CRIT A: (word count 893)

Questions sent to client:

1. What is your name?

David Mathew

2. What do you do which requires you to have a basic wireframe editor and engine?

Currently, I am doing a course in Game Development. As part of that course I am required to develop a game using the skills that I've learned and the various tools that are accessible to me. For my product, I have decided to create a 2D indie platformer game using an established game engine known as GameMaker Studio 2. Although, over time I have had to change various aspects of the game, and have decided to implement 3D aspects to the game. However, GameMaker Studio 2 does not allow for any 3D functionality to be imported or exported from it. I have tried using the 3D functionality in GoDot, but it is far too bulky to be used.

3. What documentation of development and planning do you want to see from the project?

I need a program that can edit, save and view 3D wireframe models in a proprietary format, and can be outputted into functional use via a list of coordinates of lines and where they need to be drawn.

4. How much time should be put into user friendliness? Should functionality come first?

The UI doesn't need to be extremely user friendly, but does need to be usable, and the files the program produces, can be interpreted by a human, but don't need to be easily readable. However, the final coordinate output for implementing into the game engine, must be easily readable.

5. What should the system be able to do? (ex. Read/Write to files, edit files, view and edit 3d models)

The system must be able to Read/Write to files, Modify files in real time, and also allow me to display 3D models and modify them in real time as well. The editor doesn't have to be extremely complex, but must be usable enough to create basic shapes, and some models. It should be reasonably user friendly, but doesn't need to focus on the GUI past readability.

6. Should the user specify where the files are saved to? Or should it be standardized?

The program should allow the user to view their file and also output the line file, if possible. The files the program saves the wireframes in should be accessible to humans.

Scenario:

The client, David Mathew, is creating a game, and wants to implement some 3D aspects into an otherwise 2D game, but doesn't want to use the game engine's 3D functionality, as it's too bulky, and what he's looking for is just simple wireframes. I will create a program that can edit, save, and view 3D wireframe models in a proprietary format, which can then be output into functional use by a small list of coordinates of what lines to draw where, which can be implemented manually into the 2d engine. The UI doesn't need to be extremely user friendly, but does need to be usable, and the files the program produces, can be interpreted by a human, but don't need to be easily readable. However, the final coordinate output for implementing into the game engine, must be easily readable. The editor doesn't have to be extremely complex, but must be usable enough to create basic shapes, and some models. It should be reasonably user friendly, but doesn't need to focus on the GUI past readability.

Proposed product:

I have decided to make a product which is able to create, view, save, and output 3D wireframes. The way the files are saved will be in a .txt file, which the program can then read and interpret to a set of points which the program can use to display the wireframe, as well as edit connections. The program can then output this wireframe into a grouping of lines which can be drawn manually in the game engine; if animation is needed, the output can be repeated for every frame, at different angles. The editor will be basic, but able to create points, move points, create line connections between points, and provide everything the user could need to make basic wireframes. This format can then be saved into a file, and accessed later. There will also be a viewing mode, where the user can view their file, and output the line file if needed. The files the program saves the wireframes in should be accessible to humans, should they wish to understand them, and read or edit them manually without the program, should they wish.

Success criteria:
- The program can view 3D wireframes from a file.
  - The program is able to get the file name and directory, and, if formatted correctly, is able to display the 3D wireframe within the file correctly.
- The program can save 3D wireframes into a file.
  - The program can save the edited wireframe into a file which can be accessed again later.
- The program has the tools to edit 3D wireframes, by creating points, moving them, and drawing lines in between them.
- The program's files should be mostly readable by a human.
  - The files, with some practice, can be read by a human, and edited.
- The program can output instructions on where to draw lines in the game engine.
  - This should be in a readable format such as: Line 1 goes from coordinate 65, 43 to 43, 65