



by **Bloonagins**

Wonky Wizards

Request for Proposal — Version 1.0

Document History

Version	When	Who	What
1.0	9/23/21	Ethan, Chandler, Gabriel, Zach, Chase, David, Gage	Initial Drafting

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1.0 Problem description / opportunity / expression of need

The request being made by this document is for the creation of a top down and 2D tower defense style game. Its name is to be *Wonky Wizards*, and it should feature a whacky old wizard named Wonk. It should have a medieval theme, and a strong story about Wonk, using different areas around Wonk's home for each level.

Like any tower defense game, this game should include these key features: various placeable towers, various enemy types, waves of enemies, and levels of waves. The main difference about this game from an ordinary tower defense game is that the player should not only be in charge of protecting their territory using towers, but should also be in direct control of a player character. This player character should have the ability to repair their towers, and unlock and use spells to fight incoming enemies.

The game should have at least 5 (differently themed) levels each with their own associated goal tower that the enemies try to destroy. Each area should be written into the story in a coherent and interesting way, making the story a journey through Wonk's town/country.

2.0 Project Objectives

Bloonagins is looking for a development team to create a 2D Isometric tower defense game based in a fantasy world. This game should expand on the classic game "BloonsTD" and contain the following key features.

- Menu/UI/HUD
 - Full basic menuing system
 - Rebindable keys
 - Health Status of Player/Enemies
- Player
 - Controllable by multiple input devices (M&K, Controller, Haptic feedback for mobile/VR devices)
 - Shoots various **Spells**
 - Places various **Towers**
- Towers
 - Various towers placeable by the **Player**
 - Some should block **Enemies'** path
 - Some should shoot/damage **Enemies**

- Enemies
 - Several types, all with varying range/damage/abilities
 - Dynamic pathfinding to route around **Level** objects/towers, and follow the **Player** if conditions are met
- Levels/Scenes
 - Multiple waves per level
 - levels should have multiple obstacles
 - Each level should have at least 1 **Enemy Goal**
 - Areas to place **Towers** and move the **Player** around
- Enemy Goal
 - Tower with set hp per level/difficulty
 - Once certain percentage hp values are met, goal should defend itself from **Enemies**
 - Multiple types of goals, different per level
- Spells
 - Multiple types(ex 10+)
 - Combination of projectiles and hitscan weapons
 - Should have basic firing and hit animations

3.0 Current system(s) – if any / similar systems

Similar games that may be useful for reference:

1. BloonsTD Games — These games - created by *Ninja Kiwi Studio* - have quite a few similar elements to the ones described in the previous section. This includes placeable towers that target waves of enemies, and each tower having its own spells. In this game, however, enemies have a preset path and cannot deviate from it. Levels are for the most part static, and areas where the player can place towers are designated and do not change.
2. Dungeon Defenders — This series - created by *Chromatic Games* - is a set of tower defense games that allows the player to control a character and fight back waves of enemies. These games also contain placeable towers that attack the enemies within range constraints. Levels are static and do not change. The player's character is allowed freedom of movement across the entire level, and can use positions to their advantage to lure enemies away from their target. The character has an array of weapons and abilities to choose from to defend the objective.

4.0 Intended users and their basic interaction with the system

The target player base for our game is twofold, combining fans of tower defense games with fans of story driven 2D games such as Pokémon®.

Users:

1. Tower defense games' players,
2. & story driven 2D games' players.

Uses:

1. The primary goal of the game is for the player to enjoy the gameplay and story.
2. The secondary goal is to provide a reasonable challenge to the player, so as to not let the gameplay get boring too quickly.

5.0 Known interactions with other systems within or outside of the client organization.

- Unity
- Google Play
- Apple App Store

6.0 Known constraints to development

- The class is only a semester long therefore a time constraint may affect the quality of the product.
- C# and Unity could constrain our product due to Unity being new to many people.
- IOS and Android Devices could put constraints on the product due to space and proper portability of our product.

7.0 Project Schedule

Date	Description
September 23, 2021	SA Presentation
September 30, 2021	Minimal Viable Product Demo
October 7, 2021	Have two compile paths (one for production and another for testing)
October 21, 2021	Code should look like a game with missing features. Are we on schedule?
October 28, 2021	Show code running and updated Gantt chart
November 4, 2021	Final weekly status report
November 11, 2021	Final Product Due
December 9, 2021	Final Presentation

8.0 How To Submit Proposals

Please email all proposals in .pdf format via email to Chandler Calkins, with the subject title "WonkyWizards Proposal by [YOUR NAME]". If you have any questions please also contact him with the subject title "WonkyWizards Questions". You may contact him via email address: calk9614@vandals.uidaho.edu

9.0 Dates

All proposals must be submitted by 12:00pm PST on September 23rd, 2021. Decisions will be made and all applicants will be notified by 5:00 pm PST on September 30th, 2021.

10.0 Glossary of terms

Unity - A cross-platform game engine developed by Unity Technologies, which is primarily used to develop both three-dimensional and two-dimensional video games and simulations for computers, consoles, and mobile devices.

System - The Product, Service, or system our team is hoping to create, build, upgrade, and/or change.

Tower Defense Game - A style of game where the player places down towers to hold off a set of enemies that usually follow a set path towards a goal.

2D Isometric - A 2D isometric drawing is a flat representation of a 3D isometric projection. The goal is to create depth and texture within the art style of the game.

Summons - Summons are Towers, and Towers are exactly what they sound like, they are structures placed on the map and they typically deal damage to enemies around them, they have a health value like a player and can be destroyed.

Top Down Perspective - The main camera of the game is pointed downward like looking down at a book.

Goblin - A fantasy creature that is typically small and obsessed with gold. They are green in color and hobble from place to place.

Tome - A Tome is a book that is especially large and scholarly in nature. Wonk needs a copy to craft a potion of invisibility.

Pogo Rocket jumping - A rocket jump is performed by firing an explosive device at the ground in order to propel yourself up and forward, pogo refers to doing it many times in a row.