## **User Story**

## **Creating Buildings:**

As a player, I want to have some buildings so that there will be a world I can explore with.

## Vampire castle:

As a player, I want to generate some vampire castles to spawn vampires against the character.

- \* [ ] Vampire only spawns in the vampire castle
- \* [] Vampire castle: Vampire castle produces vampires every 5 cycles of the path completed by the Character, spawning nearby on the path
- \* [] Can be spawned by a card.

## Zombie pit:

As a player, I want to generate some zombie pits to spawn zombies against the character.

- \* [ ] Zombies only spawns in the zombie pit.
- \* [] Zombie pit: zombie pit spawns zombies every 1 cycle of the path completed by the character, zombie spawns nearby on the path.
- \* [] Can be spawned by a card.

#### Tower:

As a player, I want to generate some towers to support the character, so that towers can attack enemies when they are in the attack radius.

- \* [ ] Tower can be only placed on non-path tiles.
- \* [] Tower: during a battle within its shooting radius, enemies will be attacked by the tower, spawning nearby on the path.
- \* [] Can be spawned by a card.

### Village:

As a player, I want to generate some villages to heal the character, so that the character can gain some health points when he passes by.

- \* [] Village can be only placed on path tiles.
- \* [] Character regains health when passing through.
- \* [] Can be spawned by a card.

### Barracks:

As a player, I want to generate some barracks, so that allied soldiers can join me to fight with enemies.

- \* [ ] Produces allied soldiers to join Character when passing through, only on path tiles.
- \* [] The barracks will disappear after 2 circles.
- \* [] Can be spawned by a card.

/\* Need to be added to the TODO list

Trap:

As a player, I want to generate some traps, so that an enemy will damage if it stops on the trap.

- \* [] During the battle, the enemy is damaged when he steps on a trap, at the same time, the trap will be destroyed too.
- \* [] Only place on the path tiles.
- \* [] Can be spawned by a card.

## Campfire:

As a player, I want to generate some campfire, so that I can cause double damage to the enemies within its battle radius.

- \* [] During a battle, player deals double the damage within campfire battle radius
- \* [] Place on any non-path tile.
- \* [] Can be spawned by a card.

### Hero's castle

- \* [] Character starts at hero's castle.
- \* [] Exists at the starting position of the Character.
- \* [] Upon finishing the required number of cycles of the path completed by the character, when the character enters this castle, the Human Player is offered a window to purchase items at the Hero's Castle.

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## **Enemies:**

As a player, I want to have some enemies so that I can get experience and gold from the enemies.

### Slug:

As a player, I want to have some slugs so that I can fight with them and gain loot drops from a battle.

- \*[] Slug will spawn randomly on path tiles
- \*[] Slug has health of 5 and 2 damage.
- \*[] Slug has attack range of 1 tile and support range of 1 tile.

#### Zombie:

As a player, I want to have some zombies so that I can fight with them and gain loot drops from a battle.

- \*[] Zombie spawns from zombie pit every time the Character completes a cycle of the path
- \*[] Zombies' health starts from 15.
- \*[] The zombies' attack radius is 2 tiles.
- \*[] The zombies' support radius is 3 tiles.

### Vampire:

As a player, I want to have some vampires so that I can fight with them and gain loot drops from a battle.

- \*[] Vampire: Vampire spawns from vampire castle every 5 cycles of the path completed by the Character
- \*[] Vampire has a health of 25.
- \*[] Vampire has damage of 5.
- \*[] Vampire has an attack range of 3 tiles.
- \*[] Vampire has a support range of 4 tiles.

## Doggie:

As a player I want to have an enemy named doggie so that I can fight them and gain doggie coin.

- \*[] Doggie: Doggie spawns from vampire castle every 20 cycles of the path completed by the Character
- \*[] Doggie has a health of 10.
- \*[] Doggie has damage of 10.
- \*[] Doggie has an attack range of 1 tiles.
- \*[] Doggie has a support range of 1 tiles.

### ElanMuske:

As a player I want to have a boss so that I can fight them

- \*[] ElanMuske: Vampire spawns from vampire castle every 40 cycles of the path completed by the Character
- \*[] ElanMuske has a health of 75.
- \*[] ElanMuske has damage of 15.
- \*[] ElanMuske has an attack range of 3 tiles.
- \*[] ElanMuske has a support range of 4 tiles.
- \*[] When he appears the doggie coin have a higher value.
- \*[] When he is killed, the doggie coin have a lower value.

# **Equipping items:**

As a player, I want to have some items so that I can fight with enemies with more varieties.

