# Stargate: Galaxy

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Introduction

Stargate: Galaxy is a game developed with the Unity 3D engine that takes the player and pits them against four warring factions, each out in search of galactic dominance. The player's task is to use the ships and weapons at their control with the assistance of the ever helpful Asgard to repel these hostiles to regain balance. As the player advances further into the game they will encounter increasingly difficult enemies until they are strong enough to attempt to defeat the bosses for each race. The concept itself is taken primarily from the TV show Stargate.
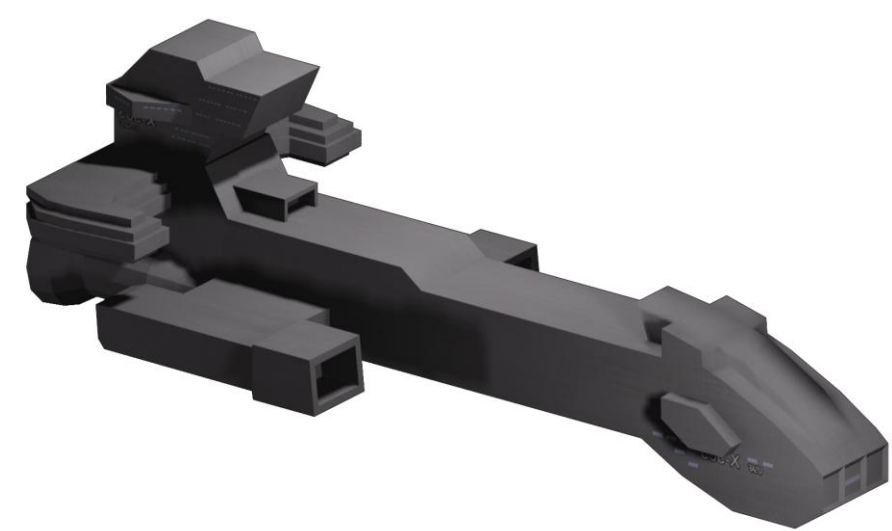
Figure 1. Prometheus, also known as the X-303 is the first ship the player is given the control of flying within the game.

Product Development

Milestones and development activities that were involved in the development of this project included: a project request specification, a project management plan, a software requirement specification, research into the Unity environment and other factors required to accomplish the project, a system design document, the implementation of code, assets, and integration, the testing and documentation, and finally the remaining supportive documentation.
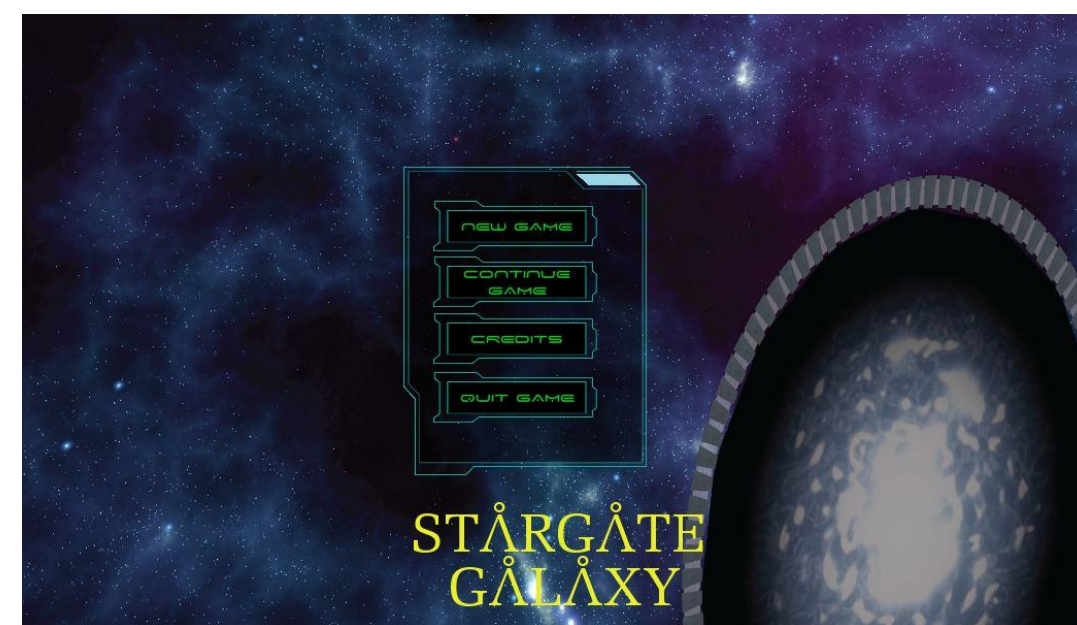
Figure 2. The main menu that is seen when first entering the game

Product Development (cont.)

Some of the broader research topics that were investigated included:

• How to best structure and implement the content of the project based on Unity as a development platform.
• How to use a variety of different specialised tools such as those required to develop the assets for the game.
• Background research of the concepts and assets to implement them into the product.

The use of this research was vital to the development of the design and implementation of the final product.

Figure 3. Asgard Mothership, as will be seen controlled by the allied Asgard forces and may also be flown by the player.

Results

The game is visually appealing and interesting to play while offering a broad set of captivating gameplay experiences. The scope was reduced from the original concept. As it was, the finalised scope was still probably too large given the small size of the development team. There has been a huge amount of work involved in the development of this project though.


Figure 4. An ingame screen shot showing the weapons, ship target list, player ship info, and target menus.

Some of the accomplishments of the project include:

• A collection of well represented 3d models that share a good likeness to those within the show.
• A clean but detailed graphical interface that allows the player a lot of control.
• A database that supports more than 130 planets, 10 different weapon types, and a varied selection of ships.
• Support for all of the required game play elements from capturing of planets to engaging in combat.

Conclusions

As part of this project many different parts of software engineering and digital media topics were put into practice to go through the development life cycle, coding, and asset creation. Many skills were gained across the group in areas such as rapid 3d model development, working in the 3d environment of Unity to code and control how the game is presented in the areas of: HUD, gameplay control, effects, and player integration. The project has been successful from what was set out to be accomplished of developing a game with the required properties within the limited period of time.
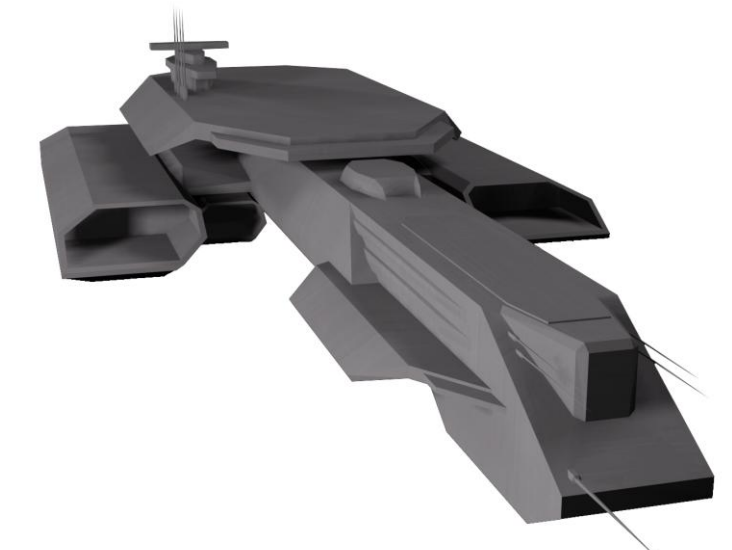
Figure 5. Daedalus-class battlecruiser, is another of the ships that the player can control within the game.