

**Interactive Environment 2.5D Game Build  
GM402  
Game Engines & Production**

**Name:** \_\_\_\_\_

**Goal:** Finish creating game and create your own game mechanic. Create a nice looking UI to give the player information about the progress of their game. Beta test and then build the game. The game should be polished and ready to ship.

Most the coding for this project will be covered in lecture. The exception is the game mechanic. the student is expected to code that part of the project themselves.

There will progress checks on the way. You are expected to have the code working from the previous class by the next class. If you do not then points will be deducted from your attitude and participation grade since you are not ready for what is going to be covered that next day.

**Take notes on the code. Printing them out for you is a privilege if you abuse that privilege then I will not print out the code for you. If you miss you class are responsible for the information that was covered will need to get the notes from a classmate. Exceptions will be made if you have an extenuating circumstance such an major illness with a doctor's note death in the family etc. However I will need documentation. I do not email the code that was covered that day.**

There are no resubmits for this project.

## **Turn this sheet in with the project**

### **Directions:**

1. Get all of base code for the game to work. Then replace your prototype assets with your finished assets. Adjust how the game works with your new assets.
2. If the player loses all of their lives the player should lose the game. If the player reaches a certain score then the player should win the game. If the player misses a certain amount of the enemies then the player should lose the game. The difficulty of the game should get harder as the game progresses.
3. Create your own game mechanic. This game mechanic has to be your mechanic solely; you cannot go on the internet and copy and paste a mechanic. Remember this class codes in C# only. If you copy and uses someone code that will be considered plagiarism and you will receive a zero for this project. Your game mechanic cannot consist of anything that I covered in lecture. This is true whether the student was in attendance on the day that it was lectured on.
4. Create an interesting UI make sure that the UI is in the correct space on the screen. The UI should consist of more than just text. The UI should be graphical in nature and encompass some text. Make sure you add the polished main menu, win and lose screens. Make sure you create an icon for the EXE and a splash screen. These should be well designed and fit the style of the game.
5. Make sure you have audio in your game. There should be a soundtrack with the game and sound fx for the projectiles and explosions.
6. Get a student to beta test your game. Make changes based on the beta tester comments. The changes made have to fall within the realm of the constraints, guidelines and

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requirements of the project. Make sure you write the student's name on the sheet so that you can receive those points.

7. Build out the PC, Web build. Make sure that you turn in all of your files. Make sure that all of your files are named correctly. Make sure that Unity directory is organized. When you create your builds DO NOT CHANGE THE NAME AFTER YOU BUILD IT. You will break the game. Make sure give me all of your game builds. Burn everything on to disk and submit. Make sure that the disk is named properly. Give me the disk in a SLEEVE and put all of the project information on that sleeve. You will have to submit your files digitally as well.
8. Capture your game Using Fraps. Use Fraps to capture your game play. Capture it at 1080p and edit the different captures together. Your video should be no longer than 30 seconds. Make sure that you do not have any titles on the video. Submit uncompressed and compressed QuickTime videos. The compressed movie will use the H.264 codec. Submit a FLV of your game as well. Make sure that these files are on disk. Highlight the best features of your game for the capture.
9. Fraps is free to use you can download it from the following website.  
<http://www.fraps.com/>

**10. BEFORE YOU TURN IN YOUR GAME MAKE SURE IT WORKS!**

**11. You are responsible for any other verbal instructions that were given.**

**Deliverables:**

1. Maya project directory
2. Unity Project directory
3. Game builds
4. Capture Files
  - a. Quicktime
  - b. FLV

**Naming conventions:**

2013\_02qtr\_cmitchell\_2.5DShooter.exe – PC and Web builds  
For the web build use the naming convention to name the folder  
2013\_02qtr\_cmitchell\_compressed\_2.5DShooter.h.264 – QuickTime  
2013\_02qtr\_cmitchell\_uncompressed\_2.5DShooter.h.264 – QuickTime  
2013\_02qtr\_cmitchell\_2.5DShooter.flv – QuickTime  
2013\_02qtr\_cmitchell\_unityDirectory\_2.5DShooter.RAR  
2013\_02qtr\_cmitchell\_mayaDirectory\_2.5DShooter.RAR

