# Mission Objectives

## Gameplay

1. Players can buy towers with coin
2. Players will start with a certain amount of coins and will obtain this currency during game-play by defeating enemies.
3. Players can see their current amount of coin in the game.
4. The player loses the game after a certain number of enemies breach the defenses and reach the destination.
5. The player can win the game by surviving a certain number of rounds.
6. Enemies spawns in waves and will be spawned over a distributed amount of time in around

## Game menu

1. The player can read the rules of the game any time before game-play.
2. A win/lose message should be shown when the game ends with game statistics
3. Two different types of game play must be selectable. You may invent one or use the two popular versions of game-play:
   1. **Continuous**: Enemies continuously spawn, and the player builds towers to defend the destination. There is no end to continuous but can be a challenge to those who want to get to the highest amount of time spent surviving
   2. **Waves**: A collection of enemies form one wave. Each wave of the enemy spawns with a short pause In between waves. The game ends when all 50 waves have been defeated.
4. The player can pause and resume the game.
5. Save/Load Games: When in the playing state, the player can choose to save the game and play at a later time with all the same towers (at the same level) in the same places on the same wave. A Save/Load Game option can also be found in the main menu and the pause screen.

## Towers

1. Towers will attack enemies that pass by (in its range of attack).
2. Each tower has a different damage output, range of attack, and rate of attack.
3. A player can view information about a tower before purchasing it and/or by clicking one that has been placed.
4. Towers should be upgradeable to have more range, fire rate, or damage.
5. Tower upgrades change the look of the tower.
6. A tower's range is visible when a tower is clicked. If a tower is upgraded, this information should also be updated.
7. Tower attacks are animated.
8. Towers cannot be built such that they block the path of the enemies.
9. Towers will be placed in a grid format and snapped to a coordinate
10. Towers cannot be placed on top of each other
11. Towers can be sold - which removes the tower on the map and refunds 25% of the coins is was purchased with (including upgrades)

## Enemies

1. Enemies continuously emerge from the map at 1 location.
2. Movement of enemies is animated.
3. Enemies move towards a destination that the player will defend.
4. Each enemy has certain stats/characteristics. This can include speed and health
5. The game will have at least three different types of enemies and each will differ in strength
6. Stronger enemies passing the player’s defence will punish the player by reducing more lives.

## Maps

1. Each map has a background image and contains a pre-defined path for enemies such that enemies originate at their start location and move along this path towards the target.
2. Different maps have different backgrounds and paths that enemies travel.
3. A player can select at least one map that contains more than one path for enemies to travel on (so it presents a more difficult gameplay).
4. Different maps will be rated with different difficulties
5. Each map will have its own name