# Adam Cardenas - Graphics : Project Review

#### To Do

From more priority to lowest priority.

- 1. The fighter is pretty basic as it stands. I still need to add decent cockpit, and thrusters. I also want to make the wings 3d. Currently the fighter's wing consist of only two polygons which are closely spaced.
- I developed a simple API for creating the maps. Pretty much much you can define a tuple consisting of a point and a object type. The point is where the object will start, and the object type tells the program which object to render. This will just take time to position the objects just right.
- 3. I need to add some transparency to some objects. I was thinking making some random objects transparent to increase the challenge of dodging them.

### Stretch goals (Not defined in proposal)

- 1. I would like added collision notification to the user. I was thinking simple sound, or rendering some text, notifying the user of a collision.
- 2. Add endgame screen to notify the player of their loss or success.

# Completed (Since Progress Report Assignment)

- Rough draft of all objects (has working light effects)
  - Fighter
  - Health pickup (needs texture)
  - Special pickup (needs texture)
- Working all 3 configurations of brick objects
- Bounding box object collision detection
- Can detect which object is colliding with the player
- Got working logic for calculating the correct life and score points
  - Hit object: no increase in score points and loss of life points
  - Do not hit objects: points increase steadily
  - Hit health object: life points increase
  - Hit special object: score points increase
- Boost mode
- Refactor for easy map creation

- Added a zwall
  - Anything blocks that move past this defined z-plane does not get rendered.
- Fog wall for hiding objects
- Mapped 'wasd' keys for player movement and 'ijkl' for camera movement
- 2 rounds of refactoring to handle import cycles errors
- Got rendering of basic HUD; simple life and score points.

### **Current Issues**

- Rendering textures for Health and Special pickups.
  - For some weird reason my health and special pickup objects are not rendering their textures.
- Multiple keyboard input
  - GLUT by default only allows detection of single character key press events. This fails me when I want to navigate the fighter and boost at the same time.