

Primal Clash: Design Document 2

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Overview

For project two our team is taking what we did for project 1 and developing it further into a final product since we were missing many important things such as proper UI and some important game functions. Art and audio will also be important things we focus on that will make our game feel more complete and add feedback in the game.

Gameplay

The main gameplay of Primal Clash is consisted of changing the map layout to suit the terrain and to upgrade the towers to deal with the increasingly difficult waves of monsters coming toward the base.

So far we already have a majority of the game finished but we never got around to changing the terrain system and how that will play a role in the game. So to make the terrain a part of the game we will make it so that parts of the map change. The position of random things such as rocks and trees will change based on the level. Along with rivers or other things these will force the player to make smarter choices on where to place their towers and where to place map pins.

Another important feature we never had the chance to implement in the last version of the game is the item drop system. While a level is playing out, when enemies die they have a small chance to drop items that the player can use as a resource to build more towers and change map pin positions. This important feature not only

creates a limit to work around in the game increasing strategy but also increases important interaction during the game. Rather than simply placing towers and starting the wave, the player must also be vigilant and move their mouse over the dropped items to pick them up so they have enough resources to be ready for the next incoming level.

Audio in the game must reflect what is happening. When shots kill an enemy, sounds should be played so the player knows an enemy has died. When they pick up upgrade tools they should hear a small sound to reflect that action being completed. Along with feedback, the background music must also reflect what is going on in game so as to heighten the experience of calmly placing pins while frantically watching the wave of enemies march down the path towards the player's base.

Art is also important. Simple cubes are great for the basic setup but for a more fleshed out game something a little more advanced would be nice.

Along with the central game play the player has to be able to interact with appropriate UI that is available to them. Buttons must be working and show feedback such as hover colors and aid them. Our lack of functional UI in the last project heavily hindered the playing experience of the last game and is something we want to spend a significant amount of time on to make the game feel just right.

Game Elements

The many game elements in our game are enemies, upgrade tools, towers, map pins, shots, and random terrain items such as trees and rocks.

Enemies

Enemies spawn at the start of each round at the starting point of the pathway. During each round, a certain amount of enemies spawn. There are different levels of enemies ranging from weak to small. As the round begins, enemies spawn and try to follow the pathway to get to the base at the end and damage it. It is up to the player to have enough towers with the proper upgrades to defeat the right enemies and pick up the upgrade tool they may drop upon on death. For example, if the enemy were an ice type, the player should have a tower that shoots fire to defeat it.

Upgrade Tools

When enemies die they have a small chance of dropping upgrade tools. These are just random items like bricks or cannonballs that can be consumed to upgrade towers or build more roadway. Upon having enough, the player can click on a tower during the round or in between and choose what type of upgrade to give it which will consume the appropriate amount of upgrade tools they may require. Or in between rounds change the maximum pathway size if they so wish or a small fee to change the map at all.

Towers

Towers are the objects that fight the enemies that come on the pathway. At the start, about 4 towers are spawned randomly in and all towers are the same and it is up to the player to decide what upgrade they want to choose from a selection. Upon choosing, that tower consumes some upgrade tools and gain new abilities like shooting fire projectiles or slowing enemies. If we can find a way we will try to make the towers look

differently based on what they do but we will see how much we can get done in this short period of time.

Map Pins

These are the central way of editing the pathway system. In between levels the player can pick up map pins which determine the points of the pathway. So if a player wanted a “V” shaped pathway they can move a pin in the middle all the way down and the starting and end pins all the way up. This allows for a dynamic map layout in control of the player the game. The only caveat is that there are procedurally generated trees and rocks which make some areas unable to have a path. This makes the map pin system have a purpose. The player must choose the optimal route around their towers that spawn at the start and the terrain.

Random Terrain

These will be simple things like rocks, trees rivers, etc. Random natural things that will obstruct the map so it is not a completely barren wasteland that allows for any and all configuration of the pathway system. If the player chooses they may destroy these at the price of some upgrade tools.

Interaction

As a whole, these all work together to make the game what it is. The terrain and towers that spawn at the start give the pathway system meaning. Enemies follow the pathway

system to get to the end and as they do the towers shoot shots to damage them. Upon their death, the enemies will drop upgrade tools which can be used to upgrade towers that shoot new shots, change map pins to alter the pathway or remove terrain.