

Implementation Plan

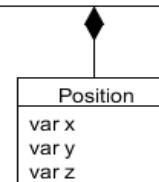
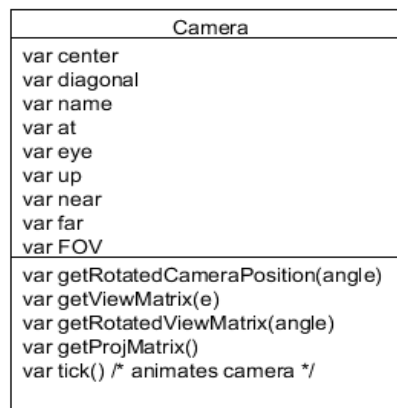
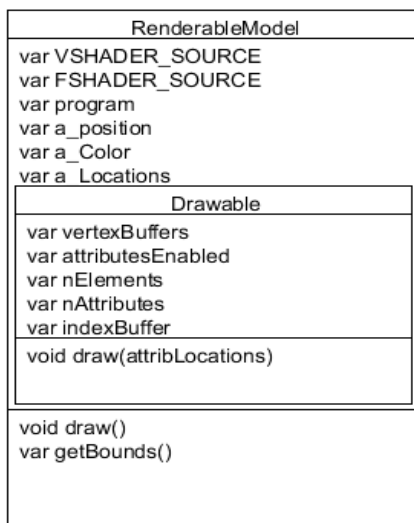
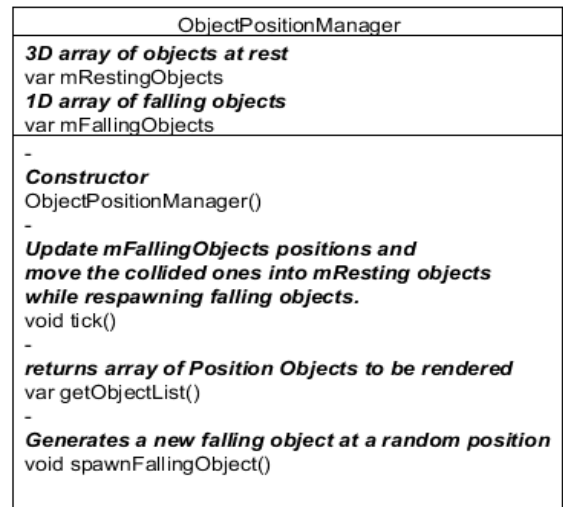
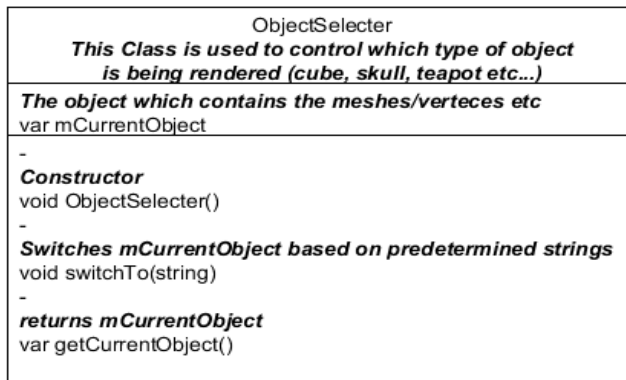
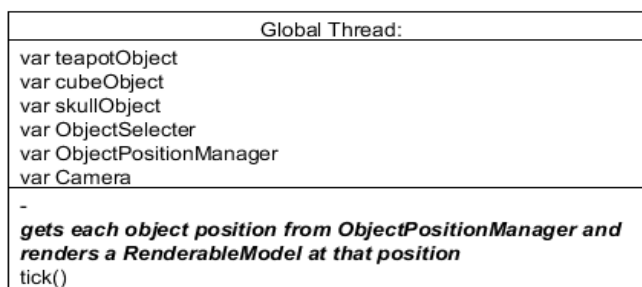
The project runs on two main components:

