Requirements and Analysis Document for JOKE

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1 Introduction

A Tower Defence game highly focused on the current political climate in the USA with satirical tendencies. Playing as Donald Trump, defend the White House from attacking aliens by placing out and upgrading towers, as well as by calling in special executive orders from previous presidents. The towers and executive orders are divided into two sections; republicans and democratics, and give different bonuses and benefits related to the real world ideologies.

We believe that this

1.1 Definitions

1.1.1 Basic definitions

Alien An enemy that wants to destroy the base.

Executive order A special attack that's based on political scandals throughout U.S. history.

Map A map consisting of different roads in a grid layout.

Tower A turret that automatically attacks enemies within its radius.

President

White House A base that needs to be defended. If the base is lost, the game is over.

1.1.2 Game related definitions

Political meter Meter that represents the Player's political position. Default value is 50% Republican and 50% Democrat. The sum is always 100%. Political position is affected by different executive orders.

Money Money is acquired through killing enemies and is used to purchase upgrades for Towers.

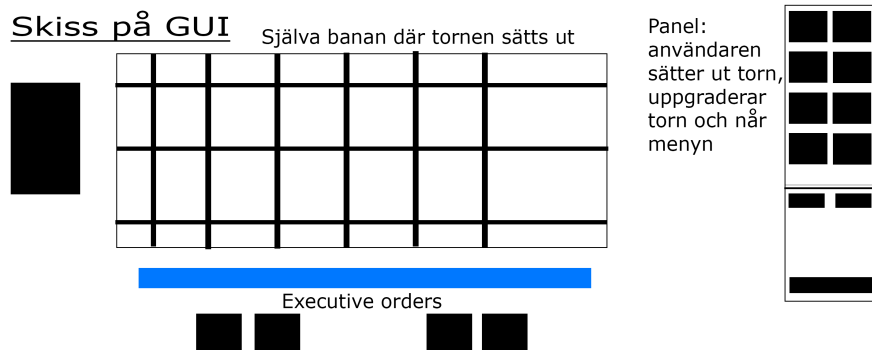**Points** Total amount of money accumulated.

Path Shortest way to White House.

Road

Wave Each wave consists of a different amount of Aliens.

2 Requirements

2.1 User interface

<u>Skiss på GUI</u>   Själva banan där tornen sätts ut

Panel: användaren sätter ut torn, uppgraderar torn och når menyn

Executive orders

2.2 Functional requirements

- Start game

- Place tower

- Issue executive orders
  - Place wall
  - Call in presedential (scandal) favours
    * Abraham Lincoln (death by assassination)
    * Bill Clinton (Monica Lewinsky)
    * Nixon (Watergate)

- Upgrade tower

- Sell tower

- Find the shortest road

2.3   Non-functional requirements

3   Use cases

3.1   Use case listing

- Place tower

- Issue executive order

- Next round

- Sell tower

- Upgrade tower

3.2   Use case: Place tower

Summary:	
Priority:	High
Extends:	
Includes:	
Participators:	Player

3.2.1   Normal flow of events

	Actor	System
1	Player selects Tower from available Towers	Tower is marked as selected
2	Player drags Tower to game field	Transparent Tower is rendered while dragging
3	Player drops Tower	Check if position is allowed

3.2.2   Alternate flow of events

3.3   Use case: Issue executive order

Summary:	Special attack
Priority:	Medium
Extends:	
Includes:	
Participators:	Player

3.3.1 Normal flow of events

	Actor	System
1	Player selects Executive order from available Executive orders	Executive order is marked as selected
2		Small prompt is invoked, asking the Player to confirm purchase of Executive order
3	Player confirms purchase	Executive order is activated instantly
4		Cooldown timer is started and Executive order is unselectable

3.4 Use case: Next round

Summary:	Proceed to the next round
Priority:	High
Extends:	
Includes:	
Participators:	Player

3.4.1 Normal flow of events

	Actor	System
1	Player clicks on "next round" button	
2		The next wave of alien attackers are spawned and appears

3.5 Use case: Sell tower

Summary:	
Priority:	Medium
Extends:	
Includes:	
Participators:	Player

3.5.1 Normal flow of events

	Actor	System
1	Player selects one of the placed towers on the map	Information as well as Upgrade and Sell buttons appear on the panel to the right
2	Player clicks sell button	Small prompt appears to make sure the player didn't click by accident
3	Player confirms the sell	The turret is removed from the map and the player gains resources

3.5.2 Alternate flow of events

3.6 Use case: Upgrade tower

Summary:	
Priority:	Medium
Extends:	
Includes:	
Participators:	Player

3.6.1 Normal flow of events

	Actor	System
1	Player selects one of the placed towers on the map	Information as well as Upgrade and Sell buttons appear on the panel to the right
2	Player clicks the upgrade button	If affordable, the turret is upgraded

3.6.2 Alternate flow of events

4 Domain model

4.1 Domain Model