

# Generic Blank Game Design Document (GDD)

Your Game Logo

Here

***'Catchy Game Tagline'*** - you

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## Game Development Team Members

PRODUCER  
You

GAME DESIGNERS  
Shane Tasker  
Christian James  
Sam Schneider  
Cole Kinkaid

PROGRAMMERS  
Shane Tasker  
Christian James  
Sam Schneider  
Cole Kinkaid

TECHNICAL ARTISTS  
You

AUDIO ENGINEERS  
You

UX TESTERS  
You

# 1 Game Overview

Title: Farmer Price

Platform: PC Standalone

Genre: 3D First Person Tower Defense

Rating: (10+) ESRB

Target: Casual gamer (aging from 8 - 99)

Release date: May, 2021

Publisher: Your Company Name

Description: Farmer Price is a first person 3D Tower Defense game. The player is a farmer whose garden has been invaded by ants. The ants are trying to reach the end of a maze, where the player's crops reside. In order to stop them, the player must place a variety of different turrets with different effects to halt the enemies' progress and destroy all of the ants before they eat all of the crops. There are multiple different turret types, from standard turrets to laser turrets to rocket launchers, as well as upgrades to make your turrets more powerful. There are a variety of different types of enemies as well, with your standard soldier ant to giant ants to flying ants. You win the game if you manage to defeat every wave of ants. Each time an ant reaches the end of the maze, you lose health, and if too many ants make it to the crops, then you have been defeated by the ant horde.

## 2 High Concept / Genre

Farmer Price is the ultimate bug-themed tower defense game. Immerse yourself in protecting your farm through the first person view of this game, as you build your turrets, run around the map, and choose whether you want to spend your gold that you earn from killing enemies on building new types of turrets or upgrading your existing turrets. Each run offers something new, as you get the opportunity to test out different strategies and find out what is the most effective way to stop the ant armies!

## 3 Unique Selling Points

- Exciting gameplay that combines the building aspect of tower defense games with the direct involvement of first person games
- Variety of Different Turret Types with Upgrades for Each Turret
- Ability to Switch Between Map View and First Person View so User Has Complete Control

## 4 Platform Minimum Requirements

Anything that can run Unity

## 5 Competitors / Similar Titles

Sanctum

Bloons Tower Defense V

## 6 Synopsis

You are the CS Professor and gardening enthusiast Steven Price. Your garden has become infested with ants, so you have set up a maze to trap and kill the ants through the use of your anti-ant turrets that you have created.

## 7 Game Objectives

Defeat waves of enemy ants through the creation of turrets without letting too many make it to the end of the maze.

## 8 Game Rules

The game is set in a single enclosed maze. The player is able to move around, build and upgrade turrets, as well as switch to a top-down map view. When a player is ready, they can spawn a wave of enemies. The player wins by having any health left after all of the waves have gone through. The player's health is tied to the end of the maze, so that whenever an ant survives, the player loses health. If the player's health hits zero, it's game over.

## 9 Game Structure

Main Menu → Play Game → Game Over Scene (Which varies on whether player wins or loses)

Parallel to Play Game: Map View and Pause Screen

## 10 Game Play

### 10.1 Game Controls

Movement- Arrow Keys or WASD

Jumping- Spacebar

Enter Build Mode- B

Enter Upgrade Mode- U

Select Tower- Q to move left through the options and E to move right through the options

Right Click- Places Tower if in Build Mode, Upgrades Tower if in Upgrade Mode

Sell Tower- R

## 10.2 Game Camera

Follows player around, keeping player in the first person view. Stationary while player is in any of the menus (top-down view for the map mode).

### 10.2.1 HUD

Player Health- Shows how much health the player has left

Player's Gold- Shows the amount of currency the player has left

Wave Number- Shows the current wave the player is on

Build- Shows the button you need to press to activate build mode as well as indicating when you are in that mode

Turret Selection Buttons- Shows buttons you need to press to cycle through turret choices, as well as showing you when you are pressing down on them

Current Turret- Displays an image of the turret that you currently have selected to build

Upgrade- Shows the button you need to press to activate upgrade mode as well as indicating when you are in that mode

Sell- Shows the button you need to press to activate sell mode as well as indicating when you are in sell mode

### 10.2.2 Maps

Single enclosed maze map with obstacles that enemies can't pass through. These obstacles are the squares you can place your turrets on.

