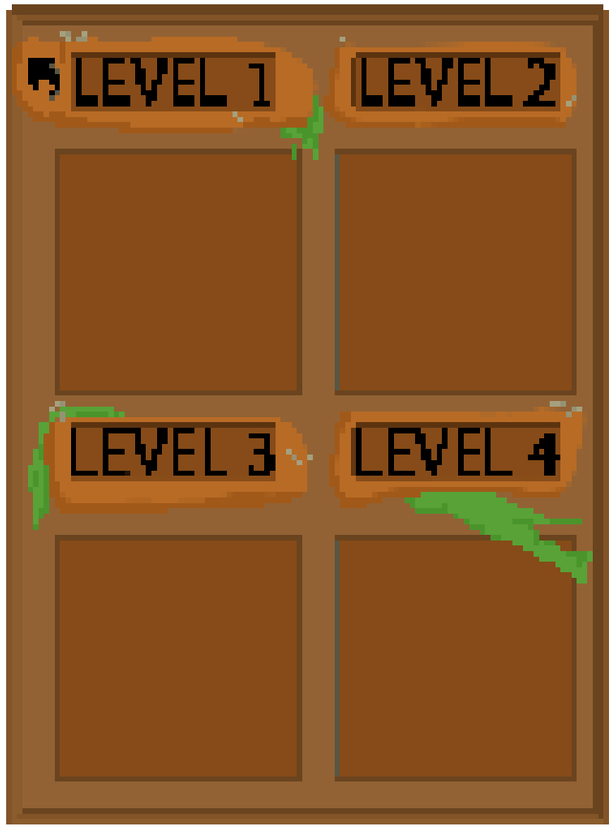
I then imported the above video into a new composition and added a background I made. I then added position so that Goldilocks will move.



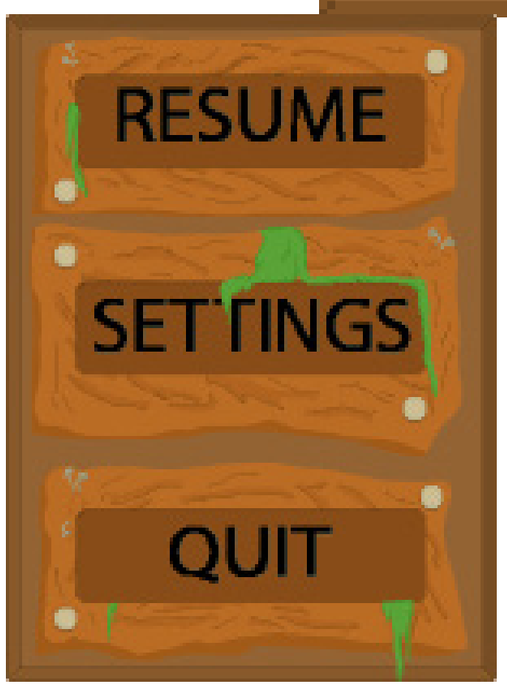
When adding a clock to my background, I decided that it would be good to make the clock move so more is happening in the cut scene. Since I was making the clock in Photoshop, I decided to make the whole background a GIF using frame animation. I then imported this back into my composition.

Menu

Jamie McFarlane



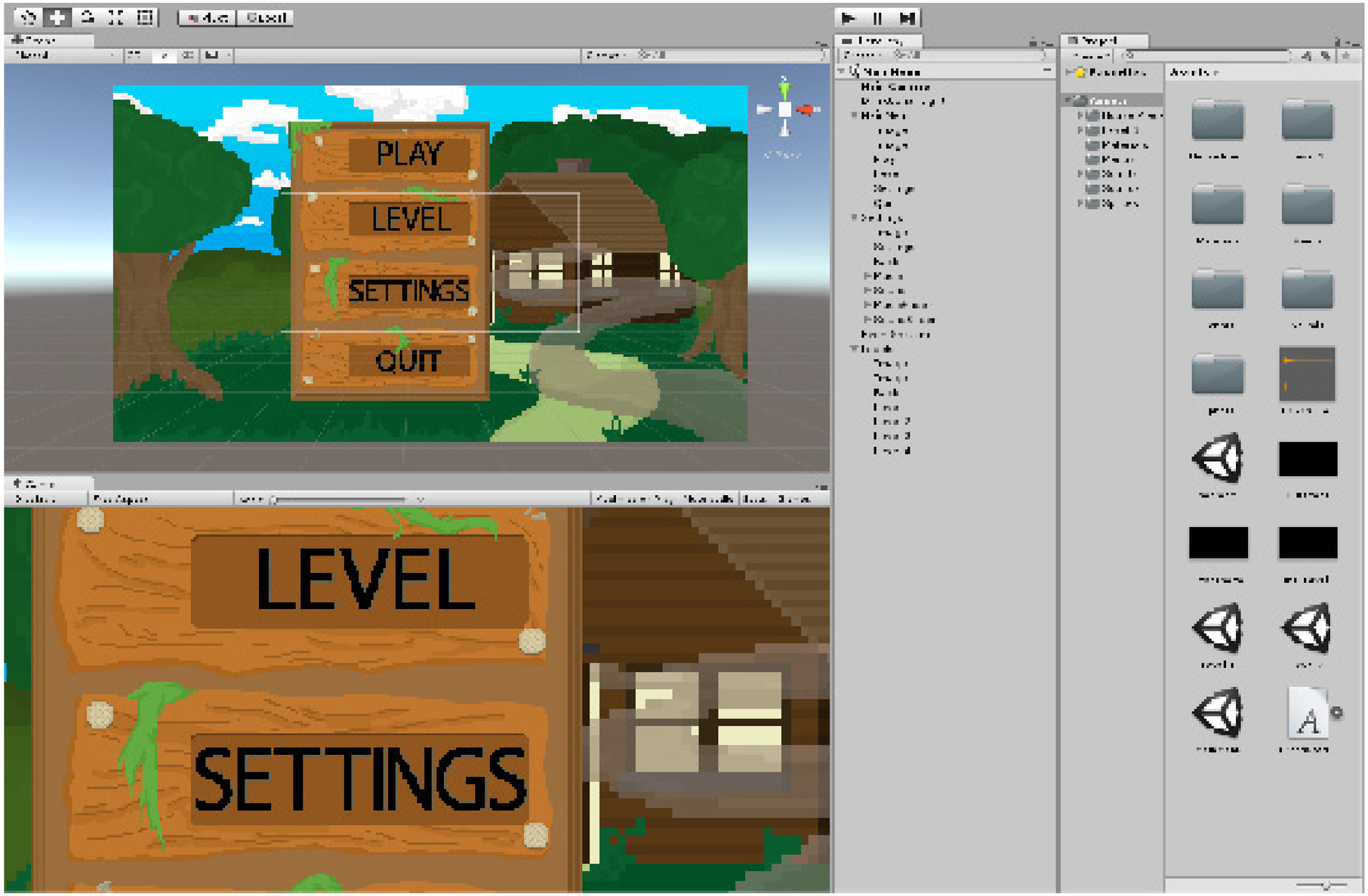
These are all of the menu assets that I created, The Main menu, Pause menu, Level select, Settings menu and the tutorial base screen. All of these
have been put together by Adam and he coded them all to work together, when played they are smooth changing and look aesthetically pleasing with a pop that will intrigue children to play the game.



