**(Working title)**

**The Speed of Gravity**

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**Table of contents:**

Game and Mechanic Summary pg

List of Finished Code pg

List of code to finish/make pg

Player Summary

Scenes Summary

Main menu

Tutorial

Game over

Level finish

Game Won

Pisces’s Lake

Sagittarius’s Range

Taurus’s Rage

Gemini’s Mirror

**Game and Mechanics Summary**

**Game:**

The player is in space and must stop the constellations from wreaking havoc.

**Mechanics:**

The player must gain speed to destroy enemies when they hit them. The player has an initial speed and a max speed, they can temporarily increase their speed and max speed by getting power ups. But the faster a player goes the harder it can be to control the player.

**List of Finished Code**

CameraFollow: controls the camera and how it follows the player.

UpAccelScript: code for increasing speed powerup, increases the players current speed by 10.

UpMaxAccelScript: code for increasing the max speed powerup, increases the players max speed by 10.

Orbit: controls how an object will orbit around something.

LookAtTarget: makes an object turn towards and face a target object.

Enemy: determines the heath of an enemy

**List of code to finish/make**

|  |  |  |
| --- | --- | --- |
| **Code to fix:**  PlayerFloatMove:  Fix jitter when destroying enemies  ~~Player weight~~  EnemyMove:  Enemy AI | **Code to make:**  ~~Scene manger~~  ~~Main menu UI~~  ~~Game over UI~~  ~~Game win UI~~  ~~level score calculation UI~~  ~~Player UI:~~  ~~Health display~~  ~~Current and max~~ ~~Speed/acceleration display~~  ~~Enemy location arrows~~  ?enemy lock on  Player speed boost lines  ??player text boxes?? | **Questions for Towel:** |

**Player Summary**

**Initial design ideas:**

|  |
| --- |
| [insert ideas here] |

**Final designs:**

|  |
| --- |
| [insert here] |

**Player animations:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Needed:**  Idle  Move  Stun/hit  Death | **Completion date:** | **Optional:**  level complete  Increase speed/acceleration | **Completion date:** | **Unsure:**  ?Hit enemy  ?Reached Max speed/acceleration |

**Player Particle Effects:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Needed:**  Stun/hit | **Completion date:** | **Optional:** | **Completion date:** | **Unsure:** |

**Scenes Summary**

Because we are using a space setting a lot of assets can be reused or re textured. This list is just a general list of things that can be used several times.

**Note:** if something has a \* next to it, it means it has some special notes/requirements that should be referenced.

|  |  |
| --- | --- |
| **Assets needed (Models):**  ~~Asteroids~~  ~~Planets~~  Player  ~~Speed up powerup~~  ~~Increase max acceleration powerup~~ | **Completion Date:**  3/10/21  3/10/21  3/16/21  3/16/21 |

|  |  |
| --- | --- |
| **Assets needed (textures/particle effects):**  Sky boxes\*  ~~Enemy Space/nebula texture\*~~  ~~Enemy ball texture~~  ~~Enemy destroy texture~~  Player hit/collide particle effects | **Completion Date:** |
| **Unsure:**  Enemy ball bounce off particle effect | **Completion Date:** |

**Sky boxes**: I would like for each level to have it’s own skybox if possible.

**Enemy Space/nebula texture**: most/all enemies will have this texture but they’ll be different colors. Also this texture should be partially see through if possible.

**Main menu**

**Initial design ideas:**

|  |
| --- |
| [insert ideas here] |

|  |  |
| --- | --- |
| **Things needed:**  ~~Start button~~  ~~Controls button~~  ~~Level select button~~  Nice background  ~~Button textures~~ | **Completed:**  3/10/21  3/10/21  3/10/21 |

Tutorial

Game over

Level finish

Game Won

**Pisces’s Lake**

References:

|  |
| --- |
|  |

**Level: Pisces’s Lake**

|  |  |  |
| --- | --- | --- |
| **Assets needed (Models):**  ~~lily pads\*~~  frogs\*  ~~jelly fish~~  ~~a fish (pices)~~ | **Assets needed (textures):**  ~~Water texture~~  ~~Lily pad texture\*~~ | **Assets needed (particle effects):**  Splash particle effect  ?Jelly fish move particle effect  Jelly fish attack particle effect |

**Animations:**

|  |  |
| --- | --- |
| **Enemies:**  Frog jump  frog attack with tongue\*  ?frog rotate  Jelly fish move  Jelly fish attack\* | **Boss:**  Swim  Jump  Attack\*  ?Damage  death |

Sagittarius’s Range

**Level: Sagittarius’s Range**

|  |  |  |
| --- | --- | --- |
| **Assets needed (Models):**  Sagittarius  ~~Bird(hawk/eagle)~~  ~~Bow~~  Comets\*\* | **Assets needed (textures):**  ??? | **Assets needed (particle effects):**  Comet particle effect  Comet hit particle effect  Comet destroy particle effect |

**Animations:**

|  |  |
| --- | --- |
| **Enemies:**  Bird fly  Bird attack\* | **Boss:**  Walk  Pointing bow\*  Shooting bow\*  Shooting bow up\*  death  ?damage |

Taurus’s Rage

**Level: Taurus’s Rage**

|  |  |  |
| --- | --- | --- |
| **Assets needed (Models):**  ~~Bull~~  ~~Butterfly~~  ~~Black hole~~  ?ground spikes | **Assets needed (textures):**  Butterfly transitions from blue to red | **Assets needed (particle effects):**  Black hole particle effect  Bull charge particle effect  Bull running particle effect\*  Butterfly particle effect |

**Animations:**

|  |  |
| --- | --- |
| **Enemies:**  Butterfly  Butterfly flutter\*  Butterfly hit/death | **Boss:**  Walk  Run/charge  Attack  Skid to stop  ?Damage  death |

Gemini’s Mirror

**Level: Gemini’s Mirror**

|  |  |  |
| --- | --- | --- |
| **Assets needed (Models):**  Hands/arms  Body  Ribcage  Heart  Glass/crystal shards  ?eye | **Assets needed (textures):**  Arm/hands texture\*  Damaged arm/hand texture\*  Ribcage texture\*  Heart texture  Glass/crystal texture | **Assets needed (particle effects):**  Body opens particle effect  ?Damaged arm/hand particle effect  Throwing planets particle effect |

**Animations:**

|  |  |
| --- | --- |
| **Enemies (hands /arms):**  move  Grab planet  Grab player  Swipe/smack at player  clap  Death | **Boss(body):**  Eye moves  Body opens  Heart beats |