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Development Blog

Wednesday 2/14/18

- I came up with the idea to create a Zelda-like rpg 2D game and started on a basic prototype with a single sprite that you could move around.

Monday 2/19/18

- I added walls and created a small test are for my game.
- I changed how the player sprite was moved from using transform.position to rigidbody.velocity so that it wouldn't phase through walls.
- Implemented a feature that the player will rotate to look at the mouse.

Wednesdays 2/21/18

- I added a weapon sprite as a child of the player sprite and spent the majority of class figuring out how to move it fluently and return back to the player while it's attacking.
- I discovered that transform.Translate would do the trick.

Friday 2/23/18

- Implemented my transform.Translate method of moving the weapon into the game along with a few bugs that came with it.

Sunday 2/25/18

- Added a slime enemy and implemented a method for it to chase the player, but it lacks pathfinding, so I need to add that latter.
- I added stats for both the player and the slime, and made it so they can damage each other.
- Added UI elements like a hp counter in the top left corner, and lose and win text.

Monday 2/26/18

- I decided that the slime enemy was boring as it was and added to its script the ability to spawn baby Slimes when the mother slime dies.
- I made the mother slime and baby slimes both be prefabs.
- Changed the code so now the Player and Slime scripts have takeDamage(int damg) functions and made it so that when the slimes die their game objects are destroyed.
- I made it so that the Slimes themselves were no longer triggers so that they wouldn't overlap each other.

Tuesday 2/27/18

- Modified the AI so that the slimes will stay a certain distance away from each other based upon a circle trigger collider that is attach as a child object.

- Added a sprite I made for the Slime and adjusted the code so that the slime now rotates to face the player.
- Moved the weapon object to inside the player object.

Wednesday 2/28/18

- Created the Creature script which is the parent script to both Player and Slime and holds universal variables and methods needed by both scripts like `m_hp`, `m_speed`, `die()`, and `takeDamage()`.
- Also learned that you need to use `override` in the method description to override a parent script's method.

Saturday 3/3/18

- Attempted to implement Ethan's pathfinder code and failed (I got a null pointer error and don't know enough about the code to fix it).
- Created the Weapon parent script that holds universal variables and methods for all weapons like `m_atk`, `m_speed`, and `m_reach`.
- I created a new enemy called Lizardman who carries and attacks with a spear
- I created a new weapon a spear which has a greater reach than the sword and attacks faster, but deals less damage per hit
- I gave the Lizardman some basic pathfinding code to attack its enemy when it gets close
- Implemented a way for the lizard man to throw the spear at the enemy at a certain distance.

Sunday 3/4/18

- Improved upon the lizardman's spear throwing code and AI so now it will not go after the player when it's far away and will move into spear throwing range when the player gets closer and will go retrieve the spear after it's thrown.
 - If the lizardman is close enough to the player for a melee attack and it's holding its spear then the lizardman will not throw its spear but rather melee attack with it.
 - Being hit with a thrown spear does double damage
 - A spear will stop if it hits a player, enemy, a wall, or has moved 5 units from its original position
 - The direction of the spear throwing is buggy and I'm struggling on how to fix it.
- Created a health bar for the player that lowers when the player is damaged
- Found a way to reimplement the win condition code so that the win text will be displayed when all enemies, indicated under the Enemies game object in the inspector, are destroyed.

Monday 3/5/18

- Fixed the spear throwing bugs by adding a kinetic rigid body to the spear so that it will stop when it hits walls, and rediscovered that transform uses the game object's local transform axis instead of the global ones.
- Attempted to implement Ethan's new Pathfinding built for monsters that chase a target. However, each one requires its own node-mesh and when the monster dies the game gives a bunch of error because the monster game object was destroyed. I have decided not to

implement an advanced pathfinding mechanic until I understand the inner workings of the pathfinder so that I can augment it into something to fits the type of game I'm building.