Documentation - Menu Unity

Adam Westwood

After receiving all of the menu asset pieces that I needed for the menu I began piecing I together. I Decided that the pause menu was going to be a canvas over the game instead of a new scene, as this will enable me to quickly attach it to the other levels when bringing them all together. I also decided that the main menu was going to be a new scene so it could have a background. I made each of the screens in the menu, "levels", "options" etc. as different canvases so I could easily code all of the buttons between menus to simply hide and unhide the different canvases. The first thing I did was to bring in all of the assets as images on the individual canvases. I then made the buttons but as they were already on the menu background I set the sprite for the button to be an invisible one so that the button was still clickable but there wasn't anything visual on it. After doing all of this for each of the canvases I set up the code that will link all of the canvases between each other. I then set up the pause menu by copying the settings page into my level and then creating the actual pause menu, and once again I linked all of this up by code and grouped the pause menu in the hierarchy so they were all in the same place, this would make copying it into the other levels easier later on. However due to the time that we had and complexity, we were not able to code the sliders and tick boxes for the settings menu.



The script below is the levels menu screen script. This contains the 4 function that will be the buttons for the levels and these will each load the scene that is the levels for the whole game. This uses the scene management part of Unity which I have imported at the start of the code.

```
#pragma strict
import UnityEngine.SceneManagement;

var Levels : Canvas;

function Start () {
Levels.enabled=false;
}

function Update () {

}

function Level1(){
SceneManager.LoadScene("Level 1");
}

function Level2(){
SceneManager.LoadScene("Level 2");
}

function Level3(){
SceneManager.LoadScene("Level 3/bedroom");
}

function Level4(){
SceneManager.LoadScene("Level 4");
}
```

```
#pragma strict
import UnityEngine.SceneManagement;

var MainMenu : Canvas;
var Settings : Canvas;
var Levels : Canvas;

function Start () {
MainMenu.enabled=true;
Settings.enabled=false;
Levels.enabled=false;
}

function Update () {

}

function PlayButton () {
SceneManager.LoadScene("Level 1");
}

function SettingButton (){
MainMenu.enabled=false;
Settings.enabled=true;
Levels.enabled=false;
}

function LevelButton (){
MainMenu.enabled=false;
Settings.enabled=false;
Levels.enabled=true;
}

function BackButton (){
MainMenu.enabled=true;
Settings.enabled=false;
Levels.enabled=false;
}

function QuitButton (){
Application.Quit();
}
```

The code on the left is for the main menu. This code contains different functions for the different buttons on the screen as well as the variables for the canvases featured in the main menu. Other than the play button in which I have included the scene management code to load up the first scene, I have used the canvas hiding code to change which ones are visible when the buttons are pressed. I have also included some code that quits the application when it is pressed.

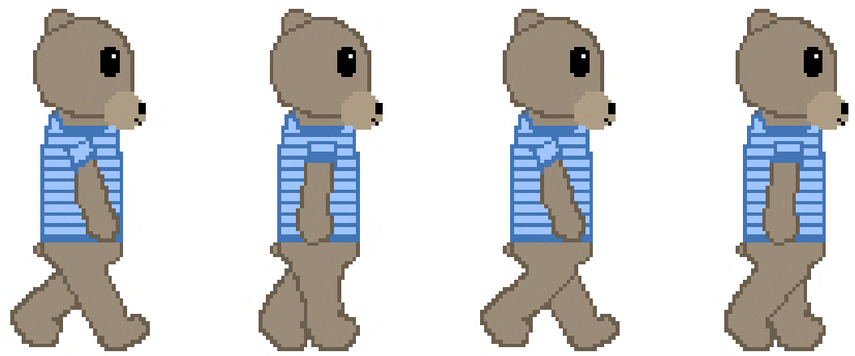
To the right is the code for the pause menu, this is following the same principles as the main menu except that when it is opened by pressing the escape key, it also pauses the movement the movement in the same way it does when the questions pop up.

```
#pragma strict
import UnityEngine.SceneManagement;

var pause : Canvas;
var settings : Canvas;

function Start () {
pause.enabled=false;
settings.enabled=false;
}

function Update () {
if(Input.GetKeyDown(KeyCode.Escape)){
pause.enabled=true;
settings.enabled=false;
Moving.move=false;
}
}

function Resume () {
pause.enabled=false;
settings.enabled=false;
Moving.move=true;
}

function Settings (){
pause.enabled=false;
settings.enabled=true;
Moving.move=false;
}

function Pause (){
pause.enabled=true;
settings.enabled=false;
Moving.move=false;
}

function MainMenu (){
SceneManager.LoadScene("MainMenu");
}

function Back (){
settings.enabled=false;
pause.enabled=true;
}
```

Baby bear- Sprite sheets

These are the sprite sheets I created in Photoshop for the game.

