
**LOKAVERKEFNI 2017
HÁSKÓLINN Í REYKJAVÍK**



**SUPER-COLLOSAL
TITAN WARFARE**

GAME DESIGN REPORT

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THE GAME'S LOGO

1. INTRODUCTION

This document is a game design report for the video game Core, which is currently in development. It contains descriptions of the design decisions for the main components that make up the game. Although the game is not ready for release, a working prototype has been developed.

2. TARGET AUDIENCE

MOBA(Multiplayer Online Battle Arena) are extremely popular and there exists a large player base pool. Riot Games estimates that 100.000.000 players are actively playing League of Legend each month.[1] This shows us that a large base of players is already active in this genre and gives us a good opportunity to tap into that market by following many of the traditions that have already been set for the genre. The genre is also attracting a lot of new players due to exposure in eSports, so making the game accessible to new players is equally important.

3. ELEVATOR PITCH

Super Colossal Titan Warfare is a video game for casual gamers who want a thrilling action packed duel with other players in the MOBA genre which separates itself from other similar games by offering a significantly shorter game with no dependency on bothersome teammates.

4. PROJECT DESCRIPTION

Our project is a multiplayer video game which involves two players fighting for the control of a chasm. The chasm is inhabited by creatures that will attack the player if he approaches their camp. Each player is assigned a titan to control, a home base and a color, either red or blue. The red base is in the bottom left corner of the chasm and the blue base is in the top right corner of the chasm as seen by the player. The goal of the game is to gather experience points faster than the opponent and by doing so leveling up sooner than him. Leveling up increases the player's damage output and health. Experience points can be obtained by killing the neutral inhabitants of the chasm, killing the opponent's titan or destroying his cannon. The game is won by either destroying the opponents base, decimating the opponent (killing him three times without him pegging back). Although the game's design is loosely based on the MOBA genre a single game's length is considerably shorter taking only 5-10 minutes on average.

5. STORY

The story revolves around two Titans one red and the other blue. The red titan is associated with the fire element and the blue titan is associated with the element of water. The titans arrive in a small chasm. Each carrying nothing but their most important possession, a phenomenon called the wonder and a small cannon to protect it. The wonder's importance to the titans is due to its healing and regenerating powers, without their respective wonders the titans would perish. When they fall in battle the wonders bring them back to life. They fight for the control of the chasm's vast pool of resources. The fight however, isn't only against each other but against the inhabitants of the chasm as well.

6. AESTHETICS

The game's visuals are simple yet colorful. One of the earliest design decisions made for the game was to try to achieve a cohesive low-poly style for the visuals. We want them to convey the casual and approachable nature of the game that sets it apart from other games in the MOBA/Action RTS genre. We also hope that the visual style will appeal to a younger audience than MOBA games typically attract. The low polygon count of the 3D assets and the absence of image textures on most of them also lowers the minimum hardware requirements significantly benefitting prospective players with older computers greatly.

7. CHARACTERS



Titans (Playable Characters)

