

## Minecraft Lava Lake Mod

### TEAM MEMBERS:

- Lauren Paredes
- Mirna Masri

### PROJECT SUMMARY:

For our project, we will create a Minecraft mod. We will create our mobs, treasure items, blocks, and drops within this mod. We will create two new mods which will live in lava lakes found in the Nether: a lava piranha and a lava dragon. Both mobs will have their attack, movement, and behavior. The lava piranha will school with other piranhas and jump out of the lava to attack the player when the player is near them. When killed, they will drop piranha scales, which can create special lava boots that allow the player to walk on lava. The lava dragon will sleep in lava and fly around the lake they spawn in. They will attack a player by either diving into the player or shooting lava at the player. The dragon will drop dragon teeth that can be used to create a lava sword that can be used to weaken lava dragons and more easily kill them. Treasure items will spawn in chests at the bottom of lava lakes and can have dragon teeth, piranha scales, piranha boots, or the dragon tooth sword, as well as other nether mob loot and potions. Additionally, we will create lava lilies that will allow the player to stand on them and walk over the lava without the piranha boots.

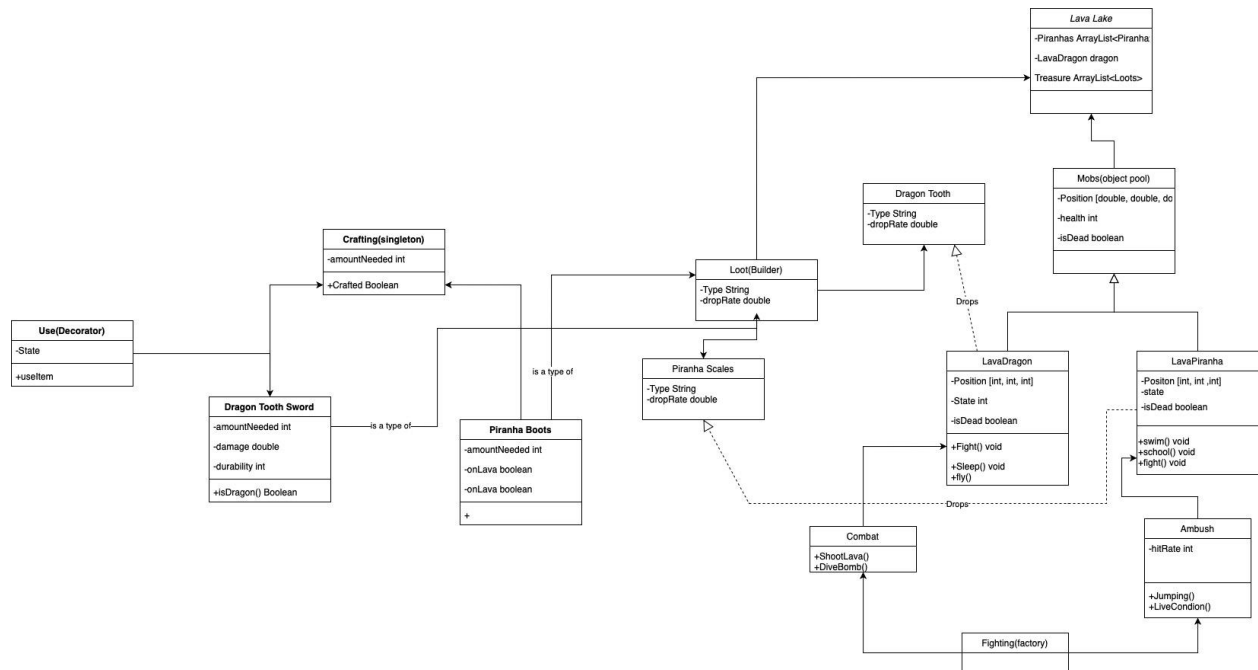
### Project Requirements:

**Languages:** Java, using optifine to help launch the mod

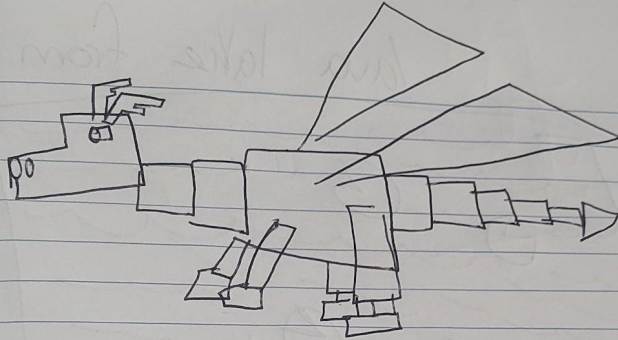
Lauren	Mirna
Lava Piranha Piranha scales Piranha boots Lava lilies Crafting Combat for Dragon and piranha	Lava dragon Dragon tooth Dragon tooth sword Treasure chests Spawning mobs

**Data Storage:** the game and the player information will be stored in the mindcraft database.

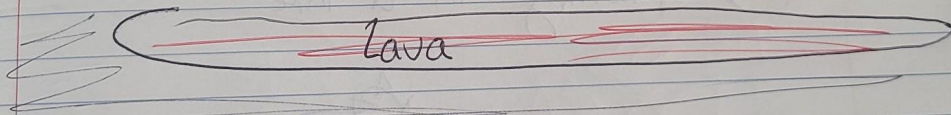
## UML Diagram



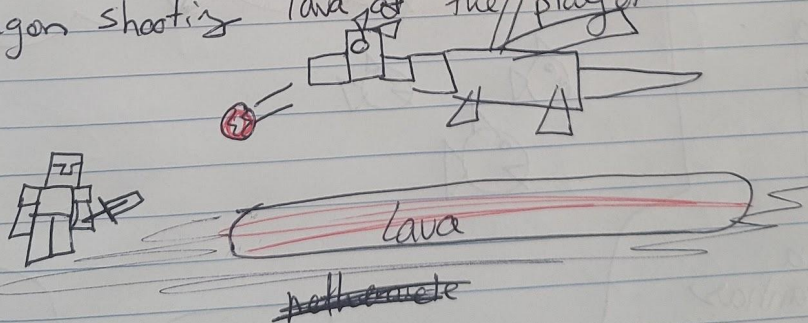
## UI Mockups/Sketches:



