

Here you can find the list of requirements fulfilled, with a small explanation and/or clarifications for each one

1. Create a battlefield with a top-down camera that can be panned across the playing area. You may use either a simple plane or a Unity terrain to represent the ground. The only requirement here is that players can see the “ground” and move their camera around.

The exact orientation and control scheme of the camera is up to you, but keep it simple.

The ground can be a simple solid color, or you may download and apply textures to it if

you wish. Setup basic lighting and scene structure as you see fit.

- Simple art to represent the playing area
- Camera info:
 - a,w,s,d and mouse to move the camera
 - mouse wheel for zoom

2. Create a “base” for the player to defend. This can be a simple primitive of some color if you like.

- Simple castle to represent the base. It has a high performance health bar, shared with the enemies

3. Create a system of spawnable “creeps”. Creeps spawn from the edges of the battlefield. They automatically move toward the base when they spawn. Make the timing, number, and behavior of spawned creeps easy to tweak and tune. When a number of creeps reach the player’s base, inform the player that he has lost the game -- feel free to add a health bar to the creeps or to the base.

- Use navmesh to achieve the path finding
- Different spawners with configurable waves
- Game over screen when player has 0 life

4. Create a system of placeable turrets. The player can instantiate a turret anywhere on the battlefield. A turret automatically rotates its gun to face the nearest creep. Turrets do not rotate instantaneously, but smoothly by a maximum rotation rate.

- Players can place turrets anywhere on the playing area. It cannot place turrets if there is already a turret in place.

To place the turret, first click in the turret button to purchase it and then click on the field to place it.

5. Make the turrets shoot projectiles at creeps. Projectiles that hit creeps cause damage to them. Make the parameters for the amount of damage caused by a projectile vs. the amount of damage a creep can take easy to tune and tweak.

- Created some components to easy change the behavior and with configurable values

6. Implement a simple economy such as making each turret cost 5 coins to build and each creep giving you a coin when it dies

- Build exactly that, with different turrets

8. Add different types of turrets with different capabilities than shooting simple projectiles, e.g. a forcefield or a freeze/slow-down effect.

- 3 types of turrets: Cannon, missile and laser

11. Implement a system of levels in increasing difficulty. Once all the waves of a particular level are cleared, the next level starts. Each level should have an initial idle time in which waves will not be spawn, so the player can use this time to place some initial turrets (or let the player click a button to start the level once all the turrets have been placed, up to you).

- Increasing difficulty using a waves system.

Note1. For cheats: Use 'z' to give coins and 'x' to simulate player lose.

Note2. Since creeps attacking turrets is not implemented, please don't block the paths for a real difficulty.