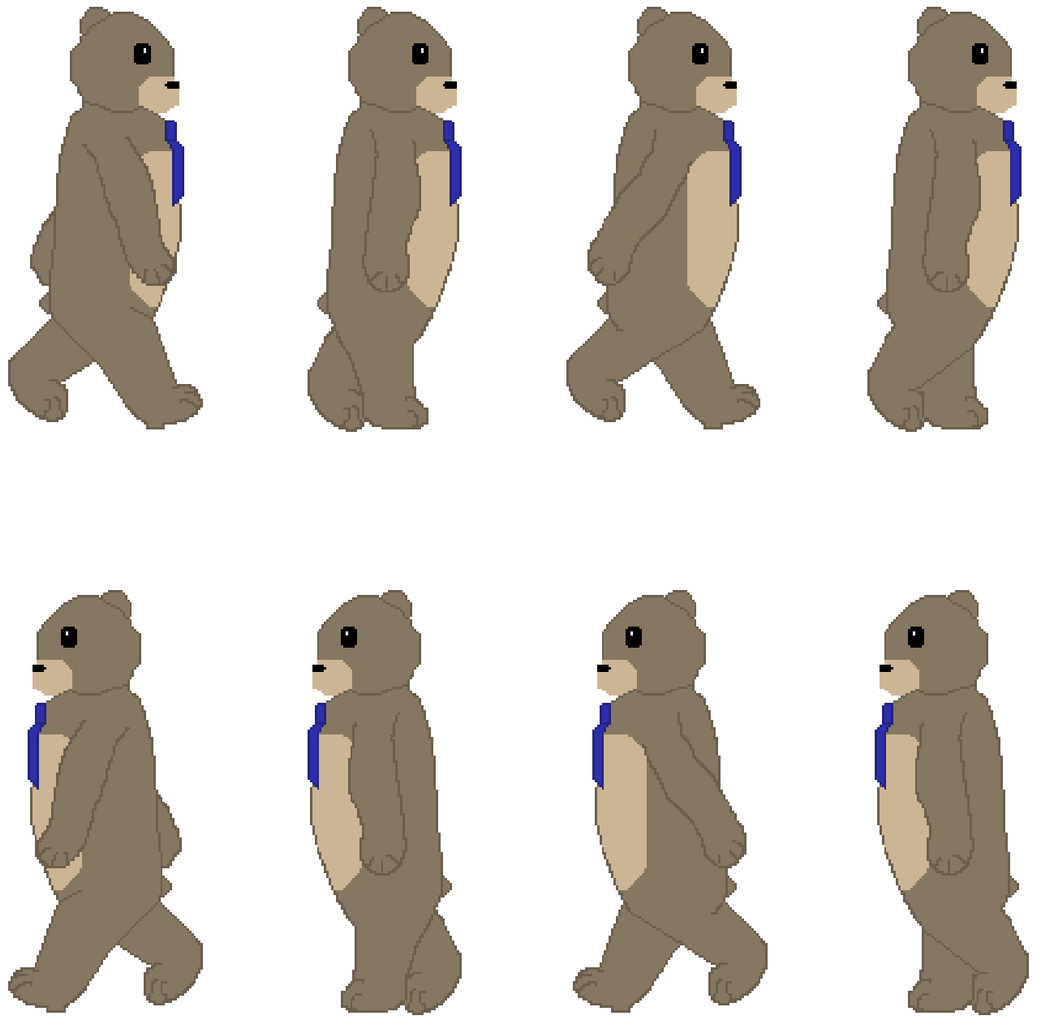
Walking



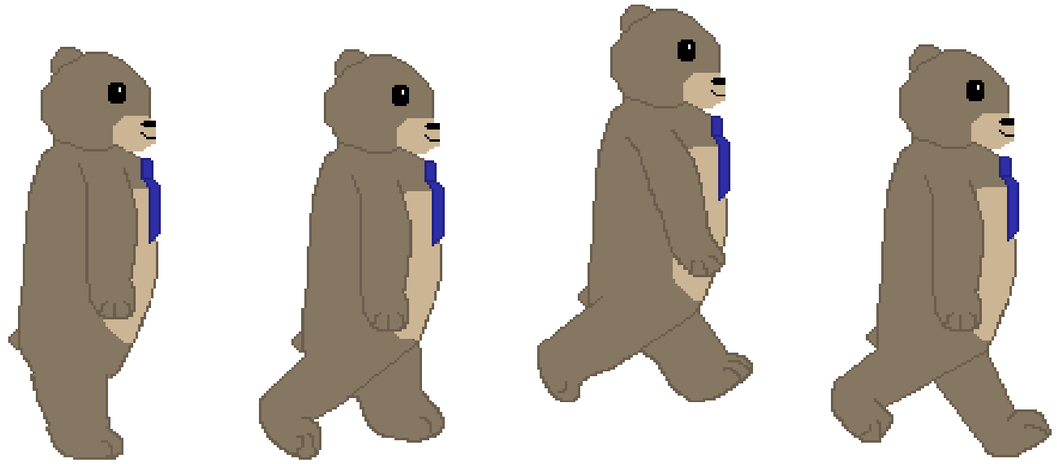
Jumping

Daddy Bear- Sprite sheets

Walking

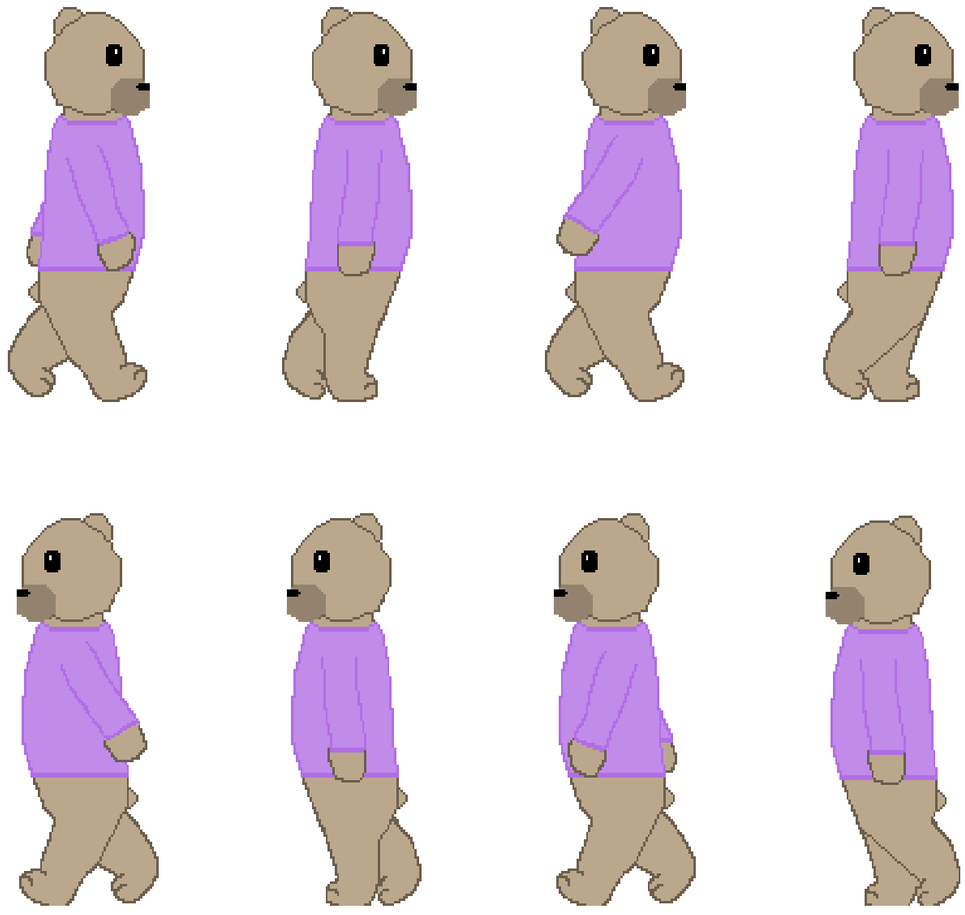


Jumping

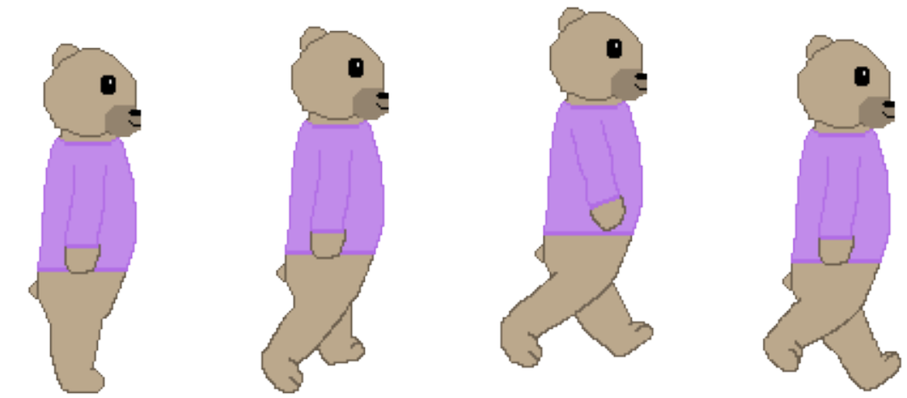


Mummy Bear- Sprite sheets

Walking



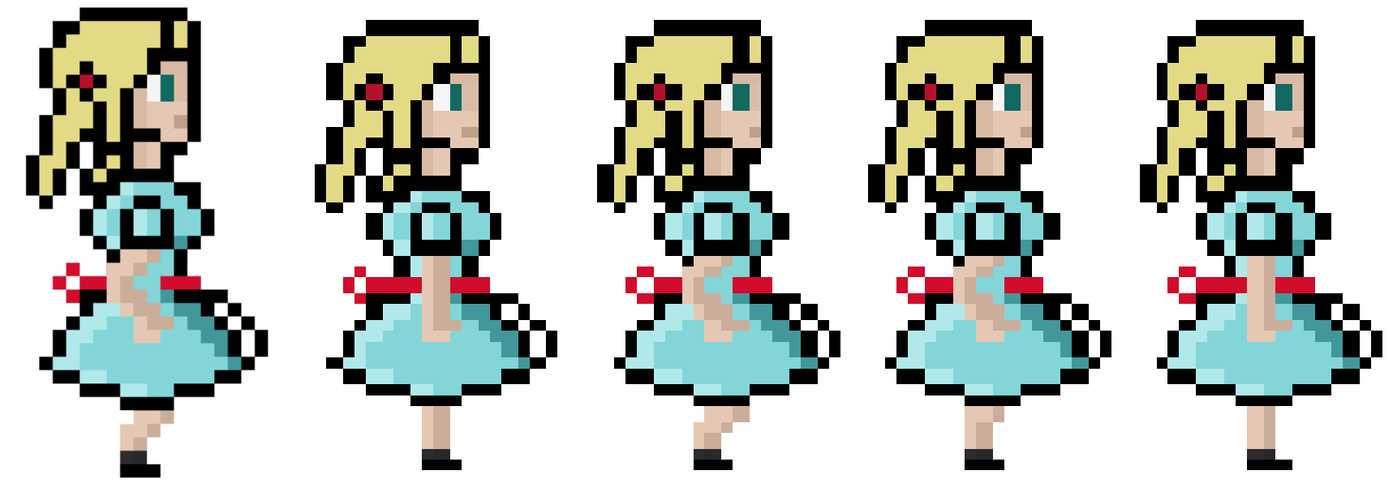
Jumping

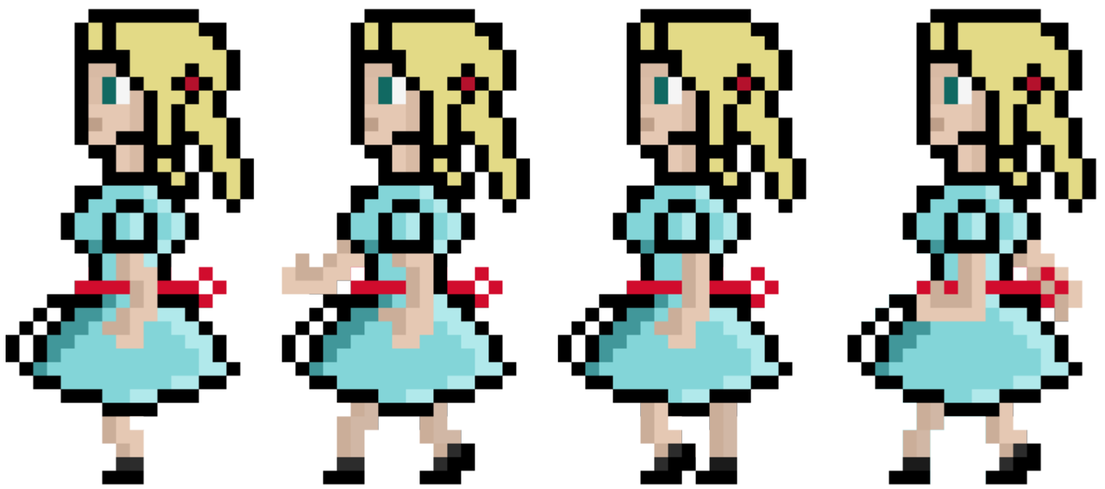


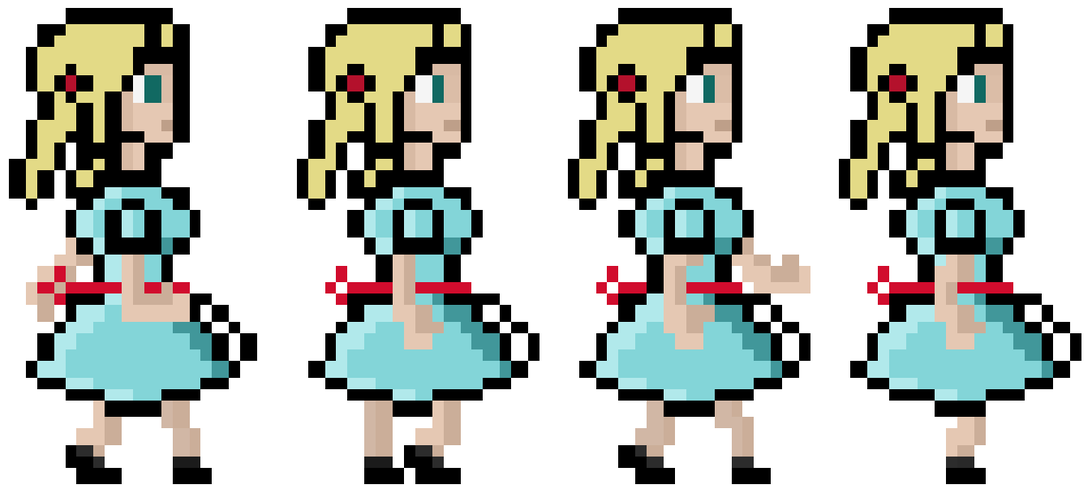
Goldilocks sprite sheets

Jamie McFarlane

These are the sprite sheets used throughout all the levels for Goldilocks

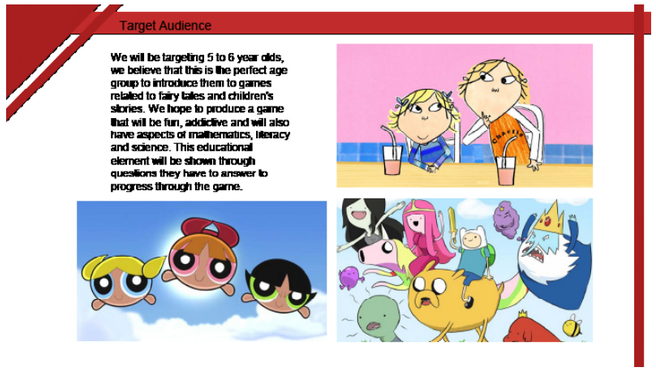


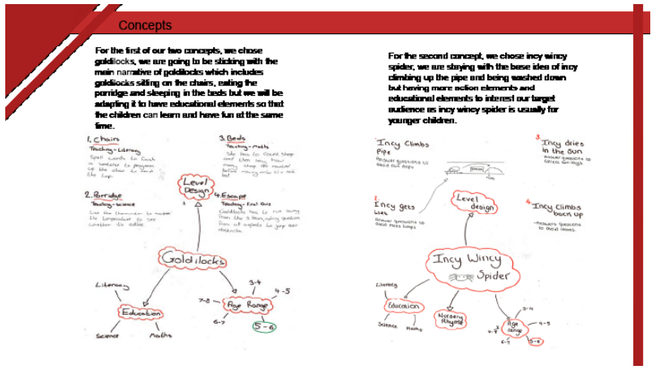


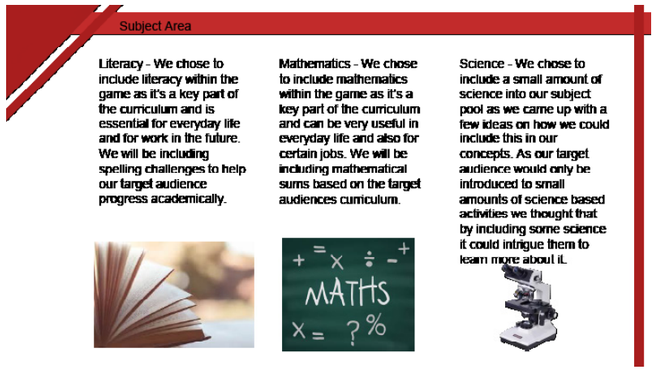


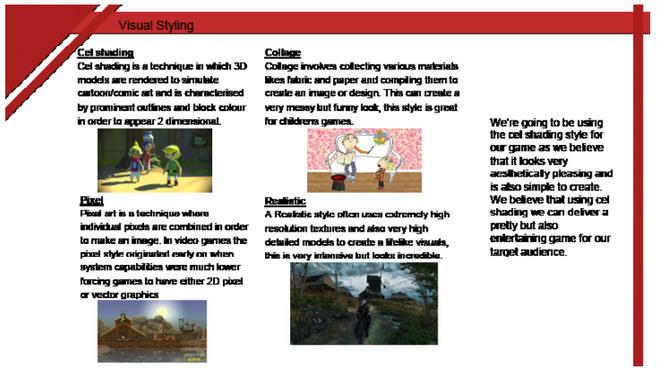
Meeting Documentation

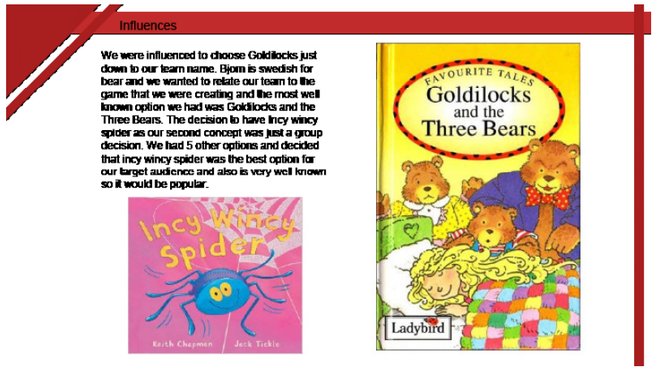
Adam Westwood

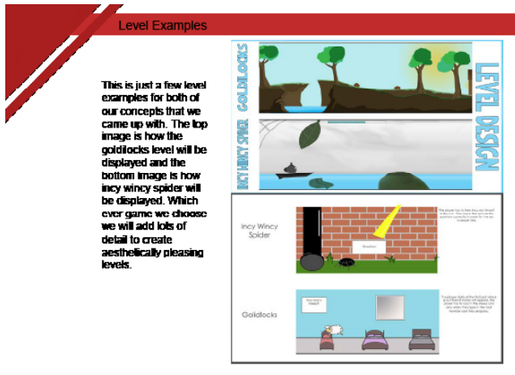












If you have any questions feel free to ask them.

Week 1

For the first week, as we had not yet done much work and we were still coming up with the ideas, we did not have a meeting as such. We got together and made the power-point for the first weeks presentation together. We then got the feedback for this and discussed this in the next weeks meeting.

Feedback

After the presentation we received feedback from the class about some things that were brought up in the presentation. Most of this was about the ideas and the levels such as things that we could do in order to develop them further etc. We also received some constructive criticism as we found out from several members of the class that the art style we originally wanted to do was a 3d art style and therefore we could not use this in our 2d game.

