Game Design - One Sheet - S1-P1 - TowerDefence - Garber, Alessandra, g016102h

Summary

The player will defend against incoming enemies by selecting where they want to place different types of towers in the level. The enemies will start from one side of the map and move their way towards the end location (the treasury) and will begin to steal gold until they are defeated.

Features/Mechanics

- Treasury
    - Will be at the end of the enemy path, and contains gold to be protected
- Enemies
    - Will move alongside a path, towards the treasury
- Towers
    - Players will choose where to position towers in the level. Towers will fire projectiles at enemies

Target Platform

PC Desktop

Technical Requirements

- Unreal Engine
- Epic Games Marketplace
- Photoshop
- ShareX

Game Play & Design

Win Condition:

The player will win the game by defeating all enemies.

Lose Condition:

The player will lose the game if all of the treasury's gold is stolen.

Gameplay Overview

- As the player will start the level, they will have a set amount of time to choose where to put towers in the level
- At the end of that time the enemies will start spawning from one side of the map and make their way towards the towers following an invisible spline
- The towers the player has placed will shoot homing projectiles at the passing enemies
    - Each tower will have a different effect
- The game continues for as long as enemies are alive or as long as there is gold in the treasury

Secondary Gameplay Considerations

- The aim of this prototype is to be functional and enjoyable to engage in
- The gameplay mechanics will be simple and easy to understand on the fly (with UI giving context to the game)

- Variables to balance that define "enemy persistence":
    - Enemy damage
    - Enemy health
    - Enemy movement speed

- Tower resistance
    - Tower projectile damage
    - Tower projectile speed

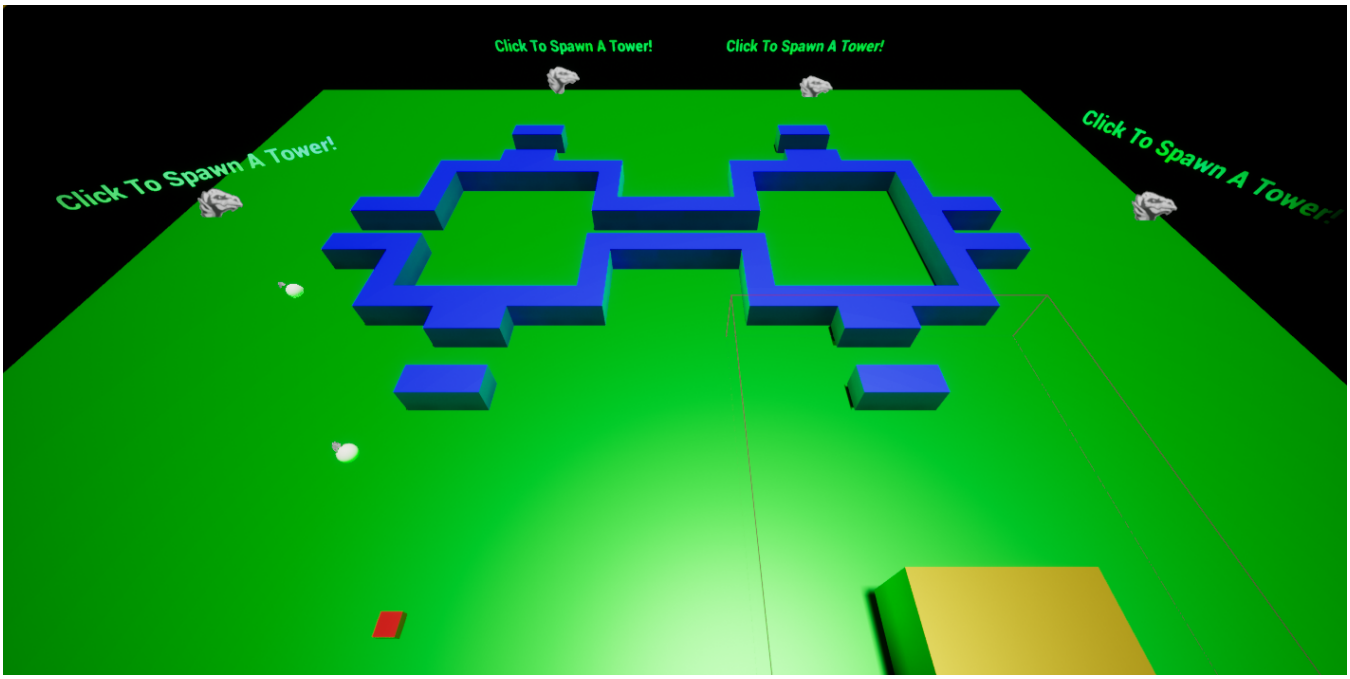
- Tower projectile frequency

Interface and Art Style

The UI for this prototype will be very basic to give the player just enough information so they understand what is going on.

