**The Jupiter Brain**

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Revision 0.1.0

Game 300

# **Overview**

## **Theme/Setting/Genre**

The Jupiter Brain is a lighthearted 2D action platformer that takes place in a Sci-Fi setting.

## **Core Gameplay Mechanics Brief**

The core Gameplay mechanics of The Jupiter Brain mainly include jumping and shooting. The player will jump to maneuver their way through each level, as well as a way to evade enemies and other dangers that will block their path.

Shooting will be a way for the player to defend themselves from their opponents using bullets that will travel forward in the direction you are facing. The bullets cause damage to whatever they hit, eventually destroying the target. The strength and effect of shooting can vary depending on the type of weapon you have equipped.

Another core mechanic will be multiplayer. The player will select a single player or multiplayer game before starting, and the two players can work together to navigate through the levels cooperatively. Enemies and bosses will be scaled in difficulty to balance the addition of another player. Players will be able to interact with each other, but will not be able to damage or kill each other directly.

## **Targeted Platforms**

This game will be designed to run on PC as a Unity created game.

## **Project Scope**

### **Game Time Scale**

* This game will not have a cost.
* This game will be completed in full within 4 months (end of December)

### **Team Size**

* Team is composed of Two people
* Shane Matthews and Denys Podkolzin
  + Both team members will be equally responsible for the development of the game in all categories, from physics and controls to UI and handmade graphics.

## **Influences**

### **Megaman**

Games. Classic games for the NES. This game is a huge influence because of its gameplay and features. The majority of The Jupiter Brain’s ideas come from the classic Megaman games, and we hope to do it justice.

### **Super Metroid**

Game. SNES. This game is an influence due to its similar features and gameplay, but we draw inspiration from its character progression and abilities, as well as its environment (hopefully).

### **Shovel Knight**

Game. A modern game designed to be a classic NES game. This game in its core is similar to Megaman in many ways, as well as a handful of other games. We are inspired to have such a well-crafted game with tight controls that plays a wonderful homage to the classic games it was inspired by, similarly to Shovel Knight.

## **The elevator Pitch**

This game is an homage to the classic gameplay styles of the original Megaman games on the NES. The player will jump and shoot their way through enemies as they navigate a level to reach the end boss, which will reward the player with a new weapon or ability in which they can use to better themselves and take down the oncoming levels. It will feature a multiplayer mode that will allow the player and one friend to locally Co-op through the game, with appropriate balances to enemies and bosses.

## **Project Description**

This game is being created using the most recent Version of the Unity game engine (5.4). It will be developed in 2 Dimensions. Its intention is to be a modern incarnation of what made the classic games it is based off good, with a modern twist to them to keep things interesting.

All assets will be created by our team or found on free resource sites that will be cited with their uses. This game is being developed for our Game 300 class at Humber College.

## **What sets this project apart?**

* This game stands apart from others like it with its multiplayer gameplay. Having a second player to help navigate these levels can create a completely different experience than if you were doing it alone.
* This project will also stand out for its creative levels and theming, both in sense of the level design (artistically) and boss theming based on their respective levels.

## **Core Gameplay Mechanics**

### **Jumping**

Jumping will be necessary to navigate the level. As this game is partially a platformer as well, levels will be designed to have the player jumping between platforms, over dangerous objects or bottomless pits, just generally to keep the player moving and as a maneuver mechanism to avoid harm.

Jumping will be controlled by a single button. The player will be able to control the height of their jump based on how long they hold the jump button down, allowing for the player to perform high jumps, or short hops depending on the situation.

### **Shooting**

Shooting is the players form of attacking enemies. The player will shoot shots out in front of them that will fly straight forward until off screen, in which they will be destroyed. If the bullets make contact with an enemy it will cause damage to them, until they receive enough damage and are destroyed.

Shooting can be performed while standing still, in the air or running. The player will press the shoot button to shoot a projectile, in which there can only be three of on screen at a time. The projectile will be destroyed in one of two ways: it collides with an enemy/piece of environment, or it goes off screen. The player will gain new ways of shooting, which will provide a different type of projectile that the player will shoot, with its own properties.

# **Story and Gameplay**

## **Story (brief)**

Hero Hugh MacMannus has to stop the ETI (Extra Terrestrial Intelligence) from destroying the solar system.

## **Story (detailed)**

The Solar System has been discovered by an Extra Terrestrial Intelligence which has started their plan to destroy our beloved solar system! They encapsulate each planet within a massive sphere that sucks the energy from the core of the planets and siphons it to their own uses. Most the outer planets have been taken, but Earth still stands as free. If Earth falls, the solar system is gone. The hero, Hugh MacMannus, is a Super Soldier trained to defend the planet from external threats, and it is up to him to travel to each taken planet and defeat the ETI leaders that guard each encapsulated planet and free the it from their evil grasp before they create the perfect Jupiter Brain.

Hugh is armed with his power suit, and trusty Morphing Blaster, both being capable of absorbing his opponent’s powers so he can use it as his own.

## **Gameplay (brief)**

Hugh MacMannus will jump and shoot his way to Victory!! Blast through the ETI’s defenses and defeat the ETI Boss at the end of the level to gain a new power!

## **Gameplay (detailed)**

The player will start by selecting the level they wish to take on. Once they enter the level, they will begin to traverse and navigate from the beginning to the end, dealing with platforming challenges as well as enemies that are designed to stop you from making it to the end.

The player will have to use their shooting ability to defeat enemies that stand in their way, without getting defeated themselves, as they have a limited amount of health. Once they reach the end of the level, they will be faced with a boss. If they defeat that boss, they will get a new ability/power that they can use. They will then be brought back to the level select to pick a new level to play.

# **Assets Needed**

## **2D**

Textures will be needed for the environment, as well as textures for enemies, bosses, the player, and bullets/particle effects.

Most of these will be handmade, although some may be found on free game asset sites, and will be credited respectively.

Animation frames for player and enemies will be created alongside the original textures.

## **Sound**

Music will be needed for menus, and each separate level. These will likely be found of free resources, but may also be designed by a person source.

Sound effects for jumping, enemies, bosses, shooting, player taking damage and player death will be needed. These can easily be recorded or created ourselves, but if an external source is found, it may be used and credited

# **Schedule**

## **Project Creation**

1 week

-Project will be created and added to GIT. Folders will be set up for organization.

## **Player Controller**

1 week

-Have Player Physics and controls created and functional.

## **Collision**

1 week

-Develop a way to handle collision with the environment

## **Shooting**

1 week

-Develop the shooting mechanic using a superclass that will encompass all different types of shooting/weapons

## **Assets/Prefabs**

2 weeks

-Find/Create all needed assets, and design the prefabs using these textures to provide a simple way of designing levels within the editor

## **UI**

1 week

-Develop functioning UI system for in game as well as menu’s

## **Enemies**

2 weeks

-develop enemies with their textures, as well as respective AI systems that will differentiate them from each other

## **Bosses**

2 Weeks

-Develop and finish bosses for each level with their AI systems.