**Game Design Document**

**Project name**: Avengers Infinity Lines

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**Introduction**

Infinity Lines is a 2D game developed using Unity3D game engine in which the player tries to collect the ***Infinity Stones*** by drawing lines (*path*) in various levels that the Avengers will take to save the universe. Infinity Lines represents a puzzle that can be solved through completing the levels in the right order as each completed level provides the player a unique ability that helps him in next levels.

**Functional Specifications**

The Infinity Stones are scattered all over the universe. Each level will take place at specific planet with specific Avenger. Your main objective is to draw a line to lead that Avenger to the stone’s location to collect it.

There are different types of lines based on the level’s planet as following:

* **Normal Line**: represents Earth’s gravity, just a simple line.
* **Boost Line**: represents Xander’s ground which pushes the avenger forward with a specific speed.
* **Bouncy Line**: represents Asgard’s ground which makes the avenger bounce on it due to lack of gravity

The Infinity Stones are tied to different aspects of the universe, those stones provide unique abilities within the game as follows:

* **Mind**: Increase line length
* **Time**: Slow enemies.
* **Power**: Destroy enemy unit when the avenger collides with it.
* **Space**: Avenger teleport (Change avenger’s start location)
* **Soul**: Destroy all enemies when the correct code entered
* **Reality**: Change current level line.

Once the level scene opens, Player can find the Avenger placed at the start location (Fixed for all levels) while the stone will be on the other side. Thanos already sent his forces to bring him the stone.

The drawn path Should make the Avenger totally avoid enemy troops. If the Avenger collided with any of them, Player would fail the level and the whole universe.

**Controls**

Player has 3 main controls:

* **Left mouse button** (*hold*): Draw lines.
* **Right mouse button** (*click*): Reset lines (*delete them*).
* **Space keyboard button**: Start the avenger’s journey towards the stone after finishing line drawing.

**Characters**

This game features a good number of marvel superheroes such as:

* Captain America
* Iron Man
* Doctor Strange
* Black Panther
* Star Lord
* Hulk
* Thor

It also features Thanos “the mad titan” as well as his troops that will be used as obstacles within the game.

**Levels**

* Level 0:
  + Planet: Earth
  + Line: Normal
  + Avenger: Captain America
  + Obstacles: 1
  + Stone: Mind
  + Objective: Tutorial
  + Hint: Tutorial
* Level 1:
  + Planet: Earth
  + Line: Normal
  + Avenger: Doctor Strange
  + Obstacles: 5 units
  + Stone: Time
  + Objective: Use Mind to pass
  + Hint: TBD
* Level 2:
  + Planet: Asgard
  + Line: Bounce
  + Avenger: Thor
  + Obstacles: 13 units
  + Stone: Reality
  + Objective: Use Space to pass
  + Hint: TBD
* Level 3:
  + Planet: Xander
  + Line: Boost
  + Avenger: Star Lord
  + Obstacles: 9 units
  + Stone: Power
  + Objective: Use Soul to pass
  + Hint: TBD
* Level 4:
  + Planet: Earth
  + Line: Normal
  + Avenger: Iron Man
  + Obstacles: 10 units
  + Stone: Get the gauntlet
  + Objective: Use Power to pass
  + Hint: TBD
* Level 5:
  + Planet: Vormir
  + Line: Bounce
  + Avenger: Black Panther
  + Obstacles: 10 units
  + Stone: Soul
  + Objective: Use Reality to pass
  + Hint: TBD
* Level 6:
  + Planet: Asgard
  + Line: Bounce
  + Avenger: Hulk
  + Obstacles: 10 units
  + Stone: Space
  + Objective: Use Time to pass
  + Hint: TBD

**Story**

Before the Universe began, six singularities existed. Sometime after the universe exploded into existence, these were formed into the six Infinity Stones by the Cosmic Entities.Each of the stones possesses unique capabilities that have been enhanced and altered by various alien civilizations for millennia which is dangerous to fall in the wrong hands.Speaking of the wrong hands, Thanos “the mad titan” wants to collect those stones to erase half of all creatures in the universe to save the other half.You will help Avengers to stop this madness through collecting the Infinity stones before Thanos gets them. THE UNIVERSE COUNTS ON YOU.