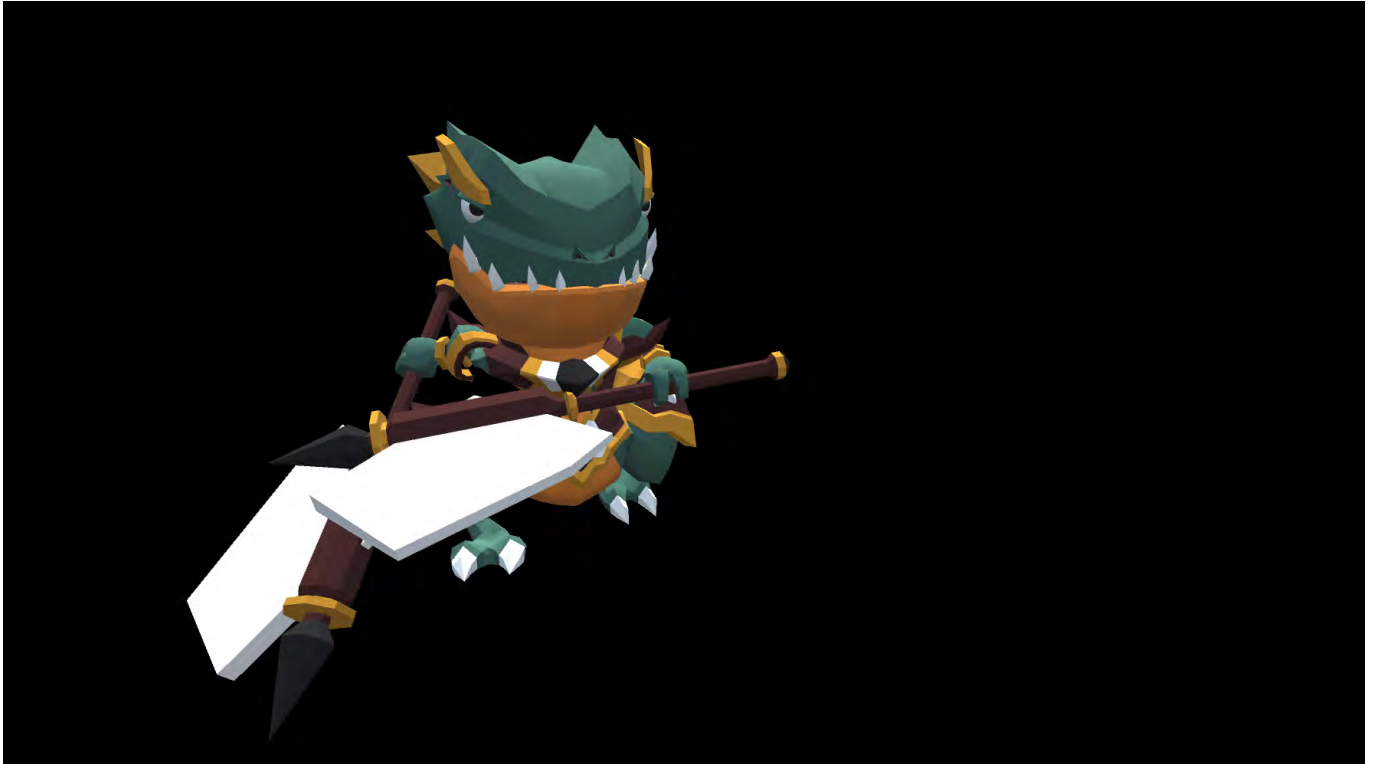
The two playable characters are both Titans of an opposite factions who upgrade themselves as the game progresses. Their main attack is to fire projectiles but they can also pick up abilities in the map which can be used to defeat their opponent.



A PEON

Inhabitants (Non playable Characters)

These are the inhabitants of the world in which the titans fight. They are separated into three levels of difficulty easy, medium and hard and are called peons, tarragons and Rorax respectively. They are not playable but are AI controlled and can be killed by the players for experience points. The inhabitants are



