

# Sophia – Concept Sheet

## Players engagement: mental models

### Game mechanics:

- Movement
- Jumping
- Pickup
- interaction
- Gravity
- Death

### Interface:

- Life meter
- Number of tries remaining
- Items acquired
- Hearts from princess

### Brain storming:

- Illusion
- Betray
- Distraction
- Conditioning
- Expectation from story

### Effects on player:

- Story
- Title of level
- Assets in level

## Designing level 0 - The castle

The design of level 0 is one of the most important levels as the player need to build a story in his mind even before the game character and the princess start a conversation. The princess will never say that the player is saving her nor that she will fall in love with him. It will be all the players' assumption.

Therefore, we need a strong visual communication. First, we plotted out how the scene would look like from our own mental models. We decided to have: a castle with the character in front of it, the princess in a balcony of the castle talking to the character, and a door with 5 locks behind her.

The reasons are that the castle and princess is often represented in stories of knights saving the princess in distress and the door behind her would make the player assume that it's the door blocking her freedom, which this will be reinforced once she asks the player to help her gather 5 golden keys.

To support our theory on our princess mental models we looked at famous princess stories like: sleeping beauty (1995) by Disney, Shrek (2001) by DreamWorks and Super Mario Bros (1985) by Nintendo.

In Sleeping Beauty (1995), after the princess Aurora is cursed and Maleficent, the antagonist, takes the princess to her castle where she falls into the spell and sleeps forever. The prince then saves her from Maleficent's castle (O'Cain, 2017).



*Figure 1: Maleficent's Castle*

*(Lewis, 2017)*

In Shrek (2001), After embarking on a quest to save his swamp, Shrek saves princess Fiona from a castle guarded by a dragon (Film\_Fan, 2017).



*Figure 2: Princess Fiona in castle*

*(WikiShrek, 2017)*

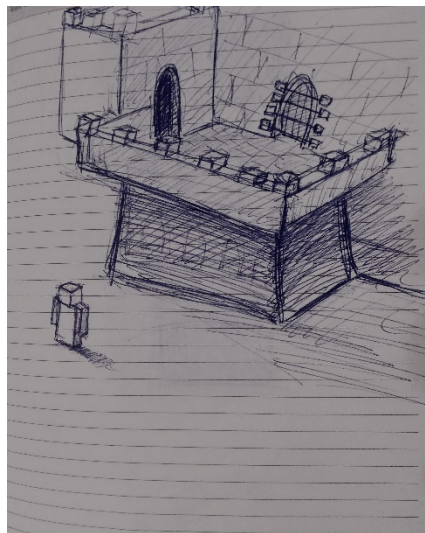
In Super Mario Bros (1985), the antagonist Bowser kidnaps princess Toadstool and her people and locks them up in seven of his castles. The objective of the brothers is to save the princess and her people from Bowser (Self, 2017).



*Figure 3: Mario saved princess from Bowser's castle*

*(Vas, 2017)*

Keeping these famous stories in mind we then created some concept art and made simple 3D model to block out how is going to look.