Week 2

On the second week we looked through the feedback and decided that we would change the style. We also discussed what each of our strengths and weaknesses were and gave each of us roles corresponding to what we do best and what we are stronger with doing. We also looked at the assets that we would need for the level and spoke about what we would need

Meeting Documentation

Adam Westwood

Week 3

For week 3, the main focus was on getting the things ready for the presentation. We talked about who was doing what roles for the week and decided that Jamie and Emily would work on the presentation, while I worked on a style sheet and Isaac looked at doing research into pixel artists. We also discussed what work will need to be done over the next week regarding the Unity.

Feedback

After the presentation we received lots of feedback regarding our concepts and ideas about our game. Most of this related to the idea of the way that the questions were delivered as in the ideas we chose to have the questions delivered in a standard box. However this was a bit plain as some people pointed out so we planned to change this and have different ideas of it in the future and how it will be displayed.
Also some things brought up included the different platforms we could make the game on. We quickly dismissed the idea of different platforms as this would mean that it would not be as playable in classrooms if it was not available on PC.

Bear With Me

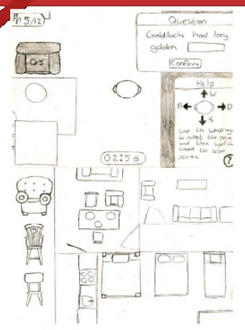
Response to Feedback

We were told to look at the style of our game and the suitability of the concept for our target audience.

We decided to change our art style to predominantly pixel art in order to keep consistent and because our initial idea of cell shading wasn't appropriate for a 2D game.

We also changed the premise of our game in order to make it more attractive and interesting for our target audience. We decided to add the porridge monster as a final boss and mix the original story up.

Level one



In this level the player is tasked with fixing the bears' chairs and will presented in a top-down view.

The player walks around collecting pieces of the chairs. When they retrieve a piece they must answer a literacy based question in order to carry on.

At the end of each level Goldilocks will befriend a bear allowing her to progress to the final level.

Level 2

This level takes place in the kitchen/dining room. There are three sets of porridge in which the player will obtain after answering sets of questions. Gathering the porridge helps a bear to eat.

This level revolves around maths and the questions will be sums.

Level three

This level is set in the bedroom and it revolves around maths. The player has to help the bear get to sleep. They do this by counting sheep. The picture frame above the bed gives the instruction and provides a space for an answer. The sheep each have numbers on them, when they jump the player must remember the number and apply it to what the picture frame says. When the player has answered three questions correctly, the bear moves to the next bed.

Style Sheet

We will be using a pixel art style with a standard and consistent size of 695 pixels by 450 pixels in the whole screen. Then we will be using a size of roughly 25 pixels for every foot for the ingame objects to be able to keep the game to a standard size. For example an object that is 2 feet tall in real life will be about 50 pixels tall in the game.

This style will be continued through the game. Lots of the colours will be brown and green colours as this will be set in a forest with a very natural and wooden house, the furniture will be some back to basics furniture as most of it will be like primative and have a log cabin esque look to it .

Questions

Maths:

What number is closest to 14; 9 or 18

2+2=?
16+7=20
2+3=?
10-6=?
11+9=?
18-6=?
9+?=18
17-9=?
9-6=?
RNG questions
Count up to 10
Guess how many sheep are in the field

Literacy:

1. Goldilocks sat on the mat

Find the verb in this sentence

2. Goldilocks saw a _____

Find the missing word using the list of words provided.

