CS-376 Final Project
Self Assessment

Your group should fill out one copy of this form and include it with your assignment when you turn it in.

Group

Who's in your group?

- Andre Chen
- Nathan Hendrickson

Goals

Say a few words about what you wanted the game to be like. Note that if you just wanted to write some code so you could get an good grade on the project, it's fine to admit that.

We wanted to make a 3D game that was simple, but had interesting movement mechanics, specifically that would disorient the player by taking advantage of the full 3D rotation space. The main aesthetic we were going for was a challenging-to-control, skill-based game, and the other aesthetic of fantasy came second. We also of course wanted to fulfill the requirements to get a good grade.

Lessons learned

What went right?

- Implementing fog: We were able to find a tutorial online that created the type of fog we wanted.
- Implementing missile physics: the fact that we had done a flight simulator assignment made it easier for us to add physics for rolling, pitching, and additional drag forces. We did have to change it slightly because we wanted to simulate actual control surfaces, but it was not too hard.

What went wrong?

- Importing the missile object: It was imported incorrectly and we had to spend a lot of time manually moving each of the parts and adding additional parts to it.
- Researching how to implement fog: We had a vague idea of how the fog was to work, but that led us down a rabbit hole that ended up wasted an hour or so.

- Implementing terrain: we originally had dreams of a vibrant seafloor, or at least one with texture, but we couldn't figure out how to use the terrain brushes, and settled on a flat seabed instead.

What do you wish you knew when you started?

- FOV is very different from fog hahaha. You can limit the player's view by making a shader script and modifying how the camera renders.
- I wish I knew how to draw terrain.

Annoying grading bookkeeping

Please list all the things you think you got points for based on the criteria given in the assignment. Include for each item which group member worked on that item. It's acceptable for multiple people to work on a single thing, but if you tell us that everybody did everything, you will need to come meet with Ian in person to justify that.

- [25] 3D game (joint decision)
- [9] torpedo
    - [1] appears on screen (joint)
        - missile asset (Nathan Hendrickson)
    - [1] moves (Andre Chen)
    - [1] player-controlled (Andre Chen)
    - [5] complicated physics: experiences additional drag force proportional to its sideways velocity (i.e. it's more aerodynamic to go in the direction of heading), experiences roll and pitch torques based on roll and pitch inputs (Andre Chen)
    - [1] sound on event: it explodes when hit (Andre Chen)
- [3] controls
    - [1] forward/backward (Andre Chen)
    - [1] horizontal axis: rotate ailerons for rolling (Andre Chen)
    - [1] vertical axis: rotate elevators for pitching (Andre Chen)
- [4] target
    - [1] appears on screen (Andre Chen)
    - [1] moves: random motion to evade the player (Andre Chen)
    - [1] continuous sound cues: sonar pings to allow player to find it (Andre Chen)
    - [1] responds to collisions: when the player touches it, it explodes and the player wins (Andre Chen)
- [4] fuel items
    - [1] appears on screen (Nathan Hendrickson)

- [1] responds to collisions: when the player passes through them, they disappear and reward the player (Nathan Hendrickson)
- [1] continuous sound (Nathan Hendrickson)
- [1] dynamic spawning (Nathan Hendrickson)
- [1] terrain
  - [1] appears on screen (Nathan Hendrickson)
- [2] win/lose screen
  - [1] appears on screen (Nathan Hendrickson)
  - [1] appears based on event/condition: says "You win!" or "You lose!" based on whether the play wins or loses (Nathan Hendrickson)
- [2] fuel indicator
  - [1] appears on screen (Andre Chen)
  - [1] changes appearance based on condition: indicates fuel level (Andre Chen)
- [0] camera fog (Nathan Hendrickson)

Total points we think we got: <u>50</u>