*Figure 4: Castle Concept Sketch*

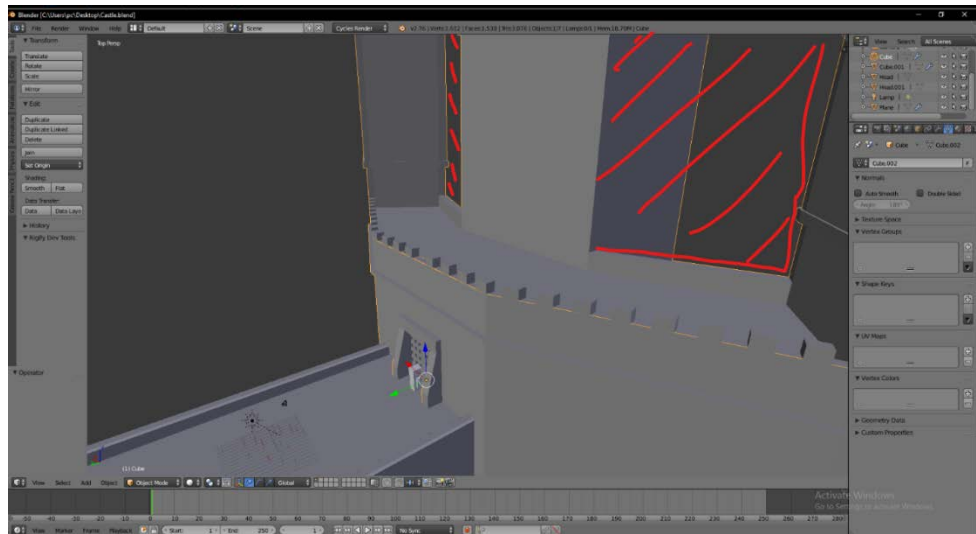


Figure 5: Castle 3D Blocking and Adjusting

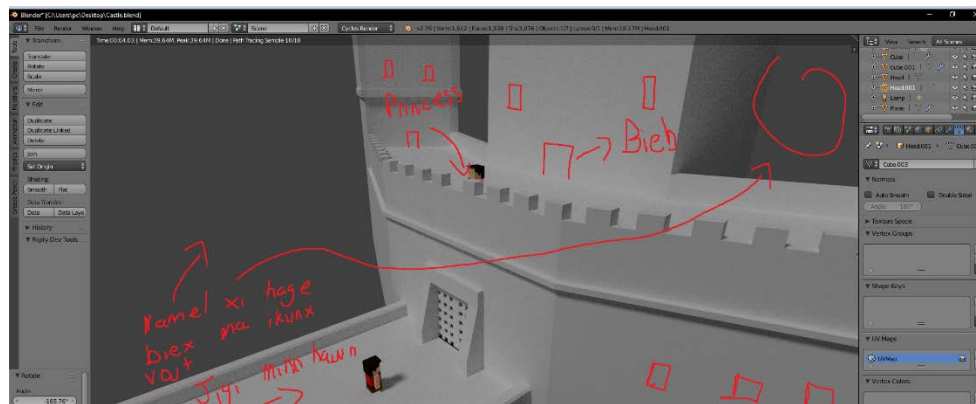


Figure 6: Adding detail

The finished product looks like the image below.



Early concept design of characters

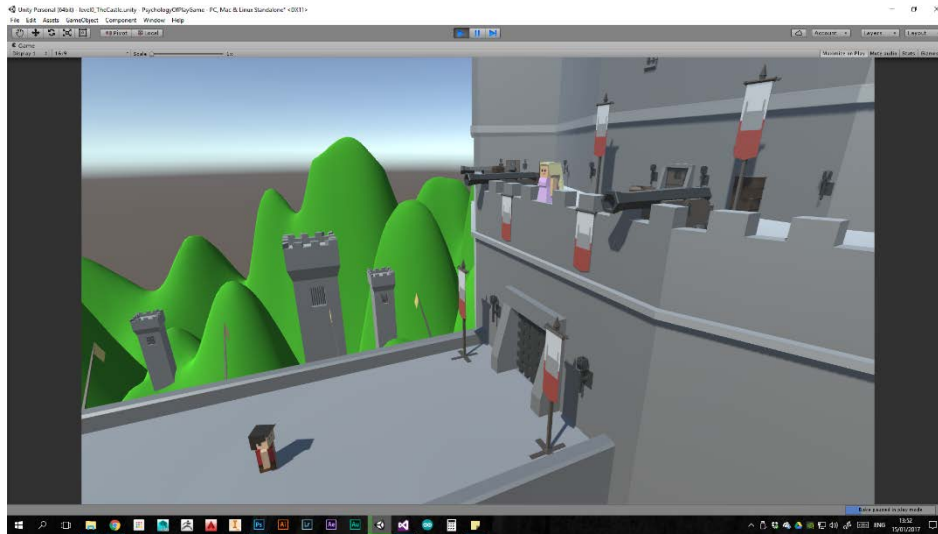


Figure 7: Final Scene of Level 0

Said that, this is still susceptible to change in order to make it fit better with other levels or to facilitate in game experience or use.