A TARRAGON



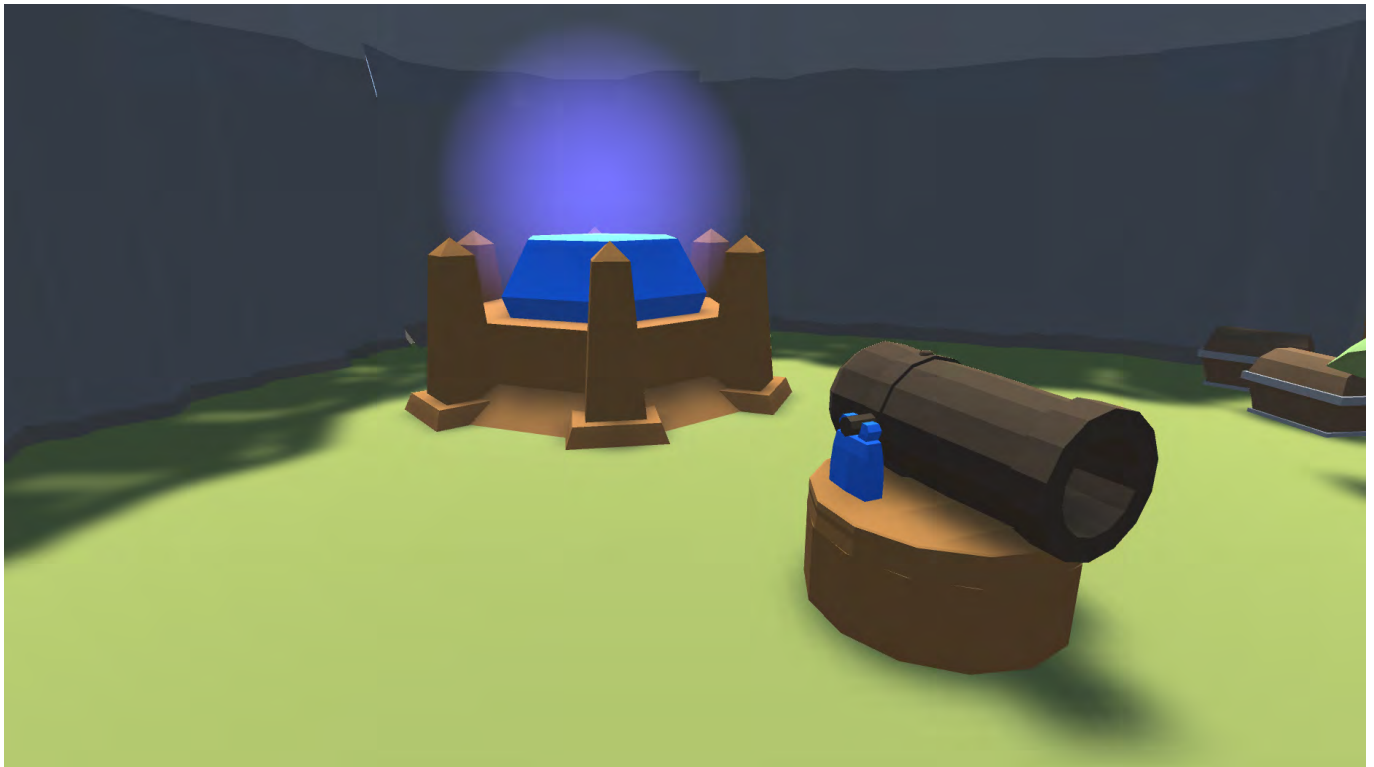
RORAX

passive unless the player enters the perimeter of their camp or attacks them, in that case they will attack the player. If the player has aggravated the inhabitants they will follow him for eight seconds. The creeps are neutral in the sense that they belong to neither titan faction.

8. STRUCTURES

Cannons

One cannon is in each base, its purpose is to protect the base's wonder. The cannon will automatically attack the opposing titan if he enters the base.



A CANNON (IN FRONT) AND WONDER (BEHIND)

Wonders

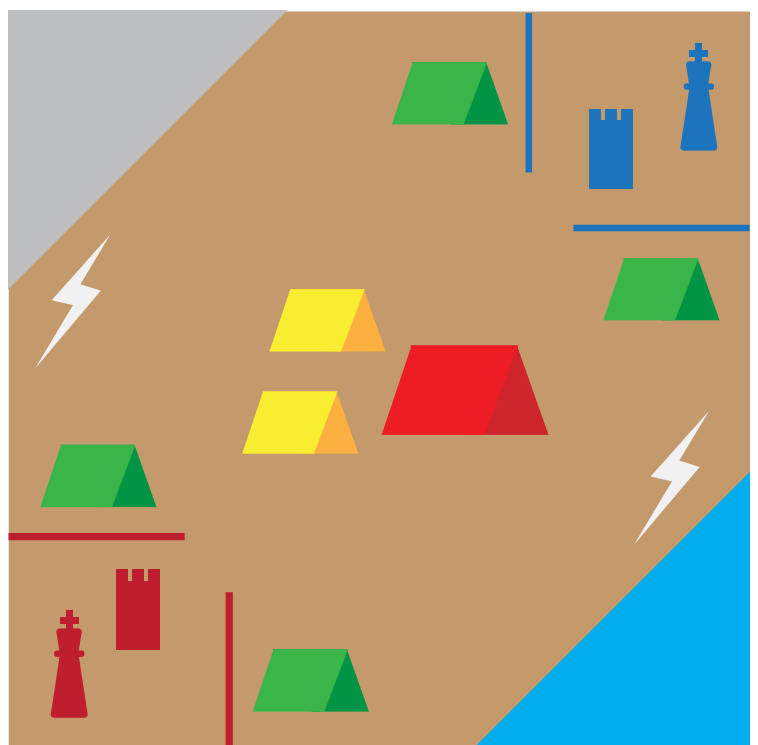
One wonder is in each base. The wonders cannot be destroyed unless the cannon that protects them is destroyed first. Destroying the opponents wonder will result in victory.

