

## Assignment 2

Instructor: Dr. Gang Hu

Due: 11:59pm, Sunday, Oct. ??, 2018

The purpose of this assignment is to let you get familiar with 2D transformation in OpenGL.

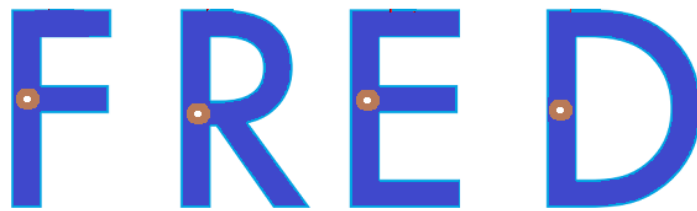
- 1) Use precompiled GLUI library (a GLUT-based C++ user interface library which provides controls such as buttons, checkboxes, radio buttons, and spinners to OpenGL applications)
  - a. Download windows\_starter.zip from onCourse.
  - b. Unpack it, and open a2 project file, your VS will upgrade it

Note:

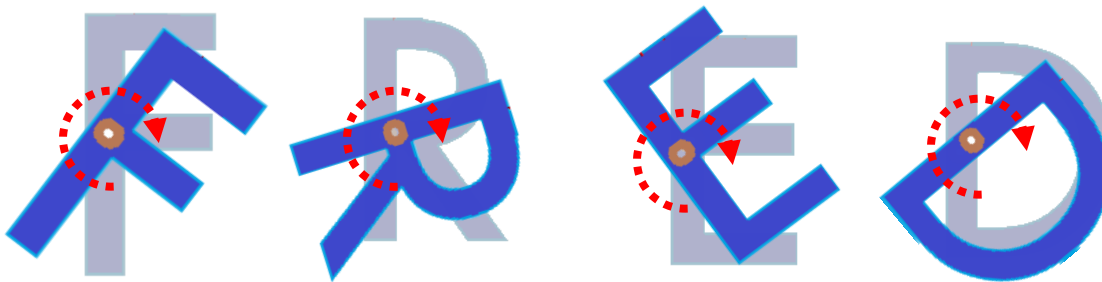
- a. The VS setting in the demo package may needs changes (eg. include, lib folds for .lib and. h files)
- b. You may still encounter some issues, google it or contact me.

- 2) Tasks: Animating a 2D object

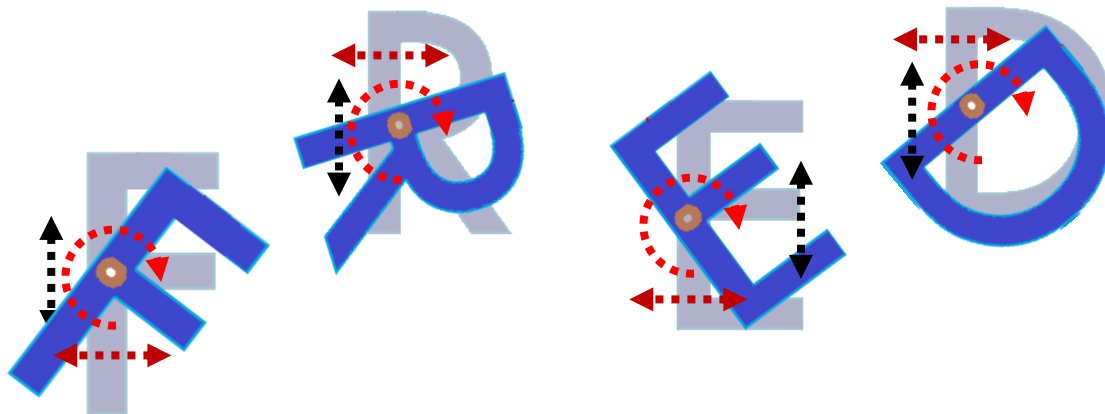
The figure below shows 4 letters, each of which has a rotation point (in brown color).



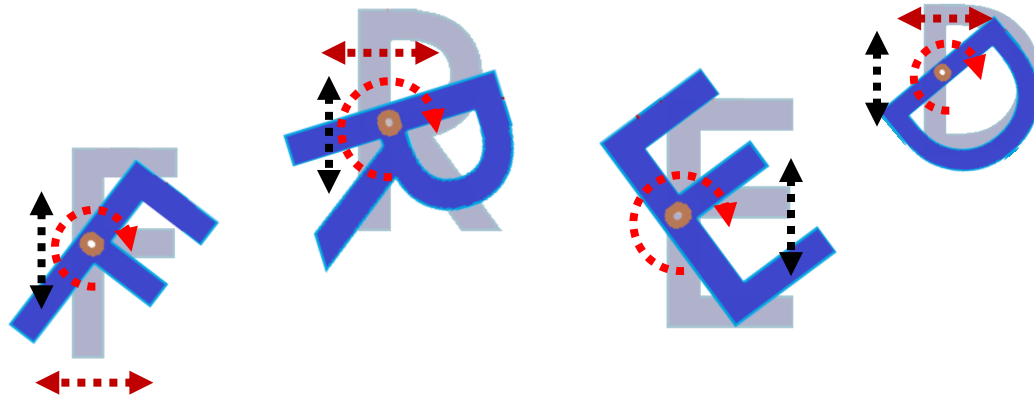
- A. Make each letter spinning (360 degree) around the rotation point.