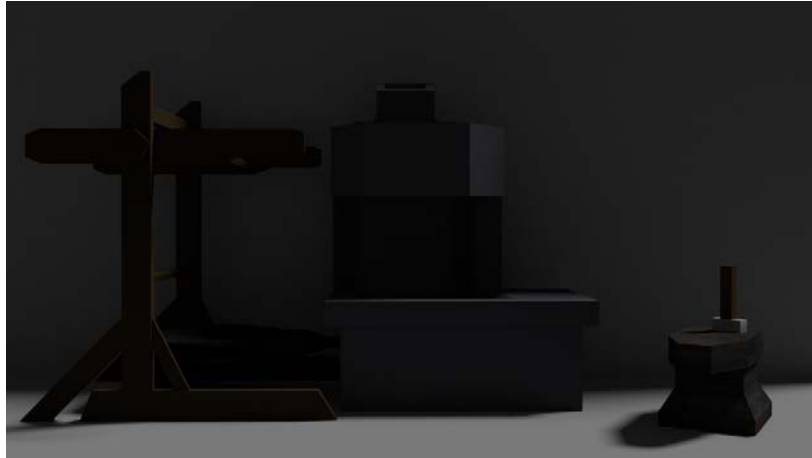
## Designing level 1 - The Forge

Since we wanted to play around with the player's mental models, first we wanted to make the player expect he's playing a normal RPG setting game. Thus we used the first level to have a stereotypical quest objective.

The objective of this level is to find five gold bars scattered around the whole level. Each bar is hidden to make the player explore the whole map. Once the player gathers all five bars, the player can put these into a furnace and creates the first key.

For the actual level design, we focused to make it a forge. We looked at medieval weapons and smiting equipment to get inspiration from. We placed the objects in such a way to hide the gold bars effectively. We also made sure the level looked dark to give that castle/forge atmosphere. To hint where the gold bars are, we made sure that the colour of the gold would be sticking enough for the player to notice them.





## Designing level 2 - The Monster

The purpose of level two was in having a dangerous looking creature in a dangerous looking environment. This is meant to show how we assume and judge from appearance and environment mental models of a character we do not know. In reality the creature will give you the key if you surrender to your fear and stop running away or even killing the creature.

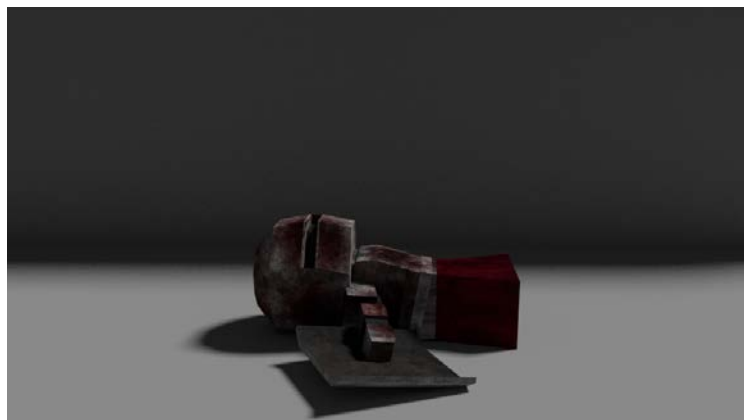
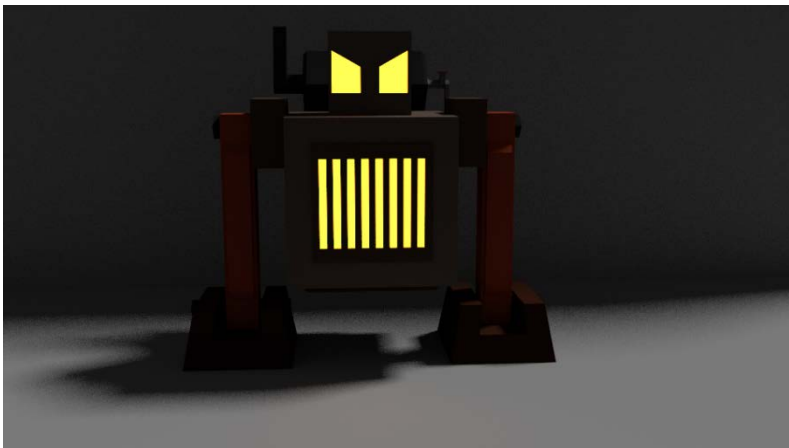
In order to achieve and build a strong idea of the mental model we are aiming for, we designed a torcher room before the level. This will make the player feel uneasy and is already on his guard that something bad might be coming to his way. Then they reach some long stairs leading down deep into the castle where a knight is dead right on top of the stairs leaving a blood stream behind. The blood stream is to show from where the knight came from and the injuries he had been inflicted.