Name: \_\_\_\_\_

**Grading rubric**

1. **Game is complete working and playable/  
Final Assets in game** 30 points\_\_\_\_\_
  - a. If not automatic zero for this part of the rubric

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2. **Previous game mechanics are working(in class)** 10 points\_\_\_\_\_
  - a. Player respond and invincibility
  - b. All code paradigms and functionality in game working(lecture)
  - c. Game states working
  - d. Game pause working
  - e. Game reset if one of these conditions are met
  - f. Scrolling background
  
3. **Game has minimal to no bugs** 05 points\_\_\_\_\_
  - a. Game has a good level of polished
  
4. **UI and graphically created/working/aesthetically pleasing** 05 points\_\_\_\_\_
  - a. More than just text
  - b. Icon created
  - c. Splash screen
  - d. Main Menu/Lose and Win Screen
  - e.
  
5. **Student created their own unique game mechanic** 20 points\_\_\_\_\_
  - a. Work well and it doesn't break
  
6. **User can win and lose the game** 10 points\_\_\_\_\_
  - a. Player goes to either the win or lose screen
  
7. **Game has sound music and fx** 05 points\_\_\_\_\_
  - a. Background
  - b. Projectiles
  - c. Explosions
  
8. **Student followed directions/Critique** 05 points\_\_\_\_\_
  - a. Student used the correct directory setup and naming conventions
  - a. If not automatic zero for this part rubric
  
9. **Student turned in all electronic files** 05 points\_\_\_\_\_
  - a. EXE/Web Build directory created and submitted
  - b. Maya Project Directory submitted
  - c. QuickTime and FLV submitted
  - d. Unity Project Directory
  - e. Files submitted on disk
  
10. **Game was Beta Tested** 05 points\_\_\_\_\_
  - a. Beta Tester's Name : \_\_\_\_\_
  - b. If not automatic zero for this part rubric

**Points:** \_\_\_\_\_ **Letter Grade:** \_\_\_\_\_  
**Grading scale: A (90-100), B (80-89), C (70-79), D (60-69), F (0-59)**  
**Grades also reflect upon the time the project is submitted.**

**HOMWORK EXPECTATION**

As stated in the syllabus for this course within the course description, this course has an expectation of **4 hours per week** to be spent on homework outside the classroom.

It is expected that the average student will spend **at least 8 hours** on the 2 week period of this assignment to the complete the previously described process of this particular assignment. The learning outcomes of this assignment are a result of the assignment process shown above and instruction rendered from the instructor, either during class or in this document.

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These learning outcomes are generally comparable with those resulting from commonly accepted practice in the field. Each of these steps will be graded according to the rubric found above.

**LATE WORK**

1. **All work must be handed in at the beginning of class. (15 minute grace period) Work submitted after the first 15 minutes of class, is Late.**
2. **Assignments submitted late or incorrectly, if accepted at all, will be reduced in letter grade.**
3. **Late work must be submitted during the next day following the due date even if no class is held that day.**
4. **Assignment submitted beyond three days late will receive and F grade.**
5. **Resubmissions of projects for better grades are not accepted, do the best work the first time.**
6. **Deadlines are important.**

**QUALITY OF WORK STATEMENT**

1. **Turning in the assignment on time does not warrant a passing grade in the class.**
2. **Your work that is turn in must be excellent.**
3. **If you did not put in the time then do not expect a good grade.**
4. **If your work is not excellent then do not expect to become a professional in the fields of Animation and game Design.**
5. **Just because you complete an assignment does not mean that you will receive a passing grade for the assignment.**