### Sword:

As a player, I want to have swords so that it can help me to increase the damage dealt.

- \*[] During a battle, it can increase the damage dealt.
- \*[] It can be purchased in Hero's Castle.
- \*[] Sword does 5 damage to any enemy.
- \*[] A sword will be wrecked after 3 attacks.

### Stake:

As a player, I want to buy a stake so that it can increase my combat effectiveness.

- \*[] During a battle, it can cause high damage to vampires
- \*[] Stake does 8 damage to the vampire and does 4 damage to any other enemies.
- \*[] A stack will be wrecked after 4 attacks.
- \*[] Purchase in Hero's Castle, loot from enemies, or obtained from cards lost due to being the oldest and replaced.

#### Staff:

As a player, I want to buy stuff so that I can transfer the enemies.

- \*[] During a battle, it can transform the attacked enemy into an allied soldier.
- \*[] this weapon has very low stats.
- \*[] it can cause a trance at a random chance.
- \*[] it can transfer an enemy into an allied soldier temporarily.
- \*[] the affected enemy reverts back to acting as an enemy when the trance end during the fight
- \*[] the enemy will die when the trance is involved a enemy in the trance when the fight is over
- \*[] Players can purchase in Hero's Castle, loot from enemies, or obtained from cards lost due to being the oldest and replaced.
- \*[] A staff does 2 damage to any enemy and has 50% probability of inflicting a trance.

### Armour:

As a player, I want to have armour so that I can protect myself from the enemies' attack.

- \*[] During a battle, it can prevent damage from enemies to some extent.
- \*[] Players can purchase in Hero's Castle, loot from enemies, or obtain cards lost due to being the oldest and replaced.
- \*[] An Armour will be wrecked after 5 attacks.

### Shield:

As a player, I want to buy a shield so that it can Improve my defense.

- \*[] During a battle, shields defend against attacks, it can have a 60% lower chance of occurring when critical vampire attacks happen.
- \*[] A Shield will be wrecked by 3 attacks.
- \*[] Purchase in Hero's Castle, loot from enemies, or obtained from cards lost due to being the oldest and replaced.

#### Helmet:

As a player, I want to have a helmet so that I can protect myself from the enemy's attack by scaling the value of the damage.

- \*[] Helmet can decrease the damage, enemy attacks will be reduced by a scalar value.
- \*[] Helmet decreases the enemies damage by 40%.
- \*[] Helmet decrease the character's attack by 20%.
- \*[] Helmet can be gained from purchase in Hero's Castle, loot from enemies, or obtained from cards lost due to being the oldest and replaced.
- \*[] A Helmet will be wrecked by 3 attacks.

### Gold:

As a player, I want to have some gold so that I can buy things from the story.

- \*[] players can use money to buy items to gain force values and health values.
- \*[] player can obtain money by selling items,, loot from enemies, pick up off the ground, or obtain from cards lost due to being the oldest and replaced.
- \*[] the character gains 5 gold after killing a slug.
- \*[] the character gains 25 gold after killing a zombie.
- \*[] the character gains 50 gold after killing a vampire.
- \*[] the character gains 50 gold after killing a doggie.
- \*[] the character gains 500 gold after killing a ElanMuske.
- \*[] the character gains at most 50 gold when the character picks up from the ground.
- \*[] the character gains 20 gold after the oldest equipment is lost.
- \*[] the character gains 50 gold after the card is lost.

## Health potion:

As a player, I want to have the health potion so that I can refill my health value.

- \*[] Health potion can refill health values.
- \*[] Health potion can be purchased from Hero's Castle, loot from enemies, picked up off the ground, or obtained from cards lost due to being the oldest and replaced. Spawns randomly on path tiles.

## DoggieCoin:

As a player, I want to have the doggieCoin so that I can sell it to gain money

- \*[] Obtained doggie coin after killing a doggie
- \*[] Get random gold when selling it
- \*[] After killing big boss we can sell it in a low gold
- \*[] When a boss appear we can sell it in a high gold

### Shop:

As a player, I want to have a shop so that I can purchase new items, sell my old items, gain some gold and increase combat effectiveness.

- \*[] Purchasing a sword requires 20 gold.
- \*[] Purchasing a stake needs 15 gold.
- \*[] Purchasing a staff requires 10 gold.
- \*[] Purchasing an armour requires 20 gold.
- \*[] Purchasing a shield requires 25 gold.
- \*[] Purchasing a helmet requires 30 gold.
- \*[] Purchasing a health potion requires 10 gold.
- \*[] Selling a sword gains 15 gold.
- \*[] Selling a stake gains 10 gold.
- \*[] Selling a staff gains 5 gold.
- \*[] Selling an armour gains 15 gold.
- \*[] Selling a shield gains 20 gold.
- \*[] Selling a helmet gains 25 gold.

