EECS 290 Team 2 Design Summary

The title of our game is Cosmos Commander. It is a horizontally scrolling space shooter in the vein of Galaga. The graphics are three-dimensional, though gameplay is limited to the xy-plane.

The player uses the arrow keys or WASD to move and the spacebar to shoot. The object of the game is to destroy all the enemies. The enemies spawn in waves, once all the enemies in one wave are destroyed, the next wave will spawn.

Each game mode of Cosmos Commander shall have a distinct set of waves, during which the player shall attempt to survive sets of pre-determined enemies and potentially reach the end of the level. In each mode, scoring is done by assigning point values to the various enemy types, and awarding those points to the player for killing those enemies. Scoring will vary depending on the game mode selected. Power ups exist in all game modes except Survival. Power ups consist of fire rate increase and invincibility. When enemies are killed, they drop pick ups. These pickups consist of rapid fire, shooting range increase, and a one-hit shield. Game modes include Classic, which reflects a typical scrolling shooter with power ups; Survival, where enemies spawn indefinitely in randomly determined groups; Challenge, where enemies are much, much harder; and Time Attack, where score is determined by the length of time on the timer which starts at the beginning of each wave. Bosses exist at the end of all modes except Survival, which never truly ends.

What makes this game stand out from the previous Galaga releases are the new game modes implemented: Survival, Challenge, and Time Attack. These do not exist in other mainstream space shooters. Additionally, the game is developed three dimensions, rather than two like previous versions. The player and enemies maneuver in 3D and the enemies have effective artificial intelligence. With these additions to the sole game concept itself, our game stands out from the rest.

For assets, we obtained most of our art, music, and sound effects from the Unity Asset Store. Sounds have been implemented for shots and explosions of defeated ships, as well as music and sound effects on the menus, in each game mode, and after death. Each asset was licensed for use in any project. The following table explains each team member's contributions:

Group Member	**Contributions**
Thomas	Assets(e.g. Models, Textures)
Ian	Bomb implementation and text, game design
James	Player controls, secondary weapons, bombs
Evan	Scoring system, music
Rachel	Game testing, miscellaneous feature implementations
Shaun	Menus, game event management, mode design, power-ups, GUI
Bryan	Enemy movement and boss design, pick-ups