

## I2P2 Final Project Proposal

### 1. Team 0

Members: 1070XXXXXX Bob, 1070XXXXXX Alice

### 2. Game title / Game type (genre)

TowerDefense, Strategic tower defense game

### 3. Details / Brief intro

A strategic simple tower defense game. Players should use their money to construct turrets in order to eliminate the enemies.

### 4. How to play / Controls

Use mouse click or drag to construct turrets, QWE can also be used as hotkey. Pressing 0-9 on keyboard can speed up the game. Special key sequence can launch the cheat.

### 5. High risk analysis

[Everything that must be done should be listed here. If any of the features below isn't finished, the game cannot be played correctly.]

Can correctly construct turrets and decrease money. Turrets should be able to automatically lock on enemies and attack. Enemies should find their path to the player base and can be killed and damage the player when they arrived the base. Winning and losing can correctly change between scenes.

### 6. High value analysis

[Everything that can be improved or done. Implementing the features below can make the game more interesting.]

Having beautiful background music, sound effects, images, enemy-tracking bullets, effects when enemies are hit or destroyed, game speed manipulation, cheat code, volume control.

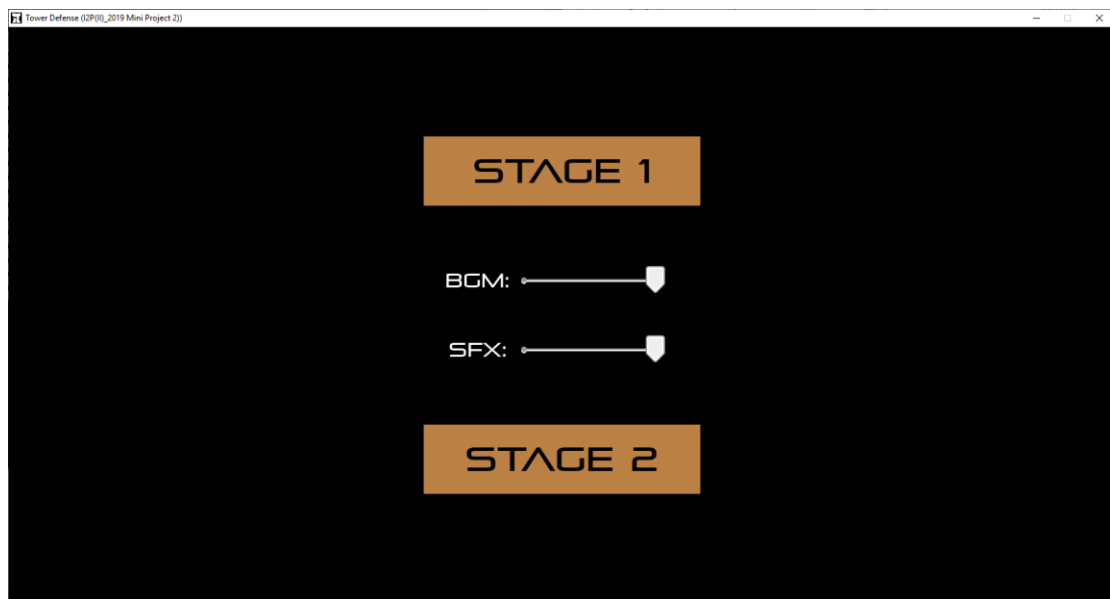
### 7. Games alike

Plant vs. Zombies, TowerMadness, ...

### 8. Game preview

[You can draw it by hand, this part is for you to have a concrete idea of what you're making.]

