## Target Device

The target device will be for PC and Mac, with a resolution of 1920 x 1080. The chosen input method will be through mouse and keyboard, however just the keyboard can be used.
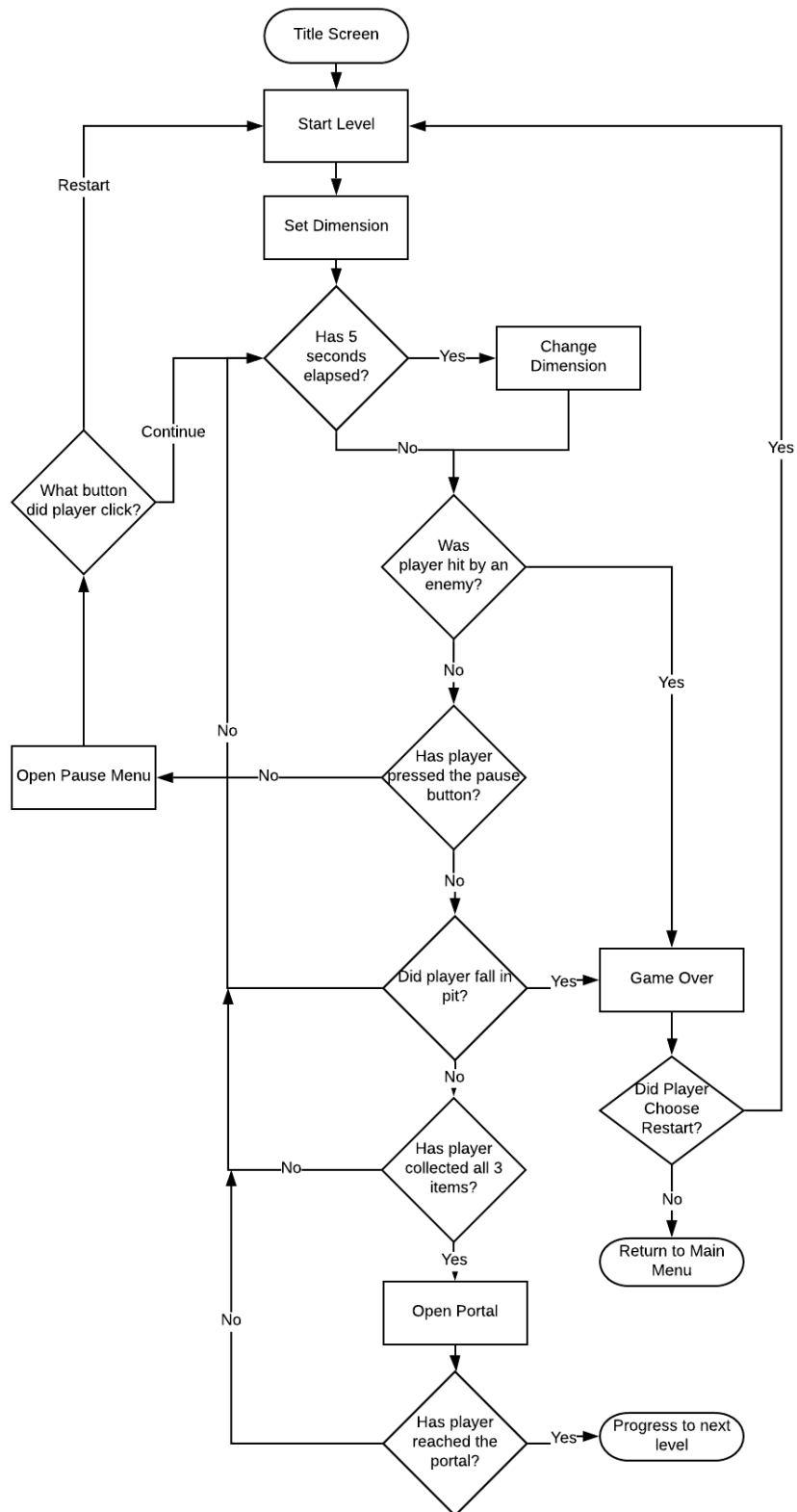
## Controls and Mechanics

The main mechanic of the game will be the ability to switch dimensions. Platforms that exist in one dimension might not necessarily exist in the other dimension. The dimensions will switch ever few seconds, but the player will also be able to briefly switch dimensions, as well as hold the current dimension if they need some more time.

For movement, you can either use A & D, or use the left and right arrows to move left and right respectively. Pressing the spacebar will make the player jump, and the longer you hold down the spacebar, the higher the player will jump. You can then press either the left or right shift key to switch dimensions, and the left or right ctrl to hold the current dimension.

## Game Screens

# Gameplay Flowchart

Title Screen

↓

Start Level

↓

Set Dimension

↓

**Has 5 seconds elapsed?** —Yes→ Change Dimension

No

↓

**Was player hit by an enemy?** —Yes→ Game Over

No

↓

**Has player pressed the pause button?** —No→ Open Pause Menu

No

↓

**Did player fall in pit?** —Yes→ Game Over

No

↓

**Has player collected all 3 items?** —No→

Yes

↓

Open Portal

↓

**Has player reached the portal?** —Yes→ Progress to next level

No

---

**What button did player click?**
- Restart
- Continue

---

Open Pause Menu

---

Game Over

↓

**Did Player Choose Restart?** —Yes→ Start Level

No

↓

Return to Main Menu

# Game Objective

To complete the level, the player needs to find all three missing pieces to a device which will grant him a new ability. In the final level, the player needs to find the last three pieces of the portal which will send them back to their home dimension. During gameplay, the player needs to avoid enemy attacks, as a single hit will result in death. To