Tuesday 3/6/18

- Implemented a healing mechanic for all creatures and created a healing potion that will heal the player when collected (ran over).
- I made it so that the player now can choose to use either the sword or the spear and can switch between them using the 1 and 2 keys on the alphanumeric keyboard.
 - The player can even throw the spear but won't be able to attack or switch to another weapon until it's collected.
- Created a chest game object that can be opened by the player when the player is close to the chest, and the chest spawns a health potion when opened. A chest can't be opened more than once.
- Cleaned up the Player, Lizardman, Spear, and Sword scripts.

Monday 3/12/18

- Created art for health potion, player character, and spear
- Attempted to implement a knock back mechanic where the lizardman would rotate hitting the player with it's tail and sending the player far enough back so that the lizardman would throw his spear at the player.

Monday 3/19/18

- Created a trap that will damage the player or an enemy when it enters it (I hope that it will cause the player trouble while fighting and exploring, and that it will offer a way to smartly damage enemies without getting close, hopefully it isn't overpowered).
- Decided against the lizardman tail whip feature (I'm debating whether the player should have the ability to throw the spear so that the lizardman's ability to throw the spear will make it more unique).
- Changed how potions work so that the player collects them and can use them at anytime they want by pressing f.
- Decided to keep implementing the knockback functionality into the game as a way for the player to tell when the player or an enemy takes damage.

Wednesday 3/21/18

- Finished implementation of the knockback feature and made it so that anytime a unit takes damage by a weapon, since I don't want the slime to knockback the player, it gets knocked back.
- Instead of determining how far a game object gets knocked back I instead determine the time it is knocked back (standard for getting hit is .1 seconds moving at 10 units per second) and made it so if the knocked back game object collides with something like a wall or enemy they will immediately snap out of knockback (I think I did that part when knockback was based on distance, but then I changed it so it was based on time so I don't know if I will change knock back to be based on distance again).

- Implemented a attack type for weapons, and added weaknesses and resistances to the creatures (except for the player which I don't know if it should have weaknesses + resistances).

Monday 3/26/18

- Created the wraith enemy that can go through walls and can cast spells at the player, but it avoids going too close to the player, and if the player gets too close then it will spawn a bunch of spells around it to hit the player (I call it pulse).
- Created the spell that will travel forward and will travel through walls to try and hit the player (will only deal damage to the player).
- Made it so that they player can only hold four potions at a time (I plan on making the potion UI to have red blocks appear in the top left corner of the screen for every potion you have).

Wednesday 3/28/18

- Created scripts to create health bars to appear over enemy's heads and decrease when they take damage.
- Changed spell script into phantom dagger script that inherits weapon, made the attack type sharp, and increased the speed of thrown daggers to 10 instead of 6 to make it more challenging.
- Fixed issue with wraith that it was stopping and doing nothing, and the fact that the wraith was using its pulse too much.
- Made more ground tile art assists (implemented some of them but they seem small and repetitive).
- Implemented it so that the slimes attack will increase over time it is touching the player (prone to change. Also, thinking about reusing the enemy avoidance script, and improving it to work better).

Saturday 3/31/18

- Updated spear throw speed so that it's harder to doge.
- Implemented a mace weapon for the player and removed the player's ability to throw the spear
- Changed it so that the potions inventory uses icons instead of boring numbers.
- Created the Minotaur boss of the game and gave him an axe that he swings around (planning to add a feature for the mace and sword to swing as well). He also can ground pound dealing blunt damage and charge at the player dealing pierce damage (both have a few bugs that I need to fix).
- Created a Script that when you enter the boss room it will take away control from the player, have the player enter the room completely, and close a door behind the player.
- Made it so that if a weapon is being held by another game-object the direction of the knockback is directed from the game-object not the weapon itself unless the weapon is thrown like the spear or phantom dagger.

Sunday 4/1/18

- Fixed bugs with ground pound and charge attacks of the minotaur and added pseudo animation to the ground pound attack (hoping to add a red opaque radius to indicate the range of the attack).
- Fixed an error with the new weapon hit code that tells the game object hit where it will be knocked back to.
- Added art for the spike trap so that it blends in more and created more rooms for the project to show off all the enemies.
- Changed win text to be displayed when the boss, the minotaur is defeated.