

Work Breakdown Agreement (WBA)

Team Members

- Alexander Authors
 - Joseph Ward
 - Jared Tucker
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Assignment Breakdown

- Requirement 1: Lava Zone (Joseph Ward)
 - Requirement 2: More Allies and Enemies (Alexander Authors)
 - Requirement 3: Magical Fountain (Jared Tucker)
 - Creative Requirements:
 - Slot Machine and Gambling (Joseph Ward)
 - Crafting and Weapons (Jared Tucker)
 - Documentation and Modularisation of all code (Alexander Authors)
 - Write up WBA for Assingment 3 (Alexander Authors)
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Requirement 1

Joseph Ward is responsible for the Lava implementation as well as creating a new map and implementing the ability for Mario (the Player) to teleport via the Warp Pipes.

The implementations he was required to do:

- After creating a second map (Lava Zone), place one Warp Pipe in the top-left corner. Place several warp pipes on the first map, scattered around randomly.
 - When we play the game for the first time, we only see warp pipes. Piranha Plants will show up in the following turn.
 - Go to one of the Piranha Plant, and kill it. You should not be able to see teleportation action until you kill the plant. Once you have killed it, you can jump to the warp pipe.
 - Here, you'll see an option to "Teleport to Lava Zone"(second map).
 - If you choose this option, you should be moved to the second map, and now you are standing on top of a warp pipe that you've created on the second map. And you will have an option to teleport back to the previous pipe.
 - Doing so should bring you back to the exact position of the pipe in the first map. Assumption: When you are teleporting, you may instantly kill Piranha Plant that is on a Warp Pipe.
 - Find another pipe, kill the Piranha Plant, and teleport. Again, it should bring you to the second map (on the pipe at the top-left corner), and teleporting back will bring you to the last pipe, not the first pipe.
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Requirement 2

Alexander Authors is responsible for this requirement. He is responsbile for creating the new enemies (Flying Koopa, Piranha Plant and Bowser) as well as the Princess (Princess Peach), who will enable the Player to end the game.

The implementations he was required to do are:

- Place Princess Peach somewhere on the second map, near Bowser.
 - In the first map, after killing Piranha Plant, step onto the Wrap Pipe, and teleport to the second map.
 - At first, Bowser does nothing until Mario approaches him (standing in Bowser's adjacent squares).
 - After Bowser lands an attack, Mario needs to step out from that ground so that we can see a fire symbol v on that ground. Note: Bowser is not immune to its fire (you are welcome to make Bowser immune to its fire, but not against Fire Flower damage).
 - Bowser will follow Mario and attack whenever possible. Mario may receive two kinds of damage within one turn: normal hit and fire damage.
 - After defeating Bowser, we should be able to see a key k, pick it up, and there should be an action from Princess Peach to unlock and end the game. You are welcome to expand the ending game scenario (e.g., bring back Peach to the Mushroom Kingdom)
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Requirement 3

Jared Tucker is responsible for this requirement. He is responsible for creating the Fountain and the Bottle.

The implementation requirements are:

- Place two fountains (Health Fountain and Power Fountain) near the starting point. We do this for marking purposes; you may put them far away later.
 - When Mario is standing on top of the fountain ground, you should see an action to fill the bottle with its water.
 - The bottle should be filled up like a stack (HINT: it uses the stack, not implementing it): First in, Last out. So, this bottle can be filled up with any kind of water, depending on its stack order. Push means to fill in the water to the bottle, and pop means drinking the water.
 - Mario may fill up and drink the water as much as possible (until you look like this).
 - a: Mario consumes Bottle[Healing water, Healing water, Healing water, Healing water, Power water]
 - b: Mario refill Power Water
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Creative Requirements

Joseph Ward and Jared Tucker were responsible for this.

They had to implement:

- The ability to gamble (Joseph Ward)
 - creation and implementation of a casino area (Joseph Ward)
 - creation and implementation of a slot machine (Joseph Ward)
 - creation and implementation of how the gambling works (Joseph Ward)
 - creation and implementing how the Player's balance would get updated. (Joseph Ward)
 - creation and implementation of Crafting which allows the crafting of weapons. (Jared Tucker)
 - implementing crafting materials. (Jared Tucker)
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Sign here:

Alexander Author agrees

Jared Tucker adheres to these guidelines

I Joseph Ward agree

Reviews and Reviewers

Deliverables due Sunday 22nd May, 2022

Deliverable	Reviewer	Date Reviewed
Alexander Authors	Jared Tucker	21/05/2022
Joseph Ward	Alexander Authors	21/05/2022
Jared Tucker	Joseph Ward	21/05/2022
