

Testing Protocols

For the test protocol the game was manually tested installing it on 3 Windows 10 machines and an Ubuntu one. The game has the following versions:

- **Version 0.1**

We created a map as a Tilemap with tile palette tools. After this we added a tilemap collider which wraps the visual renderer of the tilemap. We also added the dragon and the knight with their static animation (dragon_idle and knight_idle).

- Several tileblocks were black instead of transparent and blocked the characters jump or movement.
- Several stripes remained after photoshopping the original tilemap.
- The knight or the dragon gets stuck in some points on the walls.

- **Version 0.2**

We created the game mechanic: jump and running animations.

- When a character stops sudden the legs are still moving although the character is idle.
- The characters can perform multiple jumps before the landing and so the game becomes too easy.

- **Version 0.3**

We implemented a flag for the states: on ground or in air (isgrounded).

- The walls are perceived as ground and the characters can climb the wall illegally.

- **Version 0.4**

We added a platform which moves between 2 different positions continuously.

- When the dragon/knight is crushed by the platform, he slides on the x axis, and then comes back to the initial position.

- **Version 0.5**

2 kind of levers were created (the left and the right). After their activation/deactivation the collider is ignored.

- When both the dragon and the knight are on the both sides of the lever, the lever switching process loops forever.
- **Version 0.6**
When a character changes his direction, only the sprite was flipped, but the collider was not. We addressed that with the scale attribute of the Unity object.
- **Version 0.7**
We added the buttons which perform different tasks.
 - Sometimes the button remains pressed after the character exits the collider to the left, whereas the right side seems to work fine.
 - When 2 buttons are connected to the same platform, and are both pressed, if one of the characters leaves one button, the platform moves.
- **Version 0.8**
We added a door for each character which open when they are triggered.
 - If the dragon keeps his door open, and the knight passes by, the door will close.
- **Version 0.9**
Spikes were implemented with 3 colors.
 - When a character jumps into spikes from below, instead of falling into them, he dies.
- **Version 1.0**
We added the timer and a proper resolution.
 - The absolute position made the timer to be inside or outside the screen depending on the resolution of the screen. This was made relative.
 - On a specific level it is flattened or is not legible.
- **Version 1.1**
The main and the pause menu were implemented as well as the pause and resume process.
 - Resuming after the pause without having the time unfrozen made the loading impossible.
- **Version 1.2**

The saving system was added.

- **Version 1.3**

The loading system was added. When each level is loaded, it checks if it has to load from the last checkpoint or to start from beginning.

- **Version 1.4**

The background music was added which loops forever.