The player walks down the stairs to a few more corpses lying around and a huge, robust metal door. One of the knights is even crushed between the door and this was made in order to show that the door was shut in a hurry and no one waited for any one. As soon as you pull a big lever beside the door, the door will slowly elevate and in front of the player eyes will be a scene of death. A massive wide and long corridor with many knight's dead. Blood is splattered everywhere and at this point the player should have got the point that this is a dangerous place.

As they walk the corridor they will find a huge trap which they can activate and rearm by means of a lever. This was put there in order to make the player more believe that he must kill the creature, and in reality, he is still able to kill it. The further they venture in the corridor, they will start in recognising a silhouette of a creature. We chose to make the creature a steam punk robot.

A steam punk so that it fits the environment of knight's, castles and princesses, and a robot so that it can be turned off and slow moving.

After the player gets near the robot, it will activate itself and turn his arms towards the player. At this point the player can either escape, run and kill the robot or else stand still. If he decides to escape or to kill the robot, they will never be able to get the key. On the other hand, if they stop, the robot himself will hand them the key and will explain why people fear him because of his look and size. In reality he is a gentle metal giant and the dead knights at the beginning of the corridor are all the consequences of a dispute arguing if the robot was evil or not.





## Designing level 3 - The Maze

For level 3, we wanted to include a maze for the player to navigate through to find the third key. At the middle of the maze, one could find the key.

We wanted to play with the player's mental model by placing a large, golden sword near the beginning of the maze. Because of this, the player has a large chance to forget about the key and travel further the maze to gather the sword at the beginning. Once the player gathers the sword, a door automatically opens as a shortcut to cross to the exit door.

The sword is also purely for cosmetics. It was designed to look powerful and gives the player the expectation that it's important in the future of the game but in reality, the sword only lowers the player's speed and will never be used. We wanted to play around with the concept of the famous 'legendary sword' cliché.

For the sword design, we took inspiration from games such as Final Fantasy to give it that powerful and fantastic look. We also gave it gold, blue and red colouring to look very powerful and royal.

## Designing level 4 – The Mirror Room

Since mental models are built from instructions, we wanted to create a level where one is giving you instructions, and you need to follow them to progress the level. In this level, the player enters the so-called 'Mirror Room'. The room is made out of two, 10x10 tile grounds separated by a stream of lava in the middle.

The player enters the room on the left. Here across the other side of the room, the player sees the main character's doppelganger. The doppelganger will move to a selected tile. The other tile except the one the doppelganger is on, would move down into the lava. The player must copy the doppelganger's actions quickly to save him/herself from the falling tiles. This action is repeated until the doppelganger hands the key to the player.

The level's theme is mainly focused on the medieval wizards and magical orbs commonly associated with fantasy medieval stories such as Lord of the Rings. We got the idea of this level by taking inspiration from the Psycho Mantis segment of Metal Gear Solid and the doppelganger puzzle of Tomb Raider.

## Designing level 5 – it's A Trap!

In level 5, the whole map is filled with traps that could instantly kill the player. The player must continue to run and avoid the traps around him/her to get to the key located at the end of the obstacle course. The speed and timing of the traps is always randomized so the player can never build a mental model to cross the obstacle course with ease.

The level also has check points for the player to rest. In each check point, the player has the option to gather pieces of the legendary armour. The armour is separated by four parts;

- Helmet
- Body armour
- Left Arm



- Right Arm

In fantasy games, armour is usually depicted quite large and very aesthetically beautiful. It's also quite common that the larger and more complex the armour, the better stats it has. Here we designed the armour to look very powerful and royal by giving it gold colours and having a more complex form. The irony is, that the more armour the player gathers, the slower he/she'll become. Although the armour does increase some health, speed is more important in this level to avoid the traps.

