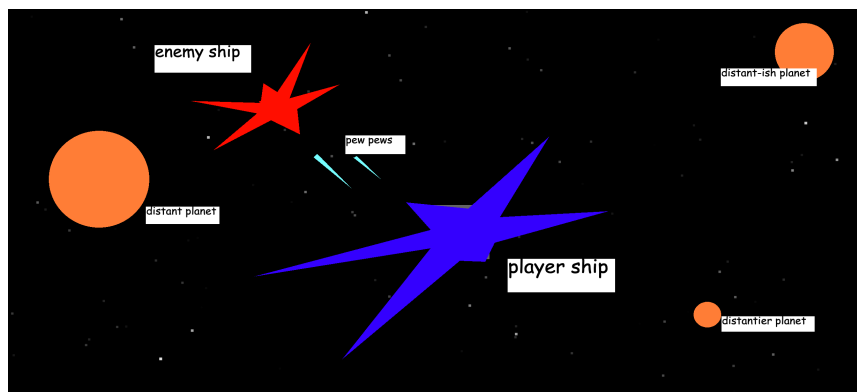


# CART 253 – PROJECT 3 DESIGN DOCUMENT

The idea of this game is to try emulating an early 90s pseudo-3D space game. The player controls a spaceship, moving around on a X- and Y-axis, with implied forward movement on the Z-plane. During gameplay, the player will have to dodge asteroids or other debris, or fire their laser cannons to destroy said debris. Potentially, I hope to have some kind of enemy AI flying around, trying to fire at the player with similar weaponry. The game will be endurance-based, and the player will increase their score based on their actions and be graded when they inevitably blow up.

Visually, most of the game will run in pseudo-3D, with objects growing larger in size rather than actually closing in on the player. As I'm not sure how well I would be able to track movement and/or enemies in a 3D-space, the ship would be flying largely “on rails”, ergo the player will not be able to backtrack or turn around – only fly in new directions. Representation of most in-game objects will be 2D sprites, with the possible exclusion of the ship that will hopefully be rendered in low-poly 3D.



*Fig. 1: in the spirit of the early 90s, here's a representation done in paint*

## Things I'll need:

- Scrolling background that reacts to the location of the player
- Class for Player ship
- Class for space debris
- Child class for asteroids
- Class for enemy ship
- Tracking for firing lasers
- Start and end screens
- Sprites for space objects and ships
- Sprites/visualization for the lasers
- Sound effects (create in engine?) for explosions, lasers and possibly the ship engines
- Large amounts of patience and coffee
- The ability to bite off things that I can actually chew