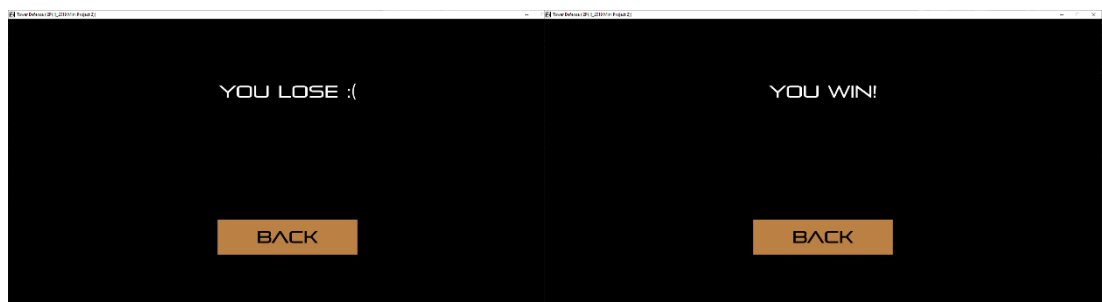
## Stage Select Scene



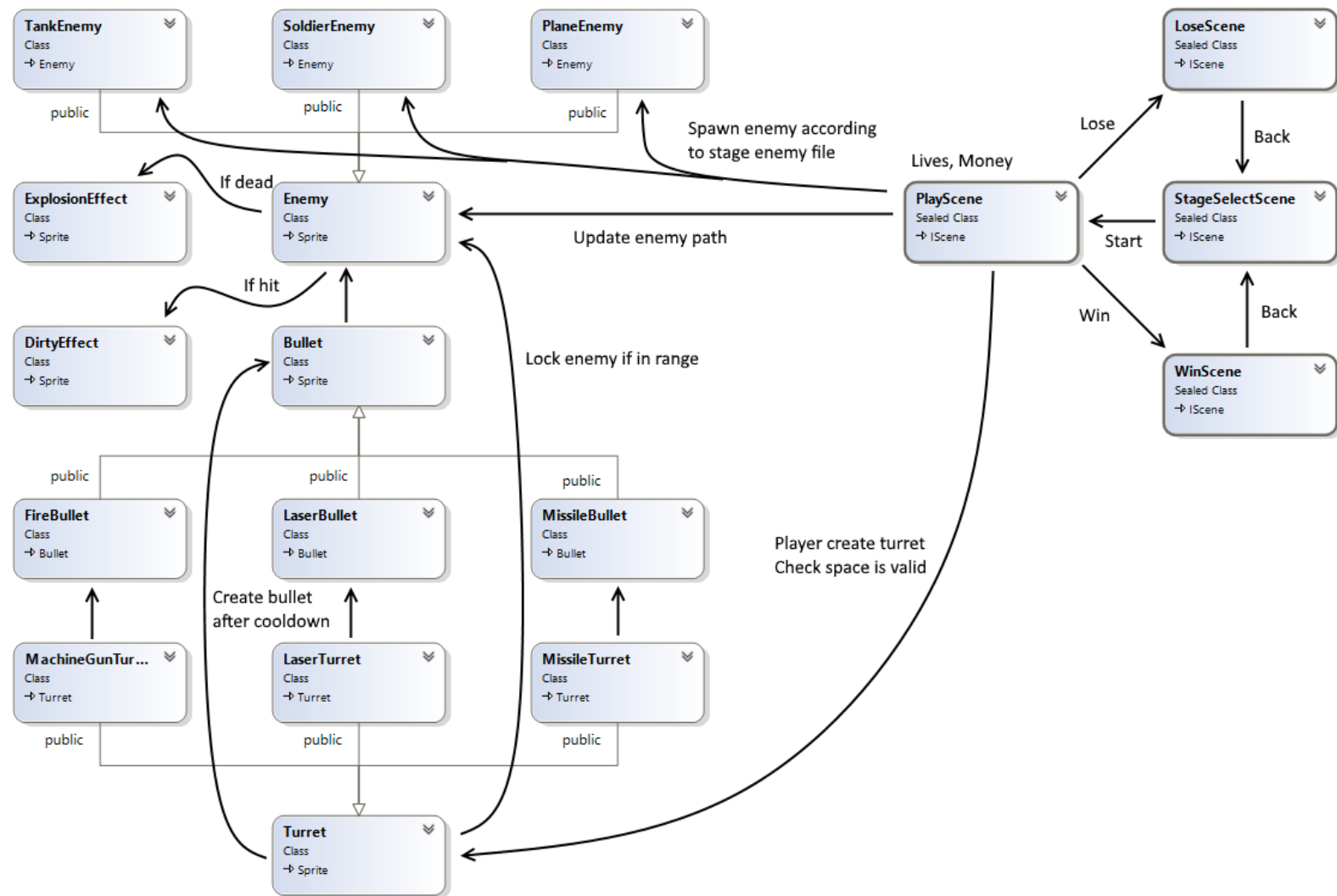
## Play Scene



## Lose & Win Scene



## 9. OOP Structure



## 10. Classes and description

Scene: Total 4 scenes with same parent class.

PlayScene: Responsible for spawning enemies, can update the distance to player base after player have constructed a new turret.

Enemy: Parent class of all enemies. Triggers explosion effect when dies.

Turret: Parent class of all turrets. Can shoot bullets in a certain rate when enemies are within the attack range.

Bullet: Parent class of all bullets. Triggers explosion debris when hitting enemy.