Dragon  
flying  
lake above the lava

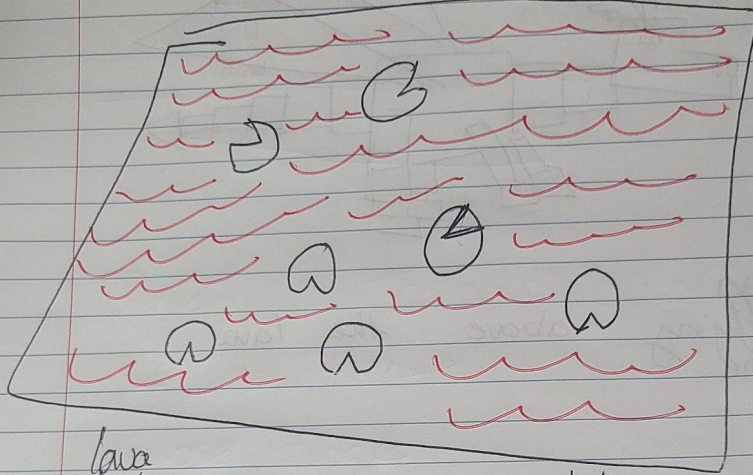


Dragon shooting lava at the player

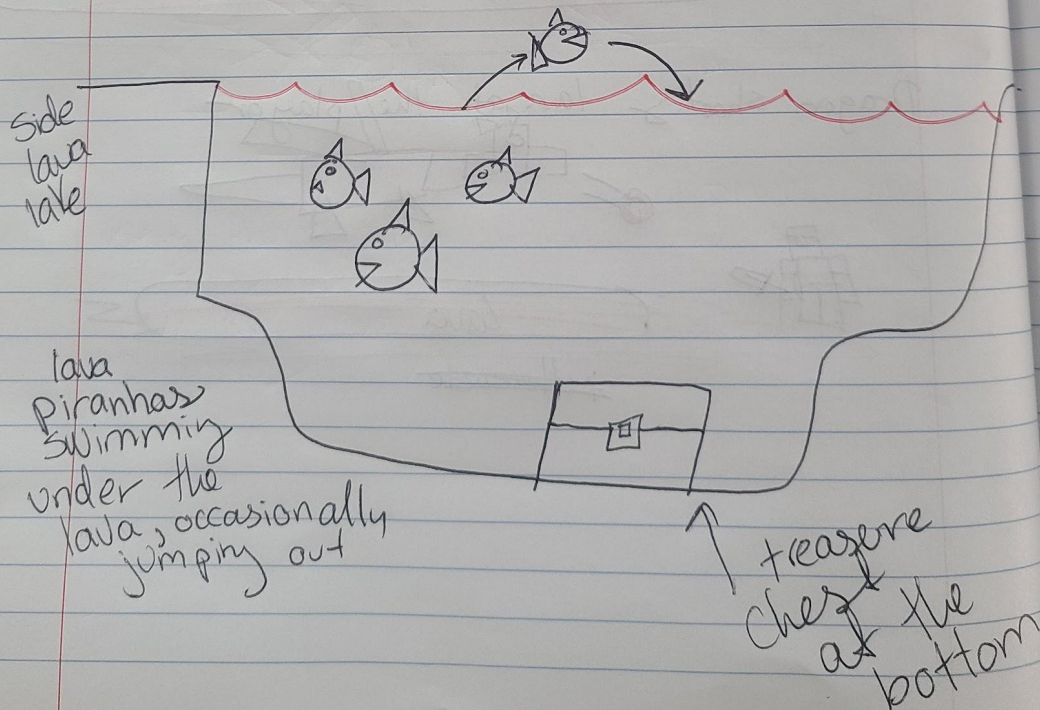




lava lake from above



lava lilly spawning in a lake



Side lava lake

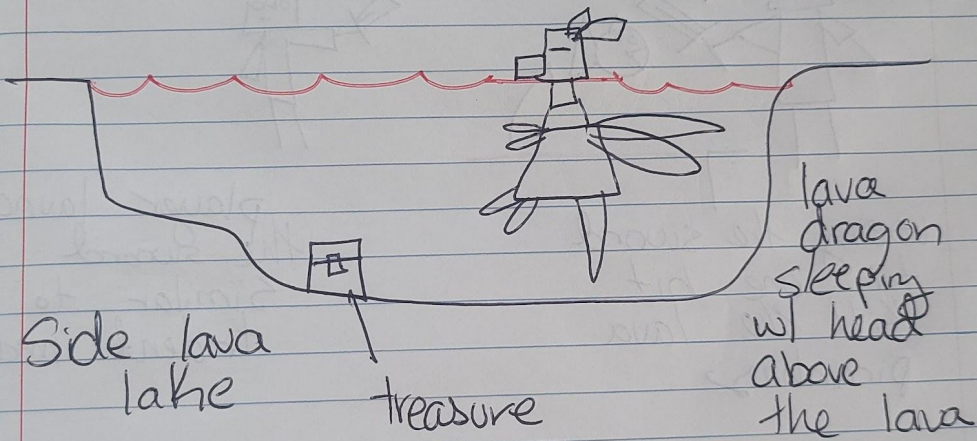
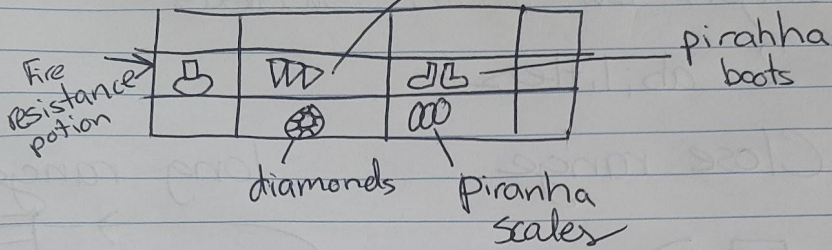
lava piranhas swimming under the lava, occasionally jumping out

