UNITED STATES MILITARY ACADEMY

PROJECT 3 PROPOSAL

CS473: COMPUTER GRAPHICS

SECTION C1

CPT BRIAN BOYLES

By

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WEST POINT, NEW YORK

19 APRIL 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:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I am planning on making a game in which the user controls a car and shoots boxes for points. My goals are to have a working game with a controllable car, functional camera, and shootable boxes. The game will have a time limit and keep the user’s score.

I plan on having a car class made up of all the objects that are a part of the car. The car will be able to move around the world, rotate its cannon, and fire projectiles. The projectiles will have a simple trajectory and will have collision detection with the boxes. The game will have a time value that is reduced until the game ends. There will be a score value that is incremented upon destroying boxes. The car will have a light source and each box will have a light source. I plan on implementing this basic car functionality first, then adding the boxes, projectiles, and score keeping. Once the game is functional is a basic form, I will add textures and lights to the world and smooth out the animations, controls, and user interface.

I plan on getting the a working prototype for the IPR by 28 APR, complete the basic functions of the game by 5 MAY, and completing the texturing and lighting by 10 MAY.

What features will be complete lesson 36

By lesson 36, a working prototype of the game will be completed. Most basic functions of the car and game mechanics will be crudely implemented to demonstrate the intent of the project.