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# Game Development Team Members

Ryan Wright

### 1 Game Overview

Title: Magical Assault
Platform: PC Standalone
Genre: Tower Defense
Rating: (10+) ESRB

Target: Casual gamer (aging from 12 - 30)

Release date: 2022 Publisher: Stephen Price

Description: This is a tower defense game where the player has to stave off a magical invasion using an array of towers.

## 2 High Concept

Magical Assault sets the player up as a military commander against legions of orcs, wizards, elves, and other magical beings. Create towers to destroy the enemy forces before they defense point.

## 3 Unique Selling Points

Unique Premise

## 4 Platform Minimum Requirements

OS: Windows XP SP

Graphics card: DirectX 9 (Shader Model: 2.0)

## 5 Competitors / Similar Titles

The game was inspired by other tower defense games such as Kingdom Rush developed by Ironhide Game Studio.

## 6 Synopsis

A magical world has invaded our world and it is up to Earth's technological might to defend against them.

## 7 Game Objectives

The objective of the game is to create towers to destroy enemies and prevent them from reaching the goal point.

### 8 Game Rules

The Player has a variety of towers to choose from and can be built anywhere on the level. Enemies emerge from one end of the path and make their way to other end. The player earns money to build and upgrade towers by killing enemies.

### 9 Game Structure

Main Menu -> Gameplay (until lives are zero) -> Results screen -> back to Main Menu

## 10 Game Play



#### 10.1 Game Controls

The mouse is used to place towers on certain tiles of the map. You can click on the towers to either upgrade or sell them. Press Esc or P to bring up the pause menu.

### 10.2 Game Camera

Camera has a fixed overhead view of the map.

### 10.3 HUD

- Timer: shows how much time before the next wave starts.
- Money: How much money you have to spend.
- Lives: how many lives you have left.
- Shop: a list of towers you can buy and place on the map.

# 11 Players

There is a list of towers each with their own upgraded version.

#### 11.1 Characters



### **Machine Gun**

Turn Speed: 12

Range: 3 Fire Rate: 3 Damage: 30



### Cannon

Turn Speed: Range: Fire Rate:

### Damage:



# Upgraded Machine Gun

Turn Speed: Range: Fire Rate: Damage:



## **Upgraded Cannon**

Turn Speed: Range: Fire Rate: Damage:

# 12 NPC

### 12.1 Enemies



#### Orc

Health: 125 Speed: 6 Value: 20



### **Armored Orc**

Health: 300 Speed: 4 Value: 35

## 12.1.1 Enemy States

Move: During the level, the enemy will be in the move state until they past the goal point.

Death: Death happens when the enemy sustains too much damage.

### 12.1.2 Enemy Spawn Points

All enemies share the same spawnpoint.

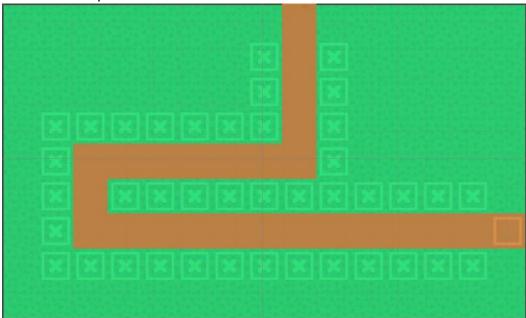
## 13 Art

### 13.1 Setting

The Game takes place in modern times where the player has to set up turrets to prevent monsters from reaching the goal point.

### 13.2 Level Design

The first level takes place in a grassy field where the enemy spawns from the top of the map and follows a path to the goal point on the right of the level. The tiles with an X are where the towers can be placed.



### 13.3 Audio

Name	Category	Description
machine_gun	FX	Machine gun attack fire
cannon_01	FX	Cannon attack fire

## 14 Procedurally Generated Content

### 14.1 Minimum Viable Product (MPV)

- Two towers
- Two enemies
- Built for PC.

### 15 Wish List

#### Add more content

• In future updates, add more turrets, more enemies, and more levels.

#### Port to mobile

Port to mobile systems, like Android.

## 16 Bibliography

Kenney.nl/assets. (2020) Tower Defense (top-down) [Package].

Unity Asset Store. (2020) Shooting Sound [Package].

Wright, R. (2020). ArmoredOrc [Prefab].

Wright, R. (2020). Armored\_Orc [Sprite Sheet].

Wright, R. (2020) Blank [PNG].

Wright, R. (2020). BuildManager [C# Script].

Wright, R. (2020). BuildTowers [C# Script].

Wright, R. (2020). Bullet [C# Script].

Wright, R. (2020). BulletImpactEffect [Prefab].

Wright, R. (2020). Cannon [Prefab].

Wright, R. (2020). CannonImpactEffect [Prefab].

Wright, R. (2020). Cannon Upgraded [Prefab].

Wright, R. (2020). CompleteLevel [C# Script].

Wright, R. (2020). Credits [Scene].

Wright, R. (2020). Enemy [C# Script].

Wright, R. (2020). GameManager[C# Script].

Wright, R. (2020). GameOver [C# Script].

Wright, R. (2020). Grass [Prefab].

Wright, R. (2020). GrassSpawnPoint [Prefab].

```
Wright, R. (2020). Level01 [Scene].
```

Wright, R. (2020). LivesUI [C# Script].

Wright, R. (2020). MachineGun [Prefab].

Wright, R. (2020). MachineGun\_Upgraded [Prefab].

Wright, R. (2020). Magical Assault Title and tagline [Digital Image].

Wright, R. (2020). MainMenu [C# Script].

Wright, R. (2020). MainMenu [Scene].

Wright, R. (2020). MoneyUI [C# Script].

Wright, R. (2020) Orc [Sprite Sheet].

Wright, R. (2020). Orc [Prefab].

Wright, R. (2020). PauseMenu [C# Script].

Wright, R. (2020). PlayerStats [C# Script].

Wright, R. (2020). Projectile01 [Prefab].

Wright, R. (2020). Projectile01\_Upgradred [Prefab].

Wright, R. (2020). Projectile02 [Prefab].

Wright, R. (2020). Projectile02\_Upgraded [Prefab].

Wright, R. (2020). RoundsSurvived [C# Script].

Wright, R. (2020). Sand [Prefab].

Wright, R. (2020). SandGoal [Prefab].

Wright, R. (2020). SandSpawn [Prefab].

Wright, R. (2020). Select UI [C# Script].

Wright, R. (2020). Shop [C# Script].

Wright, R. (2020). Turret [C# Script].

Wright, R. (2020). TurretBluePrint [C# Script].

Wright, R. (2020). Wave [C# Script].

Wright, R. (2020). WaveSpawner [C# Script].

Wright, R. (2020). WayPoint [C# Script].

Wright, R. (2020). WayPoint [Prefab].