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# VERSION HISTORY

# INTRODUCTION

## System Requirements

MINIMUM:

OS: Microsoft Windows XP/Vista/7/8/8.1

Processor: Intel Core i5 2400 - OR - AMD Phenom II X6 1100T

Memory: 4GB Ram

Graphics: ATI Radeon HD4850 -OR- GeForce GTX 295

Storage: 1 GB available space

## Purpose

The purpose of this document is to inform and aid in the creation and design of simple GUI and game systems being used in the survival shooter. The game will be comprised of separate systems. These systems are singleplayer and multiplayer aspects of the game including the match lobby, in-game HUD and quick selection inventory.

## Scope

Development time for a functional build of this project is precisely 5 Weeks. In terms of visuals, the project will need to be developed as a grey-boxed first. Additional polish can include art assets.

* The game is a survival shooter defense where you defend your garden from the ravenous insects, bent on consuming all your flora and destroying your livelihood!
* The Gameplay : Survival Defense
* Visual: 3D
* Camera: First Person
* Supported Platforms: PC, Xbox

## Concept and Reference Material

[Sanctum](http://store.steampowered.com/app/91600/Sanctum/)

[Orcs Must Die](http://store.steampowered.com/app/102600/Orcs_Must_Die/)

[Dungeon Defenders](http://store.steampowered.com/app/236110/Dungeon_Defenders_II/)

# SYSTEM OVERVIEW

**Player Movement**: The player will be able to navigate around its environment using the keyboard and mouse on the PC and the Xbox controller on the Xbox.

**Player Shoot**: The player will be able to fire their equipped weapon with their chosen input.

**Weapon**: The hose weapon fires in a spray and the water gun shoots single bullets.

**Single Player Mode:** This mode will allow users to play the game individually.

**Multi Player Mode:** This mode will require the game is networked and works on a host to peer or peer to peer network topology.

**Lobby:** The player is able to create or select an existing games to join.

**In Game HUD:** The heads up display will display the player’s health and will display when the player is damaged. It will also allow the player to see their score and match duration as well as the score of the other players.

# IMPLEMENTATION REQUIREMENTS

## Version Control

GITHUB

## Engine

Unity

## Input Method

KeyBoard/Mouse

Xbox Controller

## IDE (Integrated Development Environment)

Visual Studio

# GRAPHICAL USER INTERFACE DESIGN

## Menu Screens

*Single/Multi Player*

Main Menu: Play Solo Game, Play Multiplayer, Options, Exit  
 Options Menu: Full Screen, Brightness

*Single Player*

Pause Menu: Return to Game, Return to Menu, Options, Exit

## HUD

Health Bars

Current Weapon

Current Ammo

Current Score

Timer

## Lobby

Allows players to create a game or join a match via host to peer