UNITED STATES MILITARY ACADEMY

PROJECT #3: COMPLETE 3D PROGRAM

CS473: COMPUTER GRAPHICS

SECTION C1

CPT BRIAN BOYLES

By

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WEST POINT, NEW YORK

9 MAY 2017

\_\_\_\_\_ MY DOCUMENTATION IDENTIFIES ALL SOURCES USED AND ASSISTANCE

RECEIVED IN COMPLETING THIS ASSIGNMENT.

\_\_\_\_\_ I DID NOT USE ANY SOURCES OR ASSISTANCE REQUIRING

DOCUMENTATION IN COMPLETING THIS ASSIGNMENT.

SIGNATURE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The application I designed is a simple game. The objective of the game is to hit boxes in a limited amount of time. The game controls are displayed on the screen. I was only able to achieve basic functionality for the game, and it is currently unfinished as a game. However, all of the game’s operations are functional.

The application is used by controlling the car using W, A, S, and D keys. The turret of the car is controlled with the left and right arrow keys. The camera mode can be switched to follow either the body of the car or the turret by pressing the F key. Finally, the game can be started and reset by pressing the R key.

My initial goal for this application was to create a fully functioning game with lighting and texturing. I started by modifying an existing application into a basic for of the game. However, this took quite a lot of time and although I was able to add lighting, I was unable to fully add texturing to the game. Creating the necessary components for the game took more time than I expected and I did not start on the texturing early enough. I was only able to add texturing by drawing an object using GL\_POLYGON.

I did well at starting the project early and working on it consistently. However, I did not focus on the more difficult portions of the project first, which needed the most time and sessions of coding in order to understand and correctly implement. I started working on the texturing portion after completing most of the game components, but then realized I would not have time to implement texturing in ImportObject because I did not understand how to and did not have time to seek help.