- Graphics: how the scene is rendered
- Algorithm: the animation implementation

Plan A

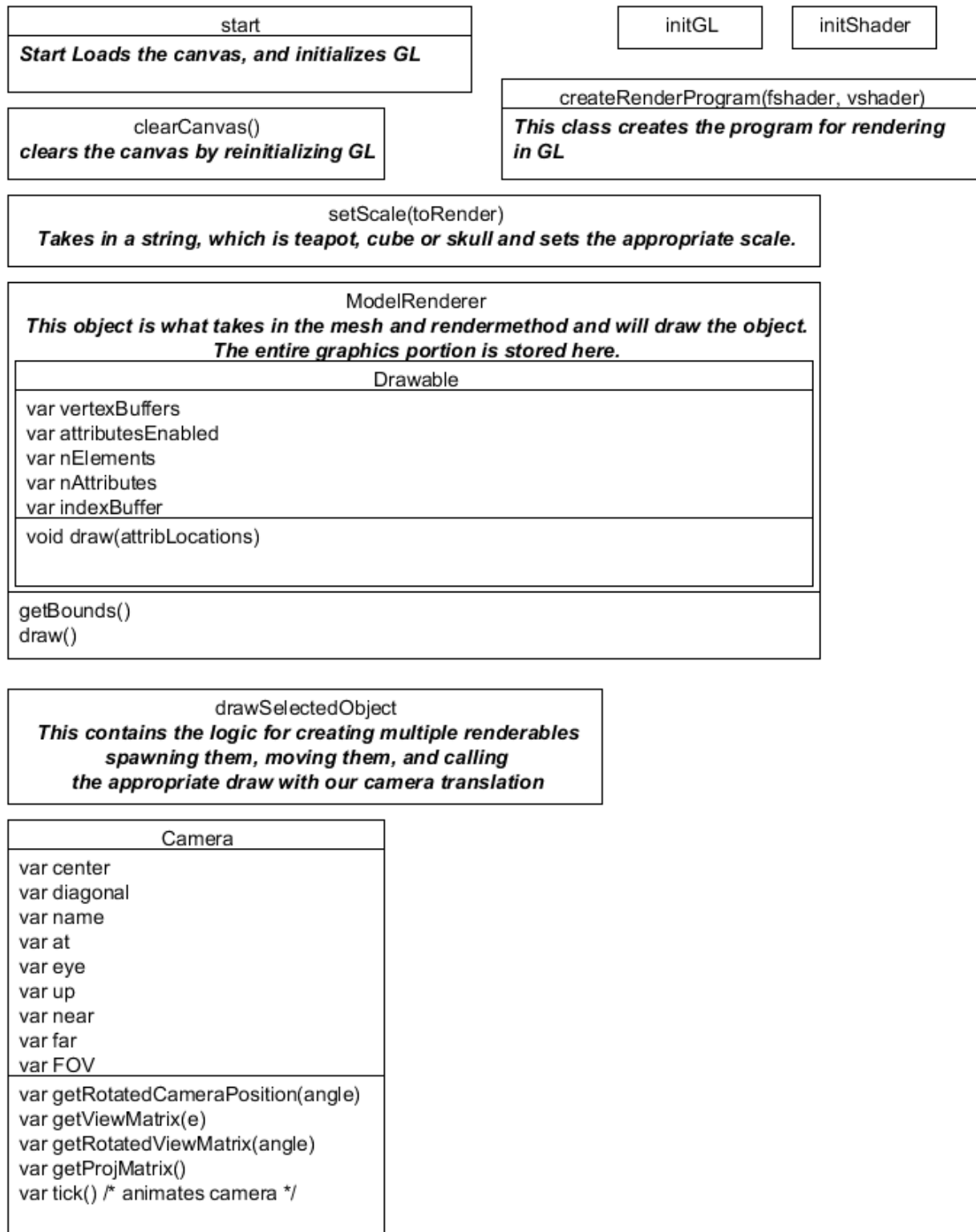
Our original plan was to split the project up into the following components and work on them individually:

ObjectSelector, *ObjectPositionManager*, *Camera*, *RenderableModel* and a global thread to tie them together



Plan B

After we began the implementation, it was clear that this was overkill, considering voxel-rain was not far from our implementation of assignment 3. So we chose to scrap our original plan and refactored it into the following:



The graphics portion of this project lies entirely in the ModelRenderer. It takes in the appropriate data and draws itself where it needs to be. The model renderer is almost identical to the one found in assignment 3, aside from a few minor changes in order to get wire frames also drawing.

The Algorithm portion all lies within drawSelectedObject, where the multiple objects are spawned, the camera is moved, and the objects fall. It creates an array of objects, which have their locations controlled by a simple update code. Then the camera draws an object at that location.

Work Division

Each member contributed to code in some way or another, but aside from code, this is the main contributions that each person made

Dan Gau: Original Design, Implementation Plan and Scraped code.

Adam Tango: Set up a Github Repo, Got the original design rolling and organized the team

Jeffrey Klarfeld: Managed Github repo, provided base project code, finished final product.

Ed Jones: Made it rain; got our falling objects to run and made scalable code for tweaking

Bradley Streu: Plan and code references in addition to communication facilitation