3. Goldilocks went on _____

Choose the correctly spelt word from a list or drag and drop the correct letters in the right order to spell.

If you have any questions feel free to ask them.

Meeting Documentation

Adam Westwood

Week 4

We discussed about what were the main things that we wanted to have done in the next week, this mostly involved getting all of the InDesign work up to date and to have the backdrops to the level finished. We also wanted to have the Levels progress coming along well so we could start implementing the assets into it. We decided that we were going to work on the sprite sheets that week as well as the buttons and the pause menu design was going to be done.

Half Term

Going into the half term, we had 2 weeks off and we was not going to be able to have any team meetings over the holidays so we decided to have one the day we broke up. We went through and discussed what we could be working on over the holidays which mostly included getting all of the previous design work up to date as well as the Unity work. We decided to try and get all the mechanics for the game finished over the holidays and by the time that we came back we would then be able to finalise and finish off some of the other things on the game such as the assets.

Week 5

For the week 5 team meeting we didn't discuss what needs to be done but instead we talked about how we got on over the holidays and what we had managed to do. Most of the team had just got the UI to complete for the questions on their levels along with some other bits such as documenting. Jamie still had some left to do on his level and the sprite sheets were still to be completed so they could be put into everyone's levels. From here we decided to just work on what we had been over the holidays and get out levels finalised.

Week 6

In this team meeting we discussed both what we had done and what now needs doing. The levels were finished other than some of the assets that were still needed to be put in and the sprite sheets were yet to be made. Emily still needed to do the bear sprite sheets as well as Jamie still needed to do Goldilocks'. I had my level to fix slightly as I had made a change to how the collection works which I was going to work on over the week. Any spare time this week was spent going through and doing the InDesign documentation when the Unity was done.

Week 7

For this week we decided to take a break from the majority of the Unity work and catch up on all of the InDesign documentation that we have missed while doing the Unity. We also made sure that we had our levels finished blocking out and that most of the main mechanics worked, for most of us we then just needed to add in the assets and images.

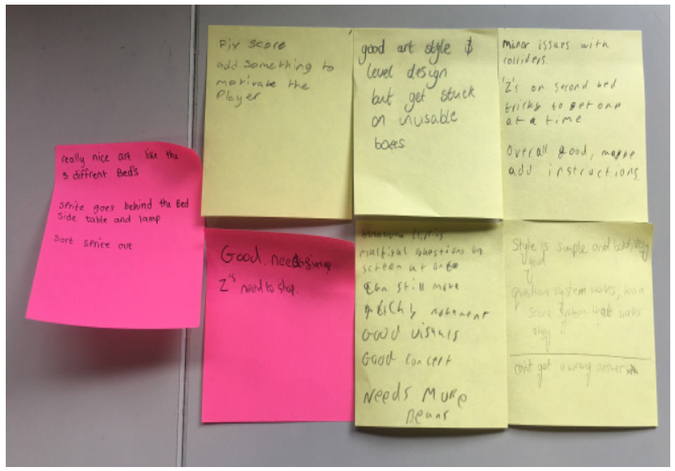
Week 8

What we decided on this week was that all of the sprite sheets need to be complete and implemented into the game. We are also going to act on the criticism that will be given during the game testing period of the week where we will look at other peoples games and peer review them. The cut scenes will be started by the whole team for everyone's individual levels and then I will begin to create the main menu for the game. I will hopefully accomplish the blocking out of this in this week and Jamie will work on the assets for the main menu over this week.

Week 9

For week 9, with the project coming to an end we discussed what we still needed to do and how much was left. I had finished my Unity but i was very behind on my InDesign so i decided to spend the week doing that and also putting other peoples levels together with mine when they had finished. Jamie just needed to finish off the porridge monster so he was going to work on that and then Emily was going to finish her level by adding the questions in. As Isaac was not joining us for most of the team meeting we did not know what he needed to do and could not note this in the team meeting documentation.

Game Testing Feedback



Action plan

I showed my game to other people in the group and from the feedback given I have created an action plan on how to better my game

Stop Z animation when answering question
Sprite sheet working
Get score to count consistently (function)

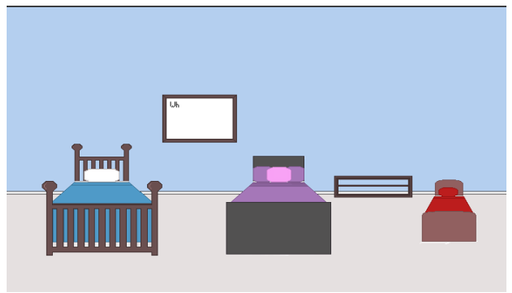
Week 10

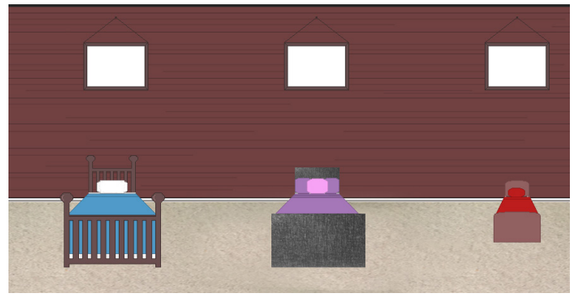
The last week we were just finishing off, we firstly looked at what we needed to finish off for the games . Me, Emily and Isaac had finished our levels and they are all put in together in one game. Jamie is just fixing some last bits of code and getting some parts to work. Me and Emily decided that we could finish our InDesign stuff early so we can work on the Power Point. This week Isaac refused to cooperate and join us at all in our team meeting so we do not know what he still has to do on his InDesign and therefore we had to conduct the meeting without him again. Jamie has nearly finished his InDesign and when he has completed the level he will put together the show reel showing off our game for the presentation. We are also going to work on some sound in our game this week as a final touch to make it more professional and better for the audience.

Self Evaluation

Throughout this project, I have developed many new skills and built upon many existing skills. In this project we, as a team, were challenged to create an educational game aimed at a target audience of our choice. We chose 5-6 year olds, as we felt that was suitable and doable. After deliberation, we decided to base our game around the classic fairy tale 'Goldilocks and the three bears', though after researching our target audience, we decided to add a twist in the form of a porridge monster, to keep the game interesting and appealing. Through out this project, we needed to bear in mind our target audience, and remember the given brief to ensure that our game was suitable.

