Final Game Development Document

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Product Backlog Link: https://github.com/users/nherbicMines/projects/3/views/1

Changes from original plan:

Gameplay:

Our gameplay consists of normal Tower Defense mechanics with a twist: the user directly controls the protagonist, meaning that they must physically run to towers in order to repair/upgrade them. The player can also shoot at enemies directly, although their weapon is not nearly as powerful as the tower weapons are.

Changes: still the same from the first GDD

Mechanics:

Our game will have a currency system, where points are gained by defeating enemies. The player can then use these points to purchase new towers or upgrade/repair existing towers. Every few waves there would be a Boss wave that will be more challenging and take a certain number of upgrades in order to beat. If enemies, make it past your defenses without dying you lose out on currency and the base's health is depleted.

Changes: Currency system changed to a time-based upgrade system / bosses not implemented.

Game World:

The world is set in medieval fantasy times with castles, ogres, wizards, and such. Enemies will be invading different areas such as villages to reach the castle or base point for that level. The play area is an open grassy field in which enemies march across and the player must evenly distribute towers to prevent enemies from successfully making the trek between their spawn point and the castle. Levels consist of different obstacles (houses, trees, walls) that create obstacles in which the hero cannot build, and lanes to designate enemy pathing.

Changes: Still medieval setting (castle/wall/village) with grassy field but enemies were changed to zombies (6 different types).

Narrative:

Although the setting is during medieval times, the player character is an engineering hero that time travels to protect key destinations which downfall eventually leads to the destruction of humankind in the far future. The hero travels in time initially with a heap of supplies, but as these are used up they must replenish resources by collecting enemy resources.

Changes: Player still controls an engineer in a medieval setting and has to fend off waves of zombies.

Character:

The main character in the game is the engineer hero, controlled by the player. The hero is a time traveling engineer that is trying to defend the castle and prevent other time traveling enemies from disrupting the future. The engineer hero is assigned the task of fighting off enemies that will be trying to take down the castle. The hero will have weapons, but they will not be nearly as powerful as the towers that they build.

Changes: Character implemented the same way in the final release.

Interface:

The game will be played on a 2d layout and will control the character by using the arrow keys. Once the player is close enough to a designated building location, they will be able to click a button to decide which building to place down. Once the tower has been placed, the player will be able to come back to that tower, press the same button and upgrade it with the money they have earned. There will be a health indicator of the player and of the castle at the top of the screen. There will also be a money indicator to allow the player to see how much currency they have.

Changes: WASD instead of arrow keys for movement. Building towers replaced with upgrading existing towers. The player still has a health bar but does not take damage from enemies. Wall health is in top-left GUI in game.

Art and Music:

The art in this game will be very simple and have medieval themed style. The building that the engineer will be trying to protect will be a medieval castle. The music will also be medieval themed. The boss wave will have a different and more intense style of music in order to signify to the player that a boss is approaching.

Changes: Art is still simple and medieval themed. The castle was changed to a wall that scrolls across the screen. Still medieval music but boss music was not implemented.

Items left from our backlog:

We refactored our backlog before the beta release in order to remove the features that we would not be able to implement, but we finished everything else that was in the backlog. We were originally going to have a currency system for the player to buy/upgrade towers, but we simplified it to just upgrading towers and repairing them when their health bars ran out. We also ended up getting rid of the player creating towers and just had towers spawn in at specific points when the level started (although the code is still in our project it is just not used anymore). The last thing we didn't implement was a player health system, where the player would have taken damage from enemies.