# Visual Elements and UI
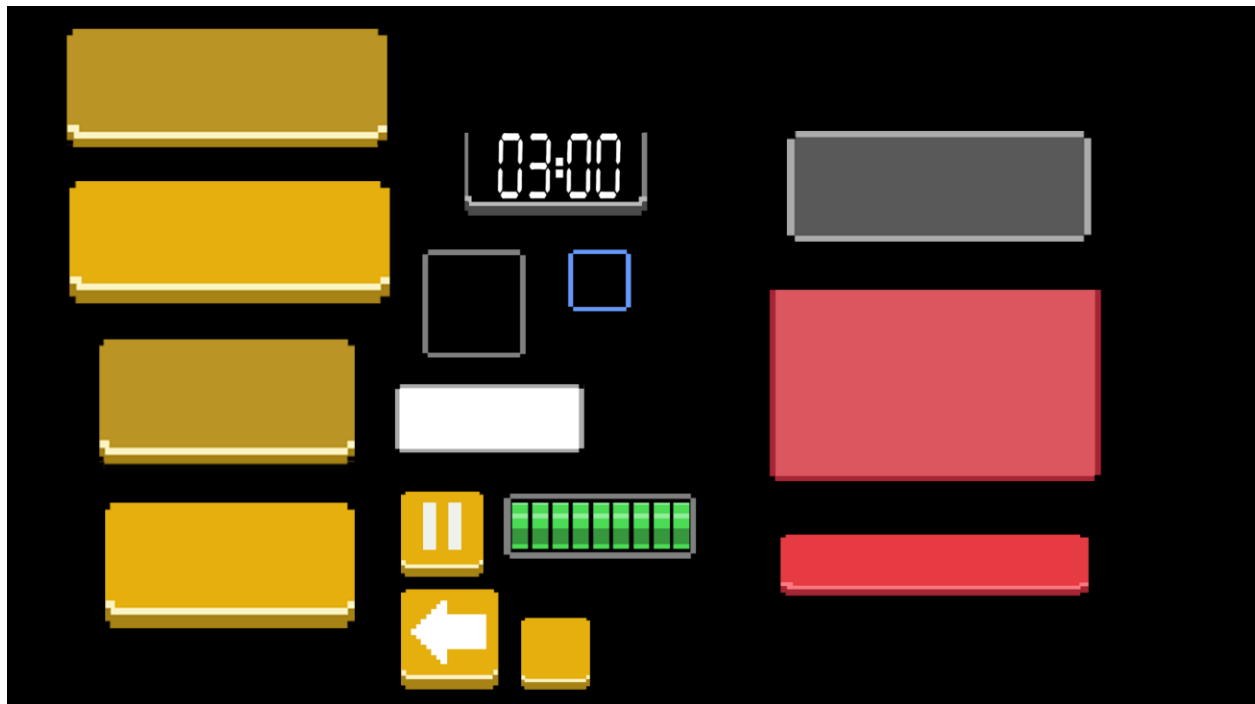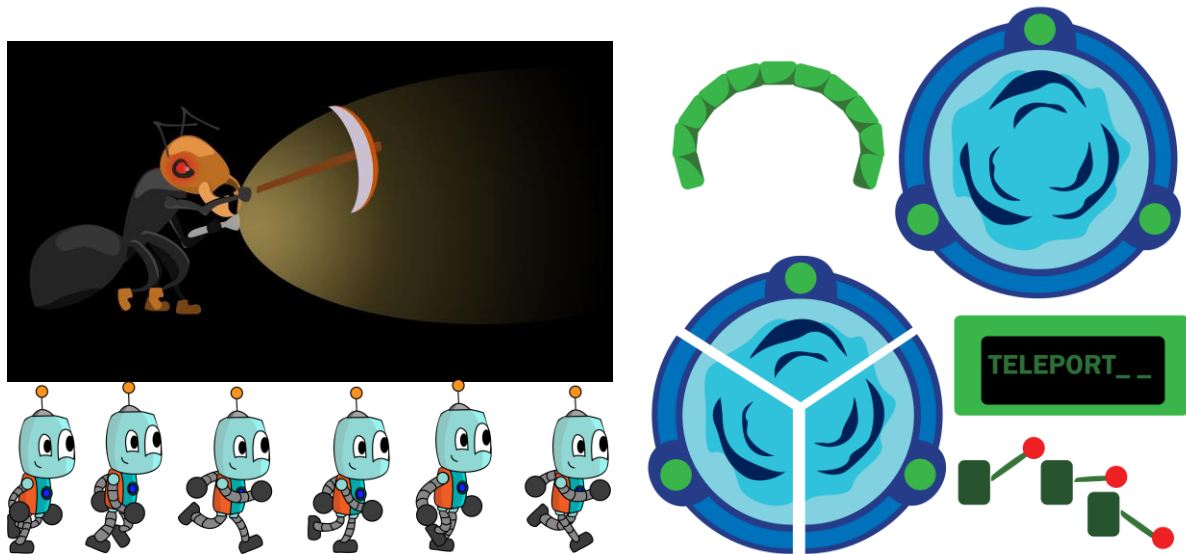
# Development Timeline

The development of the game will be done over the course of a month. using an Iterative development model. The first week will be dedicated to forming the basic gameplay loop, and having the main mechanic functional. The second week will be dedicated to the development of the AI and the Inventory system that will track what items the player has picked up.

The third week will be dedicated to placing the assets given by the art team into Unity, adding some extra touches in order to make the character feel more alive, such as sound and camera movement when he moves.

The final week will be dedicated to bug fixing and general tweaking of the mechanics to make the game as polished as possible. If time permits, some more elements of polish will be added, such as hidden items, and a scoring system.