GAME ENGINE FOUNDATIONS

FINAL EXAM

FALL 2019

TIME: 80 MUNUTES

INSTRUCTOR: ALIREZA MOGHADDAM

INSTRUCTIONS:

- Manage your time carefully

- This is an open book exam and usage of course material is allowed during the test

STUDENT NAME	
STUDENT ID	
SIGNATURE	
EMAIL	
MARK	
RE-MARK	

Before starting the test, read the following items carefully:

1 - You may use your laptop during the test

2 - You may use your previous works, labs, projects, etc.

3 - If you are using lab machines, save your work frequently on usb/ext hdd

4 - During the test, any means of communication with others is absolutely forbidden such as phone, text, email, etc. It is considered as cheating and you will be reported to ITS.

Download the "final exam" version of the game engine from BB->Final_Exam folder. (Do NOT use the one posted on "BB->Codes Developed In Class" for your final exam). You are asked to perform the following:

1. Make all boxes periodically shoot toward the player with the rate of one bullet in every two seconds.

2. Player has shooting functionality by pressing 'F' key. When a bullet collides with a box, that box is wiped out from scene.

3. The game is over if at least any of the following cases happen:

    a. The player is hit by a bullet shot from a box (lost game)

    b. The player shoots all boxes in the scene (win game)

4. Add the following comment to each part of the code that you modify:

    //Final code Added

    //Rationale: Write a few lines of comment as rationale to justify what you did.

Rubrics:

Player shooting at boxes **(15 Marks)**

Boxes shooting toward player **(35 Marks)**

Collision detection and handling **(25 Marks)**

Game Over **(15 Marks)**

Comments: **(10 Marks)**

Submission:

➢ You are required to submit your work through blackboard.

➢ You are requested to submit ONLY the CPP file that you have modified. Please do NOT upload the whole project.