treasure chest at the bottom

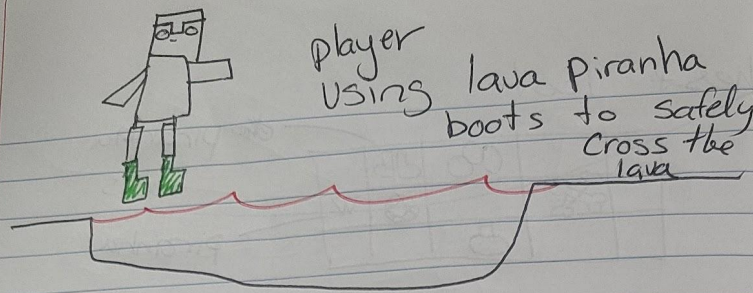


piranha

Chest loot dragon tooth



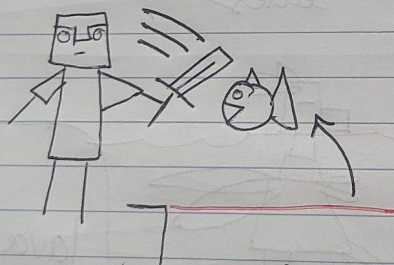




## Dragon ~~the~~ Tooth sword

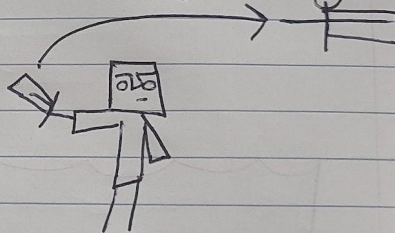
2 abilities

Close range



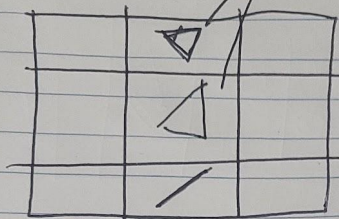
using the sword  
for one hit  
kill the lava  
piranhas

long range



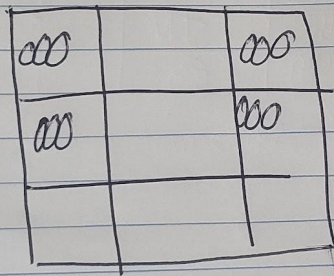
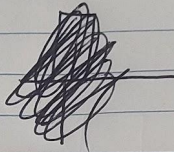
player launching  
the sword  
similar to  
trident mechanics