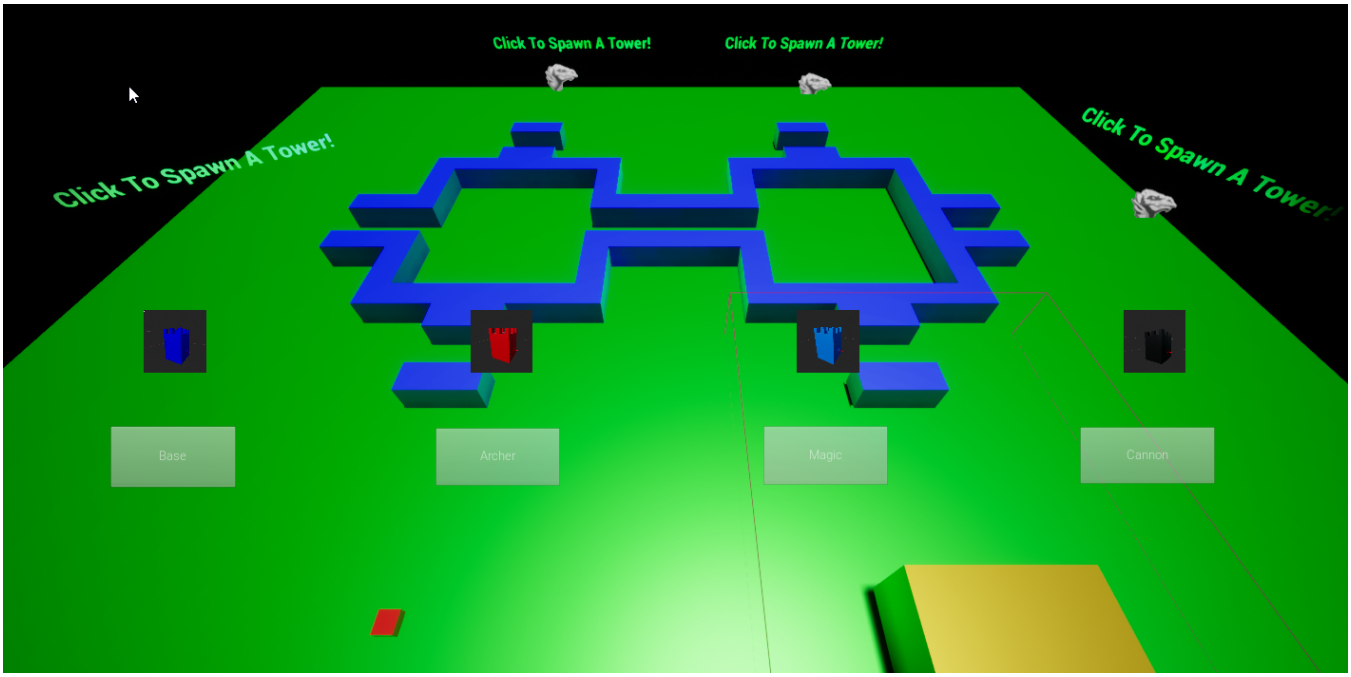
- UI elements will include:
  - Text telling the player to click on the target places (to spawn towers)
  - UI widget pop up to select which tower
  - Warning text if enemies are stealing gold

The level will be decorated in bright plastic-like materials and include very simple geometry.