\*[] Selling a doggie coin gains a random gold

## The one ring:

As a player, I want to have the one ring so that I have the chance to respawns and continue the game.

- \*[] If the character is killed, it respawns with full health up to a single time.
- \*[] The one ring can be gained from loot drop with the probability of 2%.

#### Anduril:

As a player, I want to have the Anduril so that I have chance to win the game

- \*[] the character can obtain an anduril randomly
- \*[] during the battle, the weapon deals three times damage to boss

## TreeStump:

As a player. I want to have a special shield to protect me when I attack boss

- \*[] the character can obtain a treeStump randomly
- \*[] the character can have a higher defence against bosses

### Card:

As a player, I want to have some cards so that I can create the corresponding buildings.

- \* [] The character can have at most 10 cards at the same time.
- \* [] Character gains building card after killing enemies.
- \* [] Character has 15% chance to gain a vampire castle card.
- \* [] Character has 15% chance to gain a zombie pit card.
- \* [] Character has 20% chance to gain a tower card.
- \* [] Character has 10% chance to gain a village card.
- \* [] Character has 10% chance to gain a barracks card.
- \* [] Character has 10% chance to gain a trap card.
- \* [] Character has 20% chance to gain a campfire card.

# Game settings:

As a player, I want to create a game and it has functions such as pause and quit, so that I can pause or quit the game whenever I want to. Also, the game has different modes, normal, berserk and survival.

- \* [] Pause: Press key "SpaceBar" to pause the game
- \* [] Normal mode: Before entering the game, the player can select the game mode: normal.
- \* [] Berserk mode: Before entering the game, the player can select the game mode: berserk.
- \* [] Survival mode: Before entering the game, the player can select the game mode: survival.
- \* [] Confusing mode: Before entering the game, the player can select the game mode: confusing.
- \* [] Music: As long as enter the game, it will have the music until game over
- \* [] Shop: it will appear after the round 0 when character go through the castle

\* [] UseHealthPotion: Press key "X" to use health potion

#### Status board:

As a player, I want to have a status board so that I can check my blood, gold and experience at any time.

- \* [] When the health point reaches 0, the character fails.
- \* [] the character wins when he obtains 999 golds.
- \* [] the character wins when he completes 45 cycles.

### Experience:

As a player, I want to have experience so that it can help me to win.

- \* [] the character gains 10 experience after killing a slug.
- \* [] the character gains 50 experience after killing a zombie.
- \* [] the character gains 100 experience after killing a vampire.
- \* [] the character gains 100 experience after killing a doggie.
- \* [] the character gains 1000 experience after killing a ElanMuske.
- \* [] the character gains 5 experience after the oldest equipment is lost each time.
- \* [] the character gains 20 after a card is lost.

## Equipment inventory:

The player wants an equipment inventory so that he can store the card and use it as he needs.

- \*[] The number of equipment is at most 24.
- \*[] As the unequipped inventory is full, the oldest equipment will be lost and the player will gain 20 gold and 5 experience.

### Card inventory:

The player wants a card inventory so that he can store the card and use it as he needs.

- \*[] The card will be lost as the card inventory is full and a new card needs to be added in.
- \*[] As the card is lost, the player will gain 50 gold, 20 experience, and random items.

## Loot drop from the battle:

As a player I want to obtain items randomly so that it can help me to win the battle.

- \*[] A sword can be dropped from an enemy after battle with a probability of 20%.
- \*[] A stake can be dropped from an enemy after battle with a probability of 40%.
- \*[] A staff can be dropped from an enemy after battle with a probability of 60%.
- \*[] Armour can be dropped from an enemy after battle with a probability of 20%.
- \*[] A shield can be dropped from an enemy after battle with a probability of 20%.
- \*[] A helmet can be dropped from an enemy after battle with a probability of 20%.
- \*[] A health potion can be dropped from an enemy after battle with a probability of 35%.

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## **Enemies:**

As a player, I want to have enemies to fight with me so that I can gain money and experience from the battle.

# **Building:**

As a player, I want to have various buildings to increase the variety of the game.

## Items:

As a player, I want to have various items so that I can protect myself from enemies attacking and fight with enemies better.

# **Game settings:**

As a player, I want to have complete game rules to enhance the game play, make the game more challenging.