The Little Plumber

Project – Release 1

CIS 350

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07/19/2021

**Project Description**

This project has been our take on a 2d Mario game of early 90s. The player is in control of a character that is used to advance though a map that contains elements that can either harm the player or help them.

**Features Implemented**

* Level Creation
* Further refine level design and layout
* Multiple levels linked together in secession
* Ability to control characters movement (forward, back and up)
* Create special abilities for main character that can be selected based on environment
* Have unique attacks against opponents
* Create multiple opponents
* Create coins that can be collected by the player that effects score
* Timer/Count down
* A visual representation of player’s score
* Different level environments
* Background music

Diagram

Description automatically generated

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| --- | --- |
| **Name** | Movement |
| **ID** | UC2 |
| **Brief Description** | Allow the player to direct the character |
| **Actors (primary and supporting/secondary)** | Current Player |
| **Triggers** | The player uses one of the arrow keys to direct the character left or right. The space key is also used to make the player jump. |
| **Preconditions** | The game must be started |
| **Primary Flow** | 1. Left arrow is pressed causing the character to move left.  2. Right arrow is pressed causing the character to move right  3. Space key is pressed causing the character to jump. |
| **Alternate Flows** | The player doesn’t press action keys and stays stationary   1. Possible collision with evil mushroom causing a loss in end of game. 2. Player remains in stationary |
| **Minimal Guarantees** | Player will have successfully moved in a given direction of their choosing |
| **Success Guarantees** | Playing will successfully navigate level |

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| **Name** | Collision |
| **ID** | UC3 |
| **Brief Description** | Allows player to interact with level objects |
| **Actors (primary and supporting/secondary)** | Current player |
| **Triggers** | The player either runs into or get ran into |
| **Preconditions** | The game level must be started |
| **Primary Flow** | 1. The player collides on top on of an enemy which causes elimination of the enemy.  2. The player collides with a pipe causing a change in level |
| **Alternate Flows** | The player is not responsible for the collision   1. A enemy collides with the player causing end of game. |
| **Minimal Guarantees** | Player will have a collision causing end of game |
| **Success Guarantees** | Player will have a collision resulting in the elimination of an enemy or the change in a level. |

|  |  |
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