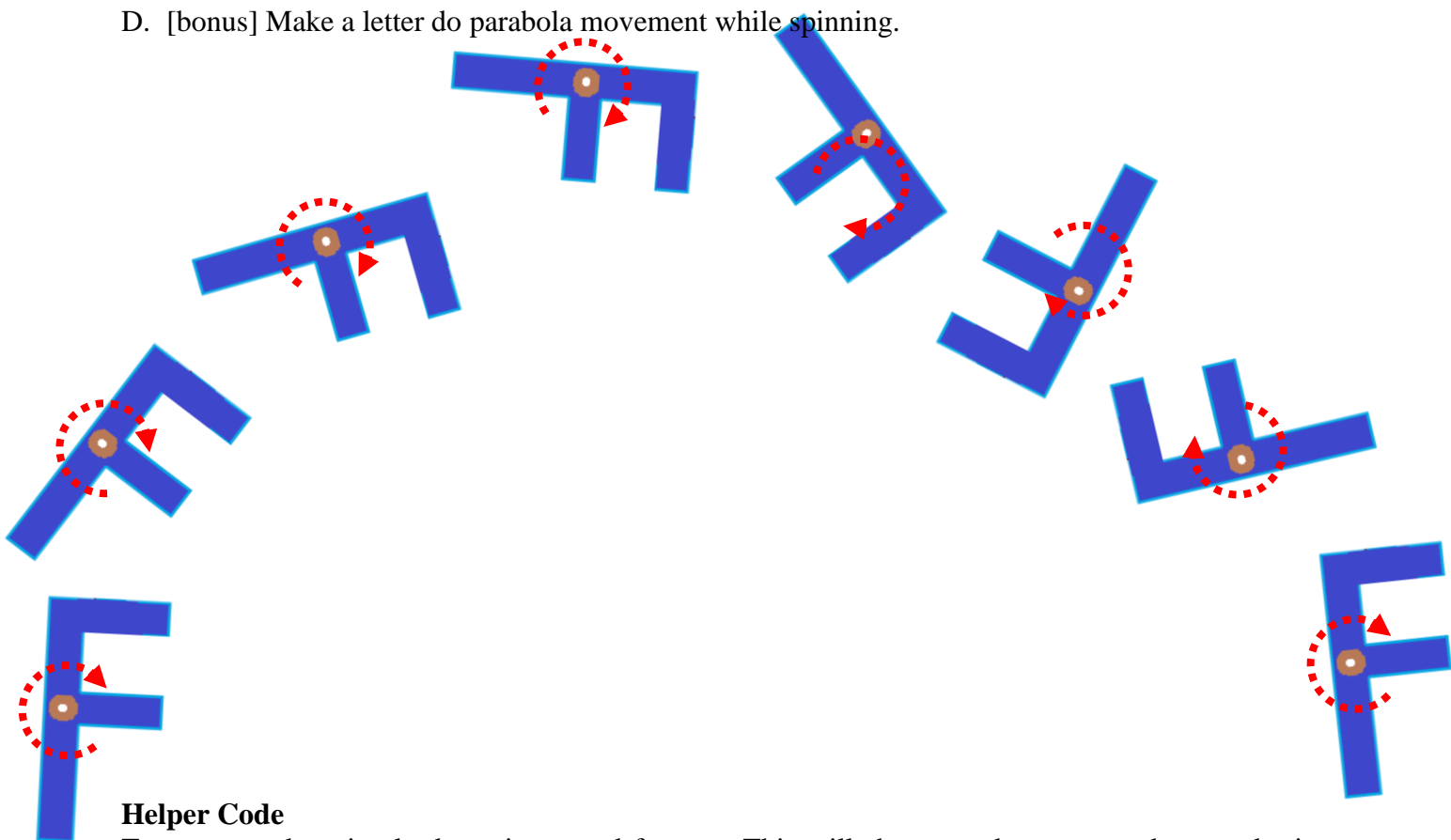
- B. Make each letter up and down, left and right while spinning.



C. Make each letter size smaller and bigger while spinning and moving.



D. [bonus] Make a letter do parabola movement while spinning.



### Helper Code

To get started, a simple demo is created for you. This will show you how to use the very basic commands of OpenGL to open a window and draw some basic shapes. This simple demo program opens a window, and animates a rotating bar. Please download, compile and run the demo.