**CIS 425**

**Final Project: Spring 2023**

**Baruch**

Items to submit with your final projects:

1. All your source code. (.cpp and .hpp files if there are any) Please make sure your name block is on each piece. Also make sure you tell me which compiler/IDE you use: Xcode 14, VS 2022, ... Please #include <cmath> if you use any math functions (and you will!).
2. Any input files you need. This might include text files, textures, objects created in advance, ...
3. A quick start sheet, telling me **all** the user options and what they do: mouse, menus, keyboard. Also, instructions about what I should do to run/play your program. I don't want to "discover" anything on my own.
4. Documentation: A Reference sheet.
   1. What you got from where. (This must ALSO be included as comments in your code with the items. Also, noted on your spreadsheet. Yes, I want this in all 3 places)
   2. Tell me what you drew/built in other applications to use here. That is, did you do a drawing in Paint to use as a texture? Build a structure in anim8or from scratch or use one of their prebuilt creatures? Build something in Maya?...
   3. Tell me how you imported them into this program and if you wrote or copied/modified the code to do it.
   4. If you learned things from other sources that you used to write your program, please list these as sources. Make it clear whether you copied the code, modified it, or just learned a technique that you used to write your own code.
   5. If you used no sources or tools, you must still submit this Reference sheet and **affirm** that you used no outside sources or tools.
5. A Brag Sheet. I want you to tell me what the **big challenges** were: building a particle system for the sparks; designing a curve for the robot to follow; making a leaf flutter in the wind; ... If you wrote a program to generate something you used in this program - for example, you wrote a program to build a surface, then stored the coordinates and all related information so you could use it as input for the main program - describe the process, and include this auxiliary program with your submission.

I do **NOT** want to read a play by play of your programming and debugging, but I want you to point out the **big accomplishments**.

6. Photos: Take some screen shots of your graphics. Show important scenes, with lights on and off, rainy, sunny, etc. These can be png, jpg, pdf, ....I do not want High Def - too big. Please keep each picture below 1 MB. The upload won't be accepted by the link if the whole package is too big.

7. StudentFilledInGradeSheetFinalProject2023.xlsx (on the blackboard assignment web page) Columns B, C, and D allow wrap, and feel free to make the columns wider, so write what you need to explain.

Don't fill in the yellow columns.

Please only add rows at the bottom, where I say ADD FEATURES HERE.

It will be to your benefit to include all the features from the course (or elsewhere) you used. Eg. lighting, spotlight, blending, textures, Bezier curves, Bezier surfaces, swept surfaces, pixel copying, ... If there were programming techniques you came up with, like having a first person view follow a vehicle, change drawScenes for different scenes in the program, have dialogue boxes that don't move with the scene, etc, ... mention them.

If there is something from past assignments that you couldn't get working, like timers, or spotlights, or...but you got them working on this assignment, please bring this to my attention on the sheet.

8. Please submit your files as follows

1. In a folder labeled ***yournetID*PROGRAM** copy all your .cpp and .hpp files.
2. In a folder labeled ***yournetID*TEXTURES** copy all your textures. In your program, in loadExterrnal textures, please have the path to your textures include this folder. For example, my textures would be in a folder mjbaruchTEXTURES. This will make it easier for me to make sure your program is using your textures.
3. In a folder labeled ***yournetID*AUXILIARY** copy any other input files. In your program, please have the path to your input include this folder. (It's fine if your program does not use any input files. This is just in case it does.)
4. In a folder labeled ***yournetID*DOCUMENTATION** put all your documentation including
   1. your Reference sheet,
   2. quick start,
   3. photos,
   4. brag sheet
   5. and the spreadsheet. Please add *yournetID* to the beginning of the name of the spreadsheet, so mine would be

mjbaruchStudentFilledInGradeSheetFinalProject2023.xlsx

Put all these folders in a folder labeled with ***yournetID\_*finalProject**. Then zip this folder, and upload it using the link on the Assignments pages.

Projects are due Sunday, April 30, before midnight. Please contact me if you will have a problem with this time. All projects must run.

You are expected to come to both days of presentations. At the presentations, you are welcome to ask respectful questions and cheer for each project when done.

On the day of your presentation, please have a copy of your project, ready to run, on your computer.