The RoseGraphics 101 Project

In this project you will demonstrate your ability to:

- Master a new API.
- Manipulate arrays of structure instances.
- Use loops.

Here is what you must do:

1. ***Install OpenGL*** by following the ***instructions to the right***.

2. Checkout the **RoseGraphicsDemo** project that I supplied.

   a. **Clean** the project, then **Build** it, then **Run** it. Confirm that it compiles and runs. ***If not, call me immediately, as it is EASY for me to fix, HARD for you to fix, and LIKELY that it needs FIXING.***

   b. Read and understand the code, asking me questions as desired.

3. Checkout the **RoseGraphics101** project that I supplied.

   a. **Clean** the project, then **Build** it, then **Run** it. Confirm that it compiles and runs. ***If not, fix as we did with RoseGraphicsTest. If that does not fix the problems, call me immediately.***

   b. Do the TODO's in that project. ***Call me first*** to be sure you understand what the TODO's are asking you to do.

   c. Optional: Do anything else you want with the project.

The entire exercise, from start to finish, should not take you more than 8 hours (except for 3c, which might take you forever!).

To install OpenGL:

1. Find your MinGW folder. It probably is one of:

   - `C:/MinGW`
   - `C:/Program Files/MinGW`

   In your `MinGW` folder, you will see folders:

   - `include`
   - `include/GW`
   - `lib`

2. Download and unzip this version of GLUT.

3. In the unzipped folder `GLUTMinGW`, you will see the following:

   - `include/GL` – copy all 7 files in this folder to the MinGW's `include/GW` folder.

   - `include/mui` – copy this entire folder to the MinGW's `include` folder, so that now MinGW has an `include/mui` folder.

   - `lib` – copy all 4 files in this folder to the MinGW's `lib` folder.

   - `glut32.dll` – copy this file to the `C:/Windows/System32` folder.

   In each of the above copies, ***overwrite any existing files if asked.***