## 11 Players

### 11.1 Characters

Farmer Price, CS Professor, Gardening Enthusiast, and Inventor.

## 11.2 Metrics

Player Health: 5

Format for Turrets: Values listed going from Level One to Level Three

Basic Turret

Damage: 10, 25, 65

Range: 3, 4, 5

Laser Turret

Damage: 4, 5.5, 9

Fire Rate: 3, 5, 8

Range: 4, 4, 5

Rocket Turret

Damage: 24, 40, 48

Fire Rate: 0.25, 0.4, 0.75

Range: 3, 5, 8

Bullet Damage Radius- 1, 1.5, 2

Bullet Speed: 4, 8, 10

## 11.3 Weapons

Standard Turret

Laser Turret

Rocket Turret

Stats Listed Under Metrics

## 12 Player Line-up

Player Height irrelevant, about 2 m. Small ants about 0.5 m, big ants 0.75 m. Flying ants around 1.5m up and are about 0.5 m tall.

# 13 NPC

## 13.1 Enemies

Small Ant

Large Ant

Flying Ant

### 13.1.1 Enemy States

Enemy Walking- Walking in whichever direction is not closed off by maze

Enemy Flying- Same but for Flying Ant

### 13.1.2 Enemy Spawn Points

Entry of Maze

# 14 Art

## 14.1 Setting

Professor Price's Backyard Garden.

## 14.2 Level Design

Small enclosed maze that player can walk around. Enemies only able to follow path in between the turret squares.

## 14.3 Audio

Homemade music and “quality” homemade sound effects.

# 15 Procedurally Generated Content

## 15.1 Artificial Intelligence NPC

Enemies procedurally generated in waves.

## 15.2 Visual Arts

Tiles procedurally generated before start of game, map also generated,

## 15.3 Minimum Viable Product (MPV)

Complete map with ability to build and upgrade different types of turrets.

Waves of enemies that increase in number and difficulty

Currency System

Ability to sell turrets

Ability to Win or Lose Game

Music and Sound Effects

## 16 Wish List

More tower types and enemy types

More map types

Character customization

## 17 Bibliography



## Bibliography

3. (2008, February 6). 3D Ant [3D model]. Retrieved from <https://www.turbosquid.com/3d-models/3d-model-formica-rufa-ant/388875>
- A. (n.d.). Heart [Free Heart PNG]. Retrieved from <https://www.freeiconspng.com/images/heart-png>
- Ajit, S. (2021). Main Music. On *MainMusic* [MP3]. San Diego: Sam Schneider. (2021, April 20)
- B. (2016, July 06). Tower Defense Asset Pack [These are the models and sprites used in the Tower Defense course.]. Retrieved from <https://devassets.com/assets/tower-defense-assets/>
- H. (2019, July 15). White Square [Digital image]. Retrieved from <https://www.houseofcharity.org/expandinghope/attachment/white-square>
- Price, P. (n.d.). Professor Price [Headshot]. Retrieved from <https://www.cs.sdsu.edu/wp-content/uploads/2014/07/Price-150x150.jpg>
- Purohit, Y. (2016, April 14). 3D model ant cartoon [3D model]. Retrieved from <https://www.turbosquid.com/3d-models/3d-model-ant-cartoon/1027059>
- Schneider, S. (2021). All Sound FX. On *All Sound FX* [MP3]. San Diego: Sam Schneider. (2021, May 4)
- Shahrabi FOLLOW 161 161 Downloads 394 394 Views, S. (2020, December 10). Watermelon [Watermelon Texture]. Retrieved from <https://sketchfab.com/3d-models/watermelon-23428abd790b4df4b7506d653f563905>
- V. (2019, November 15). 3D bird [3D model]. Retrieved from <https://www.turbosquid.com/3d-models/3d-bird-1471880>
- Yakov, S. (2018, May 17). Batterfly [3D model]. Retrieved from <https://www.turbosquid.com/3d-models/batterfly-yellow-art-insect-3d-1266283>