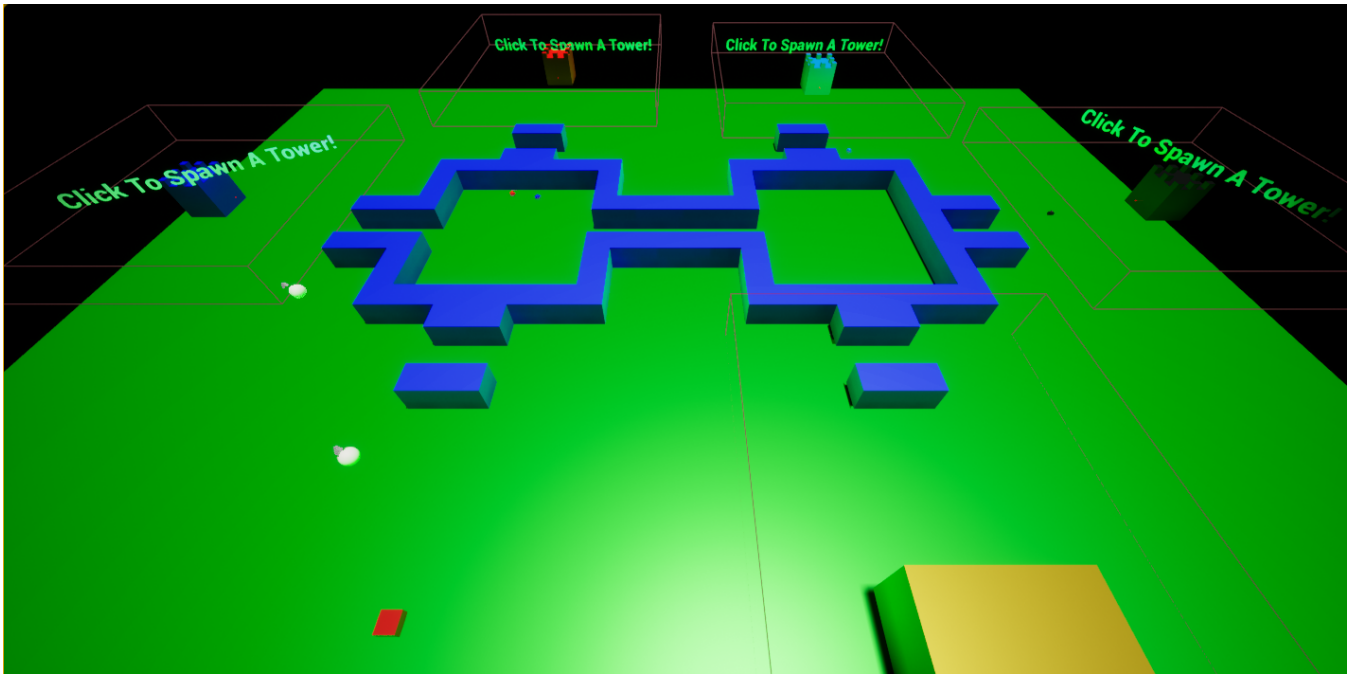
Planned UI Visual:

Applied UI Visual:



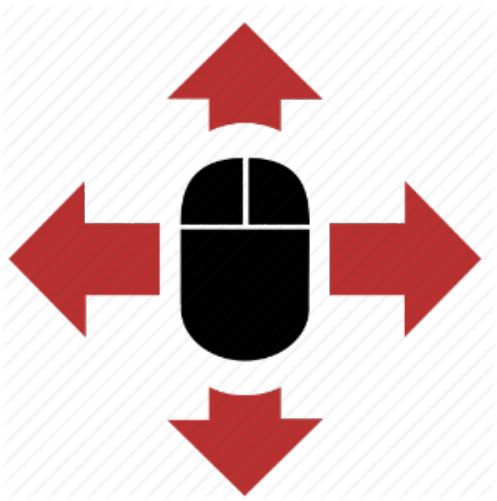
After Selecting Towers:

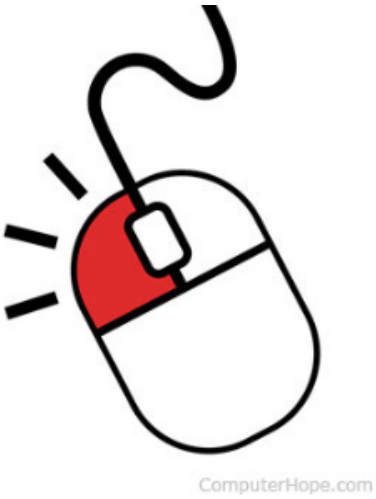
(for the purposes of this example, all tower types are present)



Controls

Controls will mainly include point and click on the mouse.





Links for pictures:

(https://www.google.com/search?rlz=1C1GCEB_enGB870GB871&biw=1920&bih=920&tbm=isch&sxsrf=ACYBGNS2lBZL7JlwVy95edHGWsDMF-NDqw%3A1571591633747&sa=1&ei=0ZWsXdKhLYawUtTsgYAE&q=mouse+move+with+arrows&oq=mouse+move+with+arrows&gs_l=img.3...2019.4617..4786...0.0..0.54.739.15.....0....1..gws-wiz-img.....35i39j0j0i5i30j0i24j0i30j0i8i30.PgKpe_3xsjw&ved=0ahUKEwiSzr6Iq6vlAhUGmBQKHVR2AEAQ4dUDCAc&uact=5#imgrc=eshJtwuzpNidFM:)

(ComputerHope.com)

Sound

- No sound will be included

Development Plan

The development process will begin with the blueprint fundamentals of the game: enemies, towers, projectiles etc... And will then proceed to more secondary priorities such as a coherent level, menus, and UI.

Sounds and art style will be the lowest priority.

- Making sure all blueprints work
- Checking that blueprints work appropriately within the level
- Making a Game Mode
- Make function pop up to select tower system
- Make sure everything flows well and is coherent for a prototype