

# COP 290 - Assignment 3

## Battlestar Galactica

Akshay Kumar Gupta  
2013CS50275

Haroun Habeeb  
2013CS10225

Barun Patra  
2013CS10773

J. Shikhar Murty  
2013EE10462

## 1 Changes

### 1.1 Map

We changed the map from a space environment to a city skyline because the space environment seemed to simplistic and sparse. The new map includes secret paths and hair pin turns, all of which test the ability of the players.

### 1.2 AI

We decided to implement an adversarial AI, hindering the players path, instead of a competitive one. The reasoning behind the change was that, due to the complex map structure, having 6 space ships racing seemed too clustered and deterred the user experience. Consequently, we decided to have AI units who would prevent the space ships from reaching their destination.

### 1.3 Number Of Ships

The number of ships rendered were fewer in number and less complex than promised. The reason behind this adaptation was that the objects were too complex to render i.e induced noticeable lag in the game when introduced. Consequently, we regrettably had to abandon our detailed Blender Objects, and had to design simplistic models to improve performance in the rendering pipeline.

### 1.4 HUD

We decided to introduce a HUD for the benefit of the player. The salient features of the same include a cross-hair to facilitate shooting, health and ammo display bar and a minimap showing the position of the goal relative to the user's current position. This helps maintaining a sense of orientation in the 3D world.