Walls

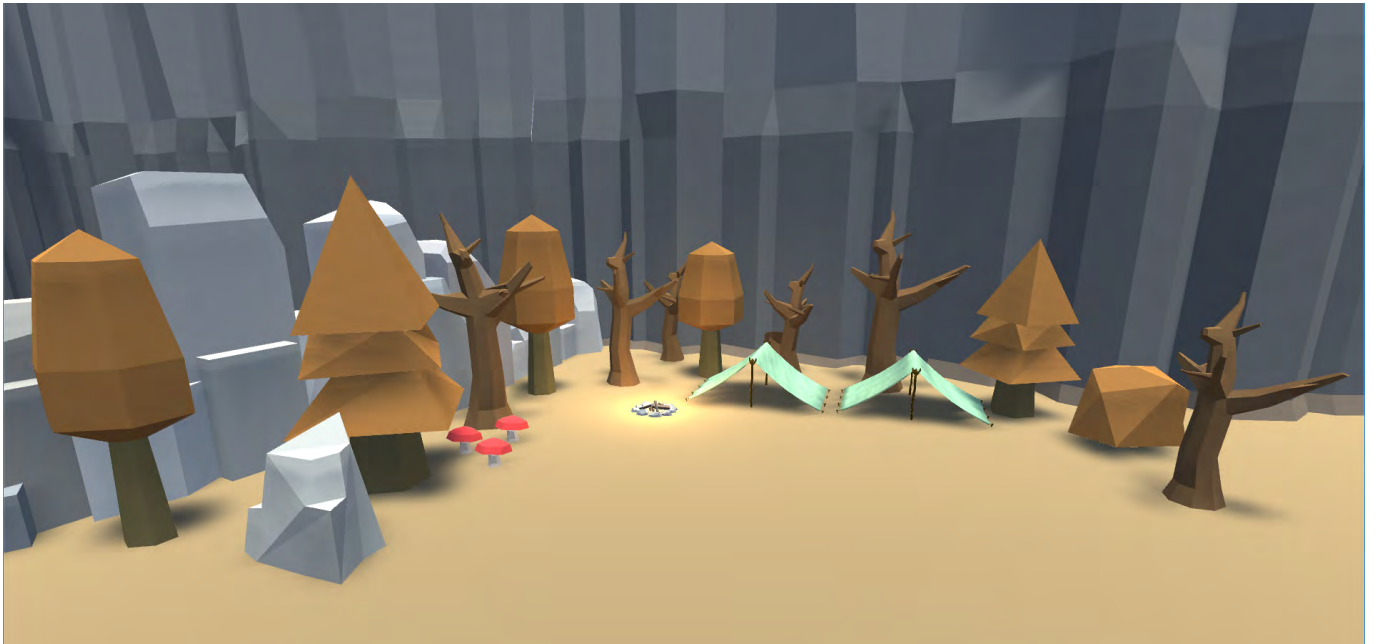
The bases are enclosed by walls which protect the bases from the opponent by forcing him to enter through a specific entrance point.

9. LEVEL DESIGN

The main level is split in half with slight environmental differences. Each half will contain three camps of non-playable characters, two of them easy camps and one medium in difficulty. There will be one hard camp in the center of the level. Each of the player's bases will contain a wonder and a cannon. Powerups will appear at the bottom right corner and top left corner with regular intervals.



CONCEPT ART OF THE GAME MAP. THE KING CHESS PIECES SYMBOLIZE THE WONDERS THAT BELONG TO THE RESPECTIVE PLAYERS. THE ROOK CHESS PIECES SYMBOLIZE THE CANNONS THAT PROTECT THE WONDERS FROM THE OPPONENT. THE DIFFERENT COLORED TENTS REPRESENT THE INHABITANT CAMPS EASY(GREEN), YELLOW(MEDIUM), RED(HARD). THE LIGHTNINGS INDICATE THE POSITIONS THE POWERUPS WILL SPAWN.



AN EASY CAMP



A MEDIUM CAMP

10. ENVIRONMENT DESIGN

The environment is based on the nature of earth. It contains trees, rocks, a mountain and a river. Each half's decorations will reflect the characteristics of the element with which it is associated. The side where the red titan resides reflects the destructive and untamed force of fire while the side where the blue titan resides reflects the calm and life giving properties of water. The same applies to the titans' bases. The blue base is designed with symmetry in mind and contains objects such as treasure chests, barrels and crates that imply abundance and life. The red base on the other hand is the opposite it seems disorganized and desolate and contains items such as a tombstone and a coffin symbolizing scarcity and death.



THE HARD CAMP

11. GAMEPLAY

Each player starts on each side of the map with a fog of war hiding the other player. In order to strengthen and level up their character, they need to kill non-playable characters which spawn regularly in the aforementioned camps. With each level, the camps will become easier to kill. The player also needs to use the powerups (which grants them a temporary skill) to pressure the other player and potentially kill him which yields experience and also gives the player control of the map. Once a player's character has been killed he will respawn in his base within a few seconds.

12. GAMEPLAY MECHANICS

Movement

The player can move his camera and his character around the game world.

Combat

The player can engage the opponent's player's character and non-playable characters in combat. If the player's character dies he respawns at his base after 10 seconds.

Progression

Progression takes the form of a leveling system where a player's character will level up after earning a specific amount of experience points. These experience points can be gained by killing the opponent's character, killing non-playable characters, destroying the opponent's tower and picking up power ups. Leveling up will increase the character's health and attack damage attributes.