2 Dragon teeth



Make / Craft  
a Dragon  
Tooth Sword

Stick



4 piranha  
scales  
to create  
piranha boots

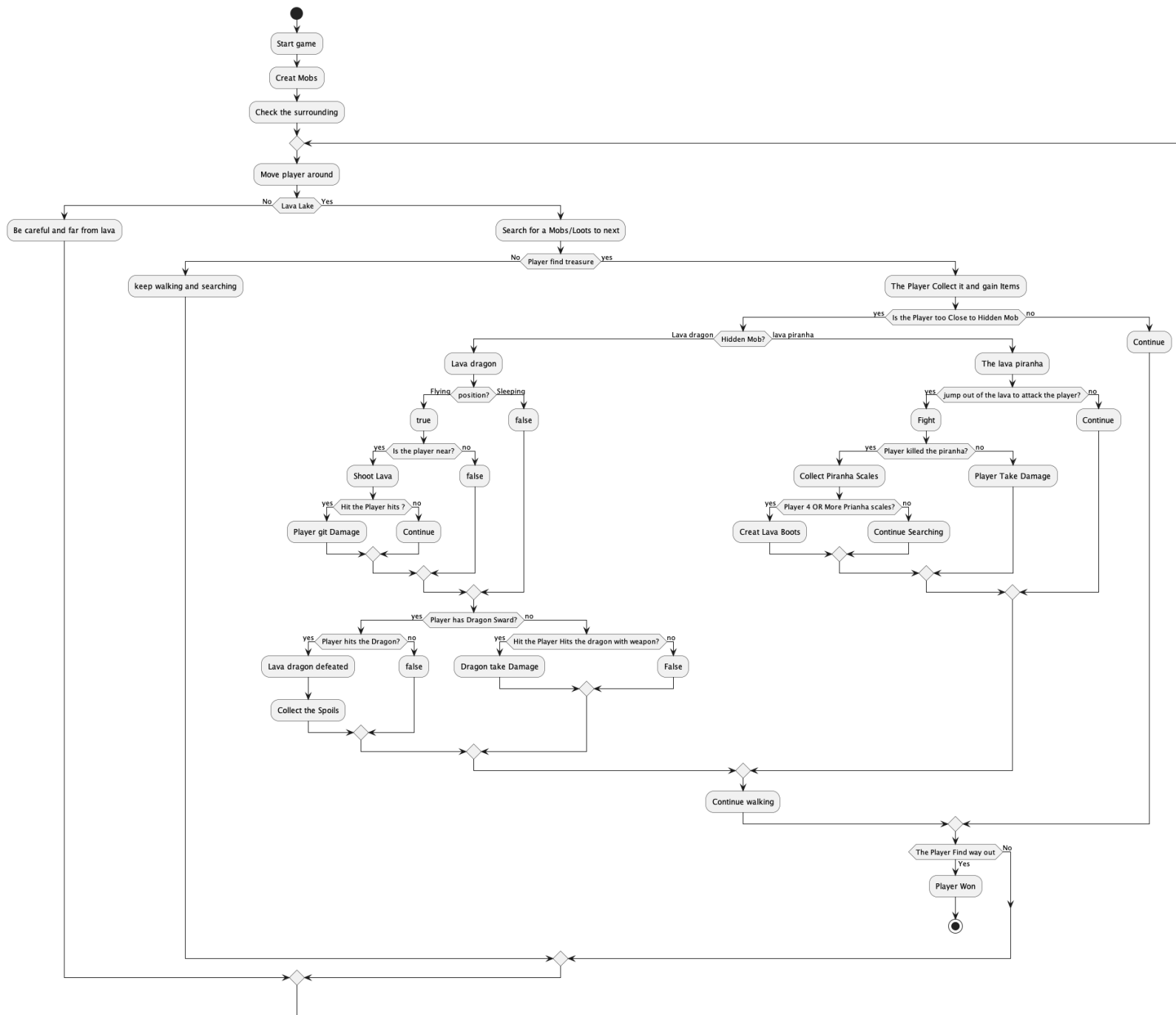


## **Users and Tasks: Use Cases:**

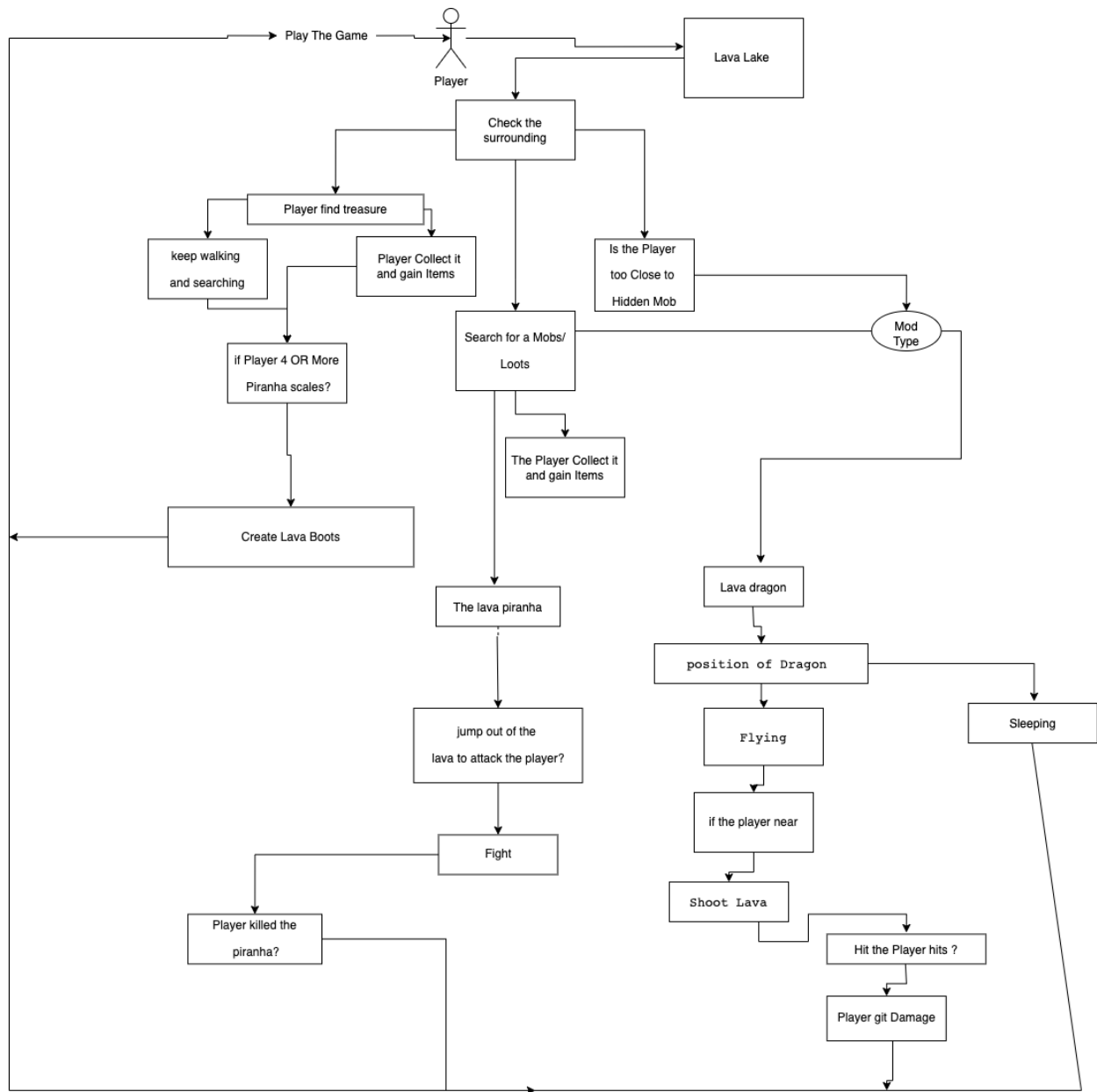
1. Dragoning flying, does it not hit blocks? Can it move vertical/horizontal? Can it divebomb? Does it shoot the player?
2. Spawning Lava lilies. Do they not burn? Are they at the right Y level? How spread apart will they be?
3. Piranha swimming, will they school in the lava? Are they able to not burn? Can they detect when a player/other mob is near? Can the player walk on them?
4. Loot, can it be opened? Will it spawn at the right Y level? Does it spawn in with enough loot?
5. If a piranha is killed and drops loot will the player be able to pick it up? Can the item burn in lava? Can it be used to craft?
6. If a dragon is killed and drops loot will the player be able to pick it up? Will it have the right drop rates? Does the item burn in lava? Can the player craft with it?
7. Dragon tooth sword. Is it craftable? Does it have the correct durability after use? Can it kill a dragon? Can it be enchanted? Is it the right type? Can it be thrown? Can it be used in close range combat?
8. Piranha boots. Is it craftable? Does it have the correct durability after use? Can it be enchanted? Is it the right type?



## UML Activity or State Diagram:



## Architecture Diagram:



## Sequence Diagrams:

