Game 3: Platformer
Design Document

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CMPM 120 – Spring 2024

Description of game

The name of my game will be TITLE, and the level I am creating will be called TITLE. This level will be farm-inspired and have multiple sections of different terrain for the player to traverse, and areas containing different kinds of enemies for the player to defeat. Similar to Mario, the player will defeat enemies by jumping on their heads, but colliding with them in any other way will lead to the player dying and being taken back to the beginning of the level. Similarly, falling into water will

Player movement

The player's movement will be very tight – fast acceleration, fast deceleration, and very little drag or sliding. Jumps will be high, but come down quickly and allow for quick braking/turning in mid-air, to give the player plenty of control of landing. The player can only single jump.

From the Platformer Toolkit, my ideal values would be:

Table 1: Platformer Toolkit Values

Characteristic	Value
Acceleration	60
Max speed	11
Deceleration	60
Jump height	4.5
Down gravity	5
Duration	3.5

I will likely have to tweak these values once I start implementing the game.

Visual asset packs

For the visual design of the game, I plan to use Kenney Assets' Pixel Platformer pack and Pixel Platformer Farm Expansion pack for my platformer level. I will also use the enemies and player characters from the Pixel Platformer pack. I will use the Particle pack for particle and texture effects. I do not plan on creating any custom tiles.

Audio

For sound effects, I will use the Impact Sounds pack for normal impact sounds, and the Music Jingles pack for extra enemy/player death sound effects. If I have time, I may create some background music using BeepBox.

Collectibles

The player will be able to collect gold coins scattered throughout the level. This, plus the number of enemies killed (times a multiplier that I have yet to decide), will determine the player's final score for the level. Both of these values will be tracked and visible in the corner of the screen.

End of level condition

All the player needs to do to win the level is make it to the end of the level without being defeated by monsters or drowning in water. Their final score will be displayed at the end of the level, with an option to replay.

Camera

The camera movement will be focused on the player and not move ahead/behind of the player, but will change aperture and zoom in/out depending on the terrain displayed on-screen.

Game screen diagram
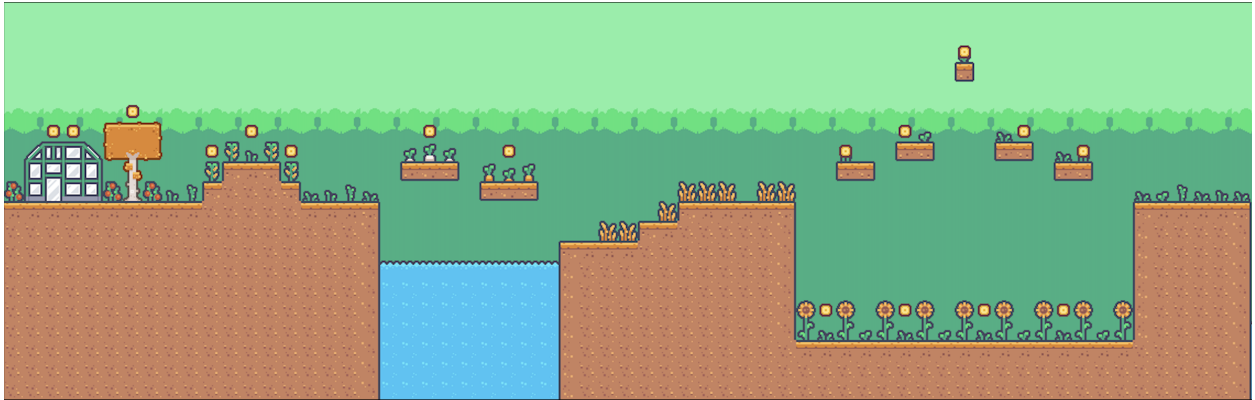

Figure 1: Game screen diagram

Figure 2: Part 1

Figure 3: Part 2

Figure 4: Part 3
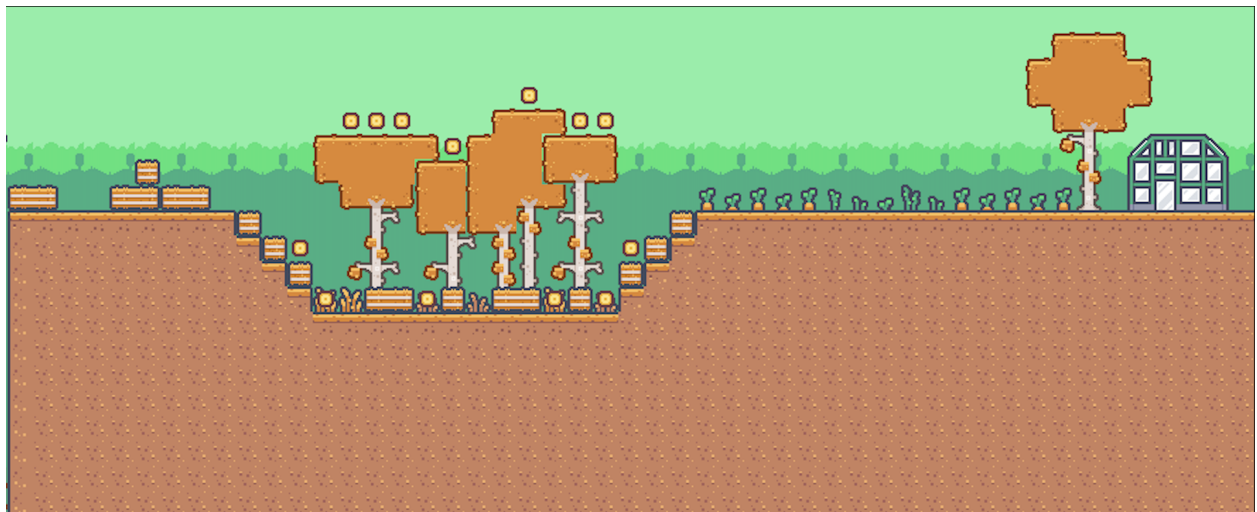

Figure 5: Part 4