Risk and Rewards

There are numerous situations within the game where taking a risk might yield a high reward for example in experience points gained and experience points lost for the enemy if the player decides to take a risk of killing the inhabitants nearest to the opponent's base or tries to kill Rorax while only at level 1 or 2.

Uncertainty

The game will contain a feature called fog of war which will hide interactive objects or information about them from the player unless the player's character or structure are within a certain range of the object under a dark mist.

Powerups

The game will feature powerups which when picked up and activated will alter certain rules of the game.

The powerups are:

Invisibility: when activated the titan will appear invisible to his opponent.

Speed boost: when activated the titan will move 1.5 times faster than usual

Double damage: when activated each projectile will deal double the normal damage.

Shield: when activated the titan takes half the damage it usually does.

Victory Condition Mechanics

- Once either player has destroyed the other player's wonder he has won the game.
- If either player kills the other three times without being killed once by his opponent he has won the game.
- If either player leaves the game by using the return to lobby button from the in-game menu he will lose the game, the other player will win and the endgame cutscene will be played.

13. USER INTERFACE

The user interface consists of a view of the game world and a heads-up display (HUD).

View of the Game World

The user sees the game world from a bird's view. The user can zoom in to see the level from up close.

Heads Up Display

The HUD shows the user vital information about the game and allows for additional actions.



PICTURE OF THE SELECTED OBJECT

An image of the game object that is currently selected by the user is displayed in the HUD.

HEALTHBAR

The health bar shows the health of the player's titan. It is designed as a horizontal green bar with a black background. As the player's health decreases the green bar shrinks from right to left. The health is also displayed in writing within the health bar.

EXPERIENCE POINTS BAR

The experience points bar shows the amount of experience points the titan has amassed. It is displayed in a horizontal black bar. As the user gains XP points the XP bar turns yellow from left to right. The level of the titan and how much XP the player needs to level up is also displayed in writing.

MINI-MAP

The mini-map is a scaled down version of the game level showing its basic layout, the location of the camps containing the non-playable characters and both bases. The mini-map can be used to move the camera around and to make the titan travel to a specific point on the map in the level.

INVENTORY

The inventory displays the power ups that the player has picked up and have not yet been used. The power ups can be activated from the inventory.

STATS

The attack damage, movement speed and attack range of the selected character or structure are displayed in the bottom right hand corner of the HUD.

14. GAME CONTROLS

The game only supports mouse and keyboard controls since this is a PC game and it is a standard for a game of this genre. The mouse will be the primary user input device and playing the game with only a mouse is possible. But for a better user experience the game will also support keyboard shortcuts.

Moving the Camera

Moving the mouse and thereby the cursor to any edge of screen will cause the game camera to move in the corresponding direction giving the user control over which part of the map is shown on his or her screen. Zooming is possible by scrolling the mouse wheel up (away from the player) to zoom in or down (towards the player) to zoom out. The camera can also be moved over to a specific location on the map by left clicking with the mouse on that location in the mini-map.

Selecting units and buildings

By moving the cursor over an interactive game object and pressing the left mouse button will cause the object under the mouse to be selected. The fact that an object is selected is indicated by a white circle surrounding the object. Both playable characters, any non-playable characters and both structures in either base can be selected this way.

Basic Actions (Movement and Attack)

The titan character has two basic actions that the user can perform; movement and attack. Basic actions are performed with the right mouse button and they are context sensitive. If the user right clicks while the mouse hovers above a point on the map the titan will walk towards that point.

If the mouse cursor hovers above an interactive object either belonging to the opposing player or neutral while the right mouse button is pressed, the titan will attack that object. If the target is not within range the titan will walk towards the target until it is within range before performing the attack. It is also possible to move the titan around the level by clicking the mini-map with the right mouse button.

Pick-up Powerups

Powerups can be picked up by moving the titan to the powerup object's position in the game world.

Activate and Use Power Ups

Power ups that have been picked up can be activated by pressing the key corresponding to the power up's

position on the user interface (Q,W or E) the key associated with each powerup will be displayed over the power up's icon in the inventory on the HUD. Clicking a power up's icon in the inventory will also activate the power up.

15. REFERENCES

- [1] P. Tassi, "Riot games reveals 'league of legends' has 100 Million monthly players," in Forbes, Forbes, 2016. [Online]. Available: <http://www.forbes.com/sites/insertcoin/2016/09/13/riot-games-reveals-league-of-legends-has-100-million-monthly-players/#2823665310b1>. Accessed: Feb. 14, 2017.