## Characters

All of the characters were created to look like their stereotypical counter parts; having royal, brightly coloured clothing. Since we had a quite simplistic design, we decided to give their faces a very simple look as well.

### Colin

It's very stereotypical that the main character would be this attractive prince or brave, smart warrior saving the princess. We wanted to change that by making our lead character very simple. Even his dialogue is very simple as he only says one word.



### Sophia

Sophia is our main character's crush. We took heavy reference from the princess in Super Mario for her design. We made sure that her character would act stereotypical to damsel in distress scenario. Little does our main character know about her true intentions.

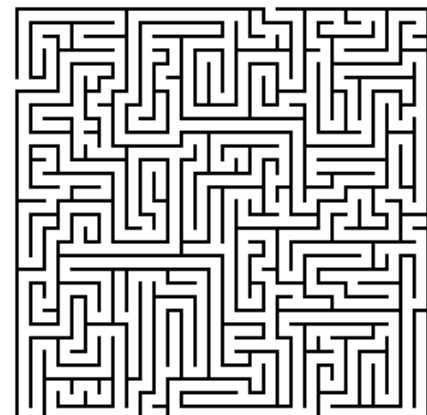
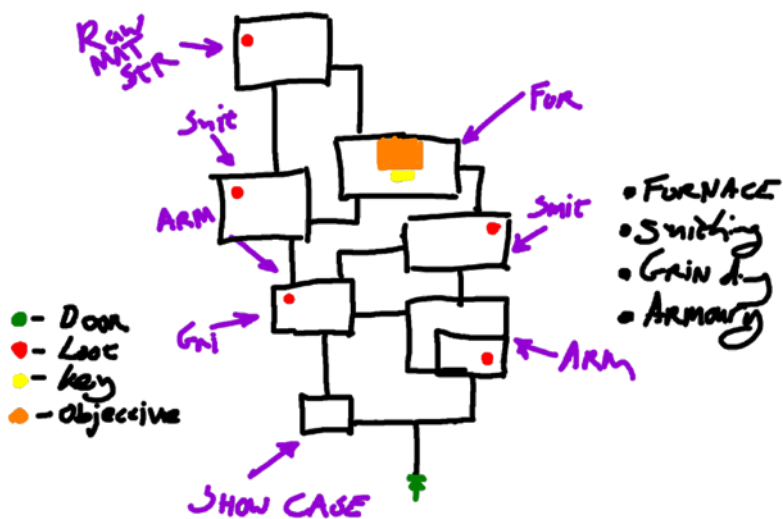


## Douchifer

Douchifer has a very little role at the end of the game. He was designed to look like the stereotypical handsome prince; having long golden hair, handsome, muscular, wealth, etc. We took inspiration from how princes were depicted in early, classic Disney animated films.



## Level Design



## Play Test #1

Our first player isn't much of a gamer and has very little experience in games. From the first play test, we left the player on her own and played by only reading to her the script to understand the story. The player had no problems grasping the idea of the first level but then started to have problems immediately on the second level because of some bugs. Here we had to intervene and guide the player to avoid some of the bugs. The player also didn't quite care for the monster as well, mostly because of the lack of sound and indication. The testing was faulted quite early mostly because of some bugs.

## Play Test #2

Second player was given some background and indication what he has to do as if there were signs and actual indications that we originally planned. We still didn't disturb or interrupt the player's action to see if he would fall for his own expectations. The player was recorded to have indeed fall for his own mental models, but some bugs actually destroyed his flow as he had to repeat the level a number of times. Player found the game good but needs a guide with the current build. Player also suggested indicators and sound to be present immediately to enhance the game's experience.

## Play Test #3

Third player had very similar experience with play tester #2 as he was given the same number of guidance. As predicted the player did find the amount of bugs quite annoying, especially the last mission. Player suggested to add a quick restart button to skip cut scene and retry mission. Player did as well fall for his own mental models. He as well suggested the importance of sound to create a better atmosphere for the game.