Team 8 – Game Dev Project 3

Vehicle combat

**Ryan Knight**

Building models and textures

Other small object models and textures

Retrieved sound files

**Beth Towns**

Basic world, plane, bullet and environment classes

Plane collision

Various components taking damage and “falling off”

**Dan Cannon**

Headlights on the plane and lighting in general (setupLights in plane.py)

Implemented the sound files into the game (setupSounds in panda3dgame3.py)

Properly removed headlights when the wing they are attached to is destroyed (in the collision code)

**Thomas Lanciani**

Modeled and textured: Ground, Plane 1, Plane 2, force field thing

Placed structures in environment

Exported terrain/collision objects

**Nathan West**

Plane Motion Physics

Integrated plane parts with degenerate motion

**Signatures**

Ryan Knight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Beth Towns: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dan Cannon: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Thomas Lanciani: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Nathan West: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group 8 –Art writeup

Buildings:

The buildings seen in the game are results of my experimentation with Maya while trying to familiarize myself with the features the program offers. The basis for our game was PvP plane combat in a futuristic society, said society being entirely inside of a dome. With this in mind, I set out to create some skyscrapers and other tall buildings as ground space would be limited. The first model I made was a very simplistic take on the Sear’s Tower after a friend suggested I try and create a model of it. This ended up being a very good model to start with, and simple transformations of the various components allowed for a seemingly wide range of buildings to be created quickly in the various environments that were created. Next, I attempted to build a cylindrical-shaped apartment complex. After a few mutations it began to stray away from the design I originally planned, but the result was an object that my fellow teammates decided looked like a futuristic power generator. I continued with this design and messed with the coloration and textures to make it less visually appealing and striking as the skyscrapers, as this would not realistically be a building that would want to attract those that would not have specific reason to be there. As the plane combat was intended to be a spectator sport of sorts in our game world, I made a building where crowds could gather and watch the show from the middle of the dome city. The tower would have two areas to hold these spectators – a wider, flatter level closer to the base of the tower and a spherical level at the peak of the tower. Though this was initially intended to be placed in the center of the dome to give the best view, but a fellow teammate thought of suspending this building from the top of the dome, upside-down. This “observation disco ball” idea was much more interesting than what I originally had in mind, and it stuck.. I tried to limit the number of colors used in any given texture compared to my use of way too many colors in art assets I have created previously.

Airplanes and environment:

For the model of the planes, we went with the Mikoyan-Gurevich MiG-3. For the style of combat we wanted to have, we believed modern jets would be too fast-paced, and require a larger, more open area. We wanted to have the dogfighting be a sort of spectator-sport inside a dome, with buildings and other obstacles the planes could fly between. Modern aircraft wouldn’t have the maneuverability we desired. The WWII era planes suited the feel we wanted for the game, and the MiG-3 was the first model plane of which a clear top, front, and side view was found. The two different textures for the plane were modeled after actual paintjobs of the MiGs.

After an initial model of the entire plane was built, it was split into several parts: the body, the tail, and two pieces for each wing. We wanted the pieces of the plane to be independently destructible. Two machine guns are mounted on top of the inside sections of the wings and headlights were put on the wingtips. This allowed us to have it so the player could lose a headlight or two and possibly both guns. The textures were made in photoshop.

The terrain of the environment started as a large plane, and sculpted and smoothed in Maya. A texture was made in photoshop to imitate a dirt and sand-filled landscape that we thought fitting of the game’s theme.