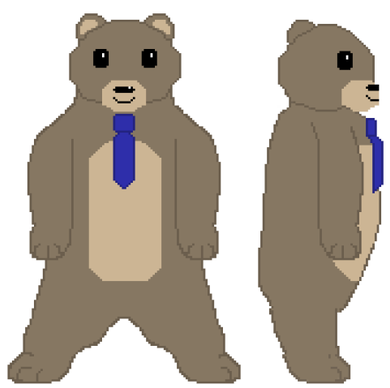
My level was decided to be the bedroom scene from Goldilocks. Upon deciding this, I researched existing takes on this scene in order to ensure mine was unique, yet recognisable. I also had to reinvent the scene, since our chosen art style was pixel, it would look very different to anything done before, which would help our game be recognisable and distinct if put on the market. I experimented with different designs, before, after feedback from my team, I decided to change my design so that the background was consistent with the rest of the team's. Team communication was paramount throughout this project, and this was achieved through our team meetings and generalised conversations.





The hardest bit of building my level was coding it and subsequently fixing most bugs that arose. I took the time to go over code so I could pick up on any issues and resolve them. In the end I was proud of the code and the level I produced. I really liked the visual aspect of the level and how it all fits together. If I were to this level again, I would look at the functionality, making sure that the game ran to a professional standard and maybe more player interaction so the level has more depth .

When setting up team jobs, I was tasked with making the bears. I researched bears through moodboards before drawing my bears in pixel style. With the basic bears drawn, I made multiple versions showing different variations and enlisted the help of my team in order to choose the best. I then took these designs and made sprite sheets for them . This was a challenge area for me as it meant 12 sprite sheets on top of creating my own level. For me, this was the most difficult part of the project as it required a lot of tangible work in a short space of time.



With this part of the project, if I were to do it again, I would add more detail to the bear's sprite sheets to make them look more fluent and realistic in their movement.

Overall, I think that this project was a success since I did all the work required of me within the team- completing my own level and designing the bears.

Peer Evaluation

Student Peer Evaluation

Category For Evaluation	Possible Scores				
	1	2	3	4	**5**
Quality of Work: Consider the degree to which the student team member provides work that is accurate and complete.	Produces unacceptable work, fails to meet minimum group or project requirements.	Occasionally produces work that meets minimum group or project requirements.	Meets minimum group or project requirements.	Regularly produces work that meets minimum requirements and sometimes exceeds project or group requirements.	Produces work that consistently exceeds established group or project requirements.
Timeliness of Work: Consider the student team member's timeliness of work.	Fails to meet deadlines set by group.	Occasionally misses deadlines set by group.	Regularly meets deadlines set by group.	Consistently meets deadlines set by group and occasionally completes work ahead of schedule.	Consistently completes work ahead of schedule.
Task Support: Consider the amount of task support the student team member gives to other team members.	Gives no task support to other members.	Sometimes gives task support to other members.	Occasionally provides task support to other group members.	Consistently provides task support to other group members.	Consistently gives more task support than expected.
Interaction: Consider how the student team member relates and communicates to other team members.	Behavior is detrimental to group.	Behavior is inconsistent and occasionally distracts group meetings.	Regularly projects appropriate team behavior including listening to others, and allowing his/her ideas to be criticized.	Consistently demonstrates appropriate team behavior.	Consistently demonstrates exemplary team behavior.
Attendance: Consider the student team member's attendance at the group meetings. (This includes in class meetings.)	Failed to attend the group meetings.	Attended 1%-32% of the group meetings.	Attended 33%-65% of the group meetings.	Attended 66%-99% of the group meetings.	Attended 100% of the group meetings.
Responsibility: Consider the ability of the student team member to carry out a chosen or assigned task, the degree to which the student can be relied upon to complete a task.	Is unwilling to carry out assigned tasks.	Sometimes carries out assigned tasks but never volunteers to do a task.	Carries out assigned tasks but never volunteers to do a task.	Consistently carries out assigned tasks and occasionally volunteers for other tasks.	Consistently carries out assigned tasks and always volunteers for other tasks.
Involvement: Consider the extent to which the student team member participates in the exchange of information (does outside research, brings outside knowledge to group).	Fails to participate in group discussions and fails to share relevant material.	Sometimes participates in group discussions and rarely contributes relevant material for the project.	Takes part in-group discussions and shares relevant information.	Regularly participates in-group discussion and sometimes exceeds expectations.	Consistently exceeds group expectations for participation and consistently contributes relevant material to project.
Leadership: Consider how the team member engages in leadership activities.	Does not display leadership skills.	Displays minimal leadership skills in team.	Occasionally assumes leadership role.	Regularly displays good leadership skills.	Consistently demonstrates exemplary leadership skills.
Overall Performance Rating: Consider the overall performance of the student team member while in the group.	Performance significantly fails to meet group requirements.	Performance fails to meet some group requirements.	Performance meets all group requirements.	Performance meets all group requirements consistently and sometimes exceeds requirements.	Performance consistently exceeds all group requirements.

Tasks I completed for the project-
- Created my own level
- Designed the three bears
- Created the bears' sprite sheets
- Voice acted for another team member

Group Members Names	Quality of work	Timeliness of work	Task support	Interaction	Attendance	Responsibility	Involvement	Leadership	Overall Performance
Jamie	4	4	4	5	4 (due to illness)	4	4	4 (Team leader)	4
Adam	4	4	4	5	5	4	4	4	4
Isaac	3	4	1	2	4	3	2	1	3
Emily	4	4	3	5	5	4	4	2	4

Team evaluation-
I think that, overall, our team worked well together, especially since we finished all the work before the deadline. There were, of course, hurdles along the way. Apart from things out of our control, like absences, there were points where members of the team struggled to work effectively together, whether that be due to disagreements or falling outs - but in the spirit of a team, we worked through this and in the end everyone came out on top.