

#### Hour 1:

This hour, I started working on creating the game, including creating a scene for the first level and a scene for the player, including basic animated movement. Afterwards, I also worked on creating a basic tilemap, and started creating a map for the first level.

#### Hour 2:

This hour, I worked on creating the camera for the game, and continued working on the level/map. This included creating world boundaries, and adding more tiles to the map. In terms of this, I created another tile and turned my tilemap into an actual map (with multiple tiles) rather than just one tile, which is what it was before. This took a bit of time to do, as I had to re-input the tiles from before, and also because I kept running into an issue where the player would get “stuck” when walking from one tile to the next, but only in one direction.

#### Hour 3:

This hour, I worked on creating a potion that the player can pick up, as well as an inventory script for this potion. Afterwards, I added some code to the potion to give the player the ability to use the potion by clicking a certain key on their keyboard, and made using the potion increase the player’s speed for 10 seconds. I also added health to the player, as well as a health bar that goes down at set intervals of time. Furthermore, I added a health potion that increases the player’s health when used.

#### Hour 4:

This hour, I started working on creating obstacles. More specifically, I created a fireball that decreases the player’s health when the player touches it. I also made the fireball “reset”, in the sense that it goes back to its original position and waits for a short period of time, before starting to move again.

#### Hour 5:

This hour, I started off by working on a way to add a delay between when the player dies, and when the player respawns. This involved changing the time the scene reloads, but also getting the fireball to stop moving in this time. I also changed the fireball a little bit, including by changing its wait time between respawns, and by making it wait for a bit before starting to move once the game loads. This...took a while, since my code isn’t the cleanest right now, so it took some trial and error to figure out how to best do these.

After this, I started working on the tilemap a bit more. I added a purple “force field”-esque tile to place in front of the fireball spawn place, and put some tiles on another layer so I could move them forward, in front of the fireball.

#### Hour 6:

This hour, I worked on adding more details to the tilemap, mostly the background. I also worked on creating a more general script for the levels so I could reuse it throughout each level instead of creating a new one for each level. I also changed some of the killzone code to be more

general as well, which fixed a bug that caused the game to crash when the player dies by touching the killzone.

Hour 7:

This hour, I started creating a portal to take players to a different level or scene. After I had done this, I started working on creating this connecting scene. I mostly worked on creating the tilemap/map for the scene, and then worked on fixing the dying, since the player wouldn't die in this new scene even if their health was at 0. After a bit of work doing this, however, I changed the spell so that it would reset once it hits something, then went back to working on the dying.

Hour 8:

This hour, I realized that it's not just the dying that's not working—nothing in the script for the new scene is. I'm currently trying to fix this.

After a while, I decided to just delete the entire dungeon scene and remake it, which took a bit of time, however it still wouldn't work. However, this time, I noticed that the script was working, it just wasn't calling functions from the parent class, so I just called these functions manually in the script for the scene, and it finally worked. In this time frame, I also created a more precise collision shape for the fireball, since it was causing issues to just use a circle at the front of the fireball as the collision shape.

After this, I continued working a bit more on the tilemap, including adding a background. I also added some more components, such as a camera to follow the player in the player scene (whereas before, it was just in the first scene itself).

Hour 9:

This hour, I worked on the second scene some more. This included working on the tilemap a bit, such as adding a killzone to the bottom of the scene and creating a tile over the spell to hide it. I am also currently trying to fix an issue where the spell/fireball doesn't actually move.

This issue with the spell/fireball not moving turned out to be an easy fix, as I just forgot to add something in the inspector. After fixing this, I started working on creating a way to make the spell script more generic by creating a dictionary of dictionaries with multiple types of spells and their properties. In this way, I am going to use the same script for multiple different spells rather than having a completely different one for each spell. However, there is an issue where I can't set the collisionShape2D properly, so I am now going to try to fix that.

Hour 10:

It turns out that the issue with the collisionShape2D was that I used a function that had a name change between versions, so I was using the wrong name for the version of Godot I have installed. I fixed this, and then moved on to creating enemies for the game.

After I had spent a while creating enemies, I realized that there were some issues with the spells, such as the fact that I had to manually add the collision shape to each instance of a spell,

so I went and fixed this so that the collision shape is set in the script for the spell, using the spell's name. Here, I ran into some issues with this, the main one being the fact that no matter what, the collision shape always stayed as the collision shape for the fireball, even if the spell wasn't a fireball. I am currently trying to fix this, and will continue to do so during the next hour.

Hour 11:

This hour, I realized that the issue with the spell's collision shape was that I had manually added a collision shape to the spell in the scene earlier, and forgot to remove it. I removed this, and the collision shape worked properly this time. After this, I am going to try to fix another issue where the collision shape and the sprite are slightly offset from one another.

After a few minutes, I decided to just leave this offset issue for now, since it isn't causing too many issues, and went back to working on the enemy.

After a while, I managed to create an enemy that moves, however the enemy does not follow the player like I am trying to get it to do, so I am now going to work on that.

After some work, I got the enemy to follow the player, and it turns out that the issue was just that I wasn't updating the player's position in the inventory, so it was always 0.

Hour 12:

This hour, I created a method for the enemies to jump if they collide with a part of the tilemap. I also changed the collision layers a bit so that the spells only hit the player and tilemaps, and go through the enemies. Currently, I am working on making the enemies actually attack the player and decrease their health, since the enemies do not do this at the moment.

Making the attacking turned out to not be too difficult, I just needed to change the collision masks of the raycasts I used themselves.

