Production Brief – Untitled

## Premise

***Untitled*** is a puzzle platformer in which you control a hovering person and navigate yourself through various levels while avoiding hazards. Its primary objective is to demonstrate an understanding of the fundamentals behind physics and how it is modeled in interactive real-time 3D environments.

## Game Design

***Untitled*** is a puzzle platformer in which you navigate to the end of levels. The player will have to navigate using adjustments in hover height to apply the necessary upward forces to reach higher areas. The propulsion keeping the player up will push downward on any objects it hovers over.

### The basic rules of the game are as follows;

* The game space consists of multiple levels with a varying set of platforms.
* At the start of each level, the hovercraft begins mid-air within the level.
* Gravity will apply a downward force on the hovercraft, pulling it closer towards the surface.
* The player will guide the hovercraft by engaging horizontal propulsion and adjusting hover height. Additionally, the player will need to take advantage of the hover forces to traverse the environment.
* Points will be awarded to the player when the hovercraft has safely reached the ending platform, by acquiring particular objects, or accomplishing particular tasks. The game will then proceed to the next level.
* If the hovercraft impacts the surface at high speeds or hazards, the hovercraft will be damaged and accumulating enough damage will cause the complete destruction of the hovercraft. This will cause the player to lose a life.
* The game ends when the player depletes all of their lives or finishes all of the levels. Their score will then be displayed and also be presented the option to return to the main menu or quit the game.

## Technical Decisions

The rendering, physics, and timing will be handled by the Unity3D engine. GitHub will serve as the remote version control repository host for facilitating work between the collaborators. Visual Studio will be the primary IDE of choice.

## Production Goals

Week 1: **Game State:** Complete implementation of the previously mentioned rules within a real-time graphical environment.

Week 2: **Application State Management:** Encapsulation of game objects and state to accommodate an application state management scheme. The states will include, *at the very least* a Splash Screen, Main Menu, Game State, Victory State, and an Exit state.