Hour 13:

This hour, I worked on creating an inventory. I already have an inventory script to store all of the player's items, but I wanted to make something visible in the game to make it possible for players to choose/click on items to use/enable them.

After some (a lot) of work, I managed to get the inventory working, however I ran into an issue: the player using the arrow keys to move results in the inventory slot selected changing, so I am now trying to fix this.

Hour 14:

This hour, I continued working on the inventory panel. This involved adding icons to the panel, and giving the player the ability to choose which inventory item they want to use with the numbers on their keyboard. This took a bit of time and trial and error, since the numbers I assigned to the slots were not the same as the numbers I used in the inventory panel, so this

was a bit confusing. I got it to work in the end, though, and moved on to creating attacks for the player to use in the form of spells.

The issue with the arrow keys changing the inventory slot selection still exists, but I think I'm going to deal with that later since it's not that big of an issue.

I started creating attacks for the player, and it took a while to do this since I had to add health to the enemies as well so that their health could decrease. I started working on this, however I will be continuing this during the next hour.

Hour 15:

This hour, I continued working on the player attacks. It's kind of working...except for the fact that it currently fires at set intervals and only goes in one way, and also doesn't actually damage the enemies, so I am now trying to fix that.

After some work, I managed to get the spell to only fire once the player fires it, move in whichever direction the player is facing, and actually damage the enemies.

After this, I realized that I had not added a counter in the inventory panel for each item, so I went and did that.

Afterwards, I added an animation for when the player is firing a spell, and added a label in the top left corner of the screen to tell players which key on the number pad to press to use each item.

**\*\*Hour 16:\*\***

This hour, I worked on making the maps for the levels bigger/more complicated. While working on these, I tried to add more health and speed potions, and realized that the scene for these potions did not include a sprite or a collision shape, so I added these to the scene so that I would not have to add them manually to each of the instances of the potions. Afterwards, I went back to adding to the tilemaps.

After a short while of adding tilemaps, I started adding more fireball spells to the scene, and that's when I realized that I needed to flip the sprite horizontally if the spell was going to the right, so I did that, and then went back to adding to the tilemaps.

After adding these tilemaps, I noticed three main issues:

1. The health potion I put in the second scene won't work/detect a body entering it.
2. The player's spell ends up damaging the enemy even if the player hasn't fired a spell
3. The enemies' collisions are not done well, since they don't always jump if they come across a part of the tilemap and they don't always harm the player even if they are touching the player.

I started by working on the first issue. This was relatively easy to fix, as I realized soon after that I just hadn't set the collision layers and masks properly for it. However, I also realized that the number of potions goes to 0 when the player dies in the second scene, when it's supposed to just go to the number of potions the player had before they entered the scene, so I went and fixed this.

#### **\*\*Hour 17:\*\***

This hour, I continued working on some of the issues from the last hour. First, I focused on fixing the errors with the player's spell damaging the enemy even if it hasn't been fired. This turned out to be a really easy fix, as it was just a logic issue with one of my booleans. Afterwards, I started working on the issue of the enemies not always harming the player even if they are touching the player. This also turned out to be a relatively easy fix, however it took a while to figure out how to fix it.

Next, I worked on creating a way for the player to punch/attack without spells, for closer-range attacks.

After some work, I got the attacking to work.

#### **Hour 18:**

This hour, I worked on creating a treasure chest for the player to work towards. After a while, I got a treasure chest working that opens when the player presses "E" when they are close enough to the chest. Next, I'm going to create a system for what happens when the player opens the chest.

After a while of work, I got the treasure chest to give the player health and potions once they open the chest. Then, I went to change the cooldown period for the attacking a bit...and realized that since I had used the same key for both opening the chest and attacking, the chest prizes were being added every time the player attacked. I am currently trying to fix this.

After a bit of work, I fixed this, and will be moving on to fixing the killzone at the bottom of the second scene, since this isn't working.

#### **Hour 19:**

After some work, I got the killzone at the bottom of the second scene to work. Now, I will be moving on to changing the tilemap for the second scene a bit, since some of the tiles the player is supposed to jump to are too far for the player to actually jump to.

I made some minor changes to the tilemap, and then moved on to creating the next scene, after the player opens the chest. However, first, I'm going to create a cutscene that explains to players what to do once they open the chest.

For this cutscene, I started creating a typewriter effect for the text in a label that I created. I created this, then tried to test it out...and realized that the treasure chest opening wouldn't work anymore. So now I'm going to try to fix this.

This issue with the treasure chest not opening turned out to just be due to the collision layers and masks, so it was a pretty easy fix. Afterwards, I went back to working on the typewriting, and changed some of the times for the scene changing timer and the typewriting timer. I played around with the times for the typewriting timer for a bit until I was satisfied with the typewriting speed. While doing this, I realized that the text was going off of the scroll, so I fixed this. Now, I'm going to work on creating the next level, after the player has finished going through the cutscene.

Hour 20:

This hour, I started off by creating a button to take players to the next level after they have finished the cutscene. Afterwards, I started working on this next level. I'm going to make this level pretty much the same as the first level, just with a key in it. I finished the first scene of this second level, and then moved on to creating the second scene of this second level.

Hour 21:

This hour, I worked on the second scene of the second level, and within this, I worked on creating a second treasure chest that can be opened once both keys have been collected. Afterwards, I worked on creating a final cutscene for when the player opens this second chest. After this, I worked on creating a main menu, as well as a how to play scene.