Project 2

David A Robbins

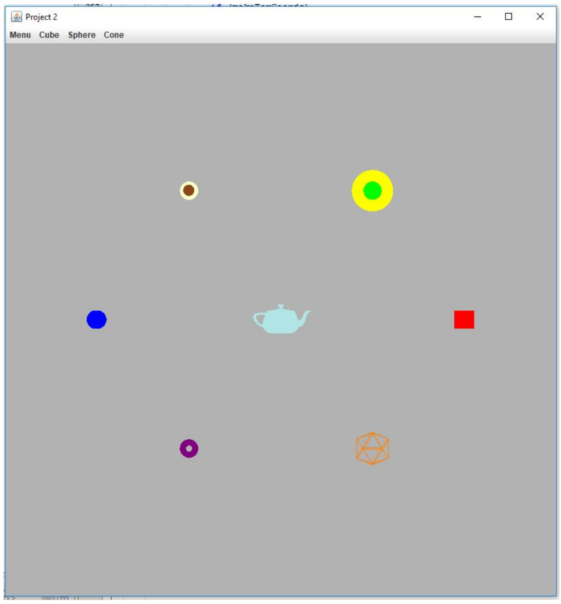
CMSC 405 6380

University of Maryland University College

February 3, 2018

As I was reading through the instructions for what this document required, I felt I could not set up a test matrix to test specific methods. My program takes keyboard input to cause different transformations to occur to each object. I can provide a test plan though that takes the KeyEvent as an argument which is the keyPressed() method. Within this method all of the testing is done, and in this method there are thirteen keys that can be pressed to cause a different transformation of the shapes that are displayed upon start up. I will include screen captures for successful compilation as well as successful execution of each key press, as providing input from the keyboard as well as starting up the program are the only actions available to take for testing purposes. Just to be clear, the instructions said to make a 3d scene, but did not specify whether we should use the keyboard as input on stationary objects, or invoke animation methods to cause an automatically moving scene. With my method of using keystrokes to perform transformations, it was easier to run and test as I was building the program, so it kind of naturally occured. When I began this project I used JoglStarter as a framework, then added elements from other templates provided until I had a program I was happy with. Due to this there are many unused methods that I will end up implementing at a later time, which is why I left them.

Test 1 : Run Project1

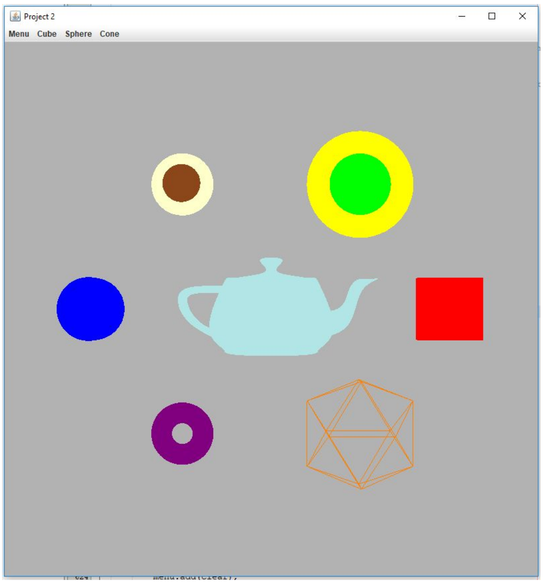


Upon successful compilation, the program launches showing seven objects on a grey background. Each of these objects will transform together, because they have the same rotating, scaling, and translating methods called on them. The only difference is that upon start up of the program, each one has this initial call upon the object as it is being created, and small adjustments were made in where they translate to, to start off. This allows them all to stay stationary and move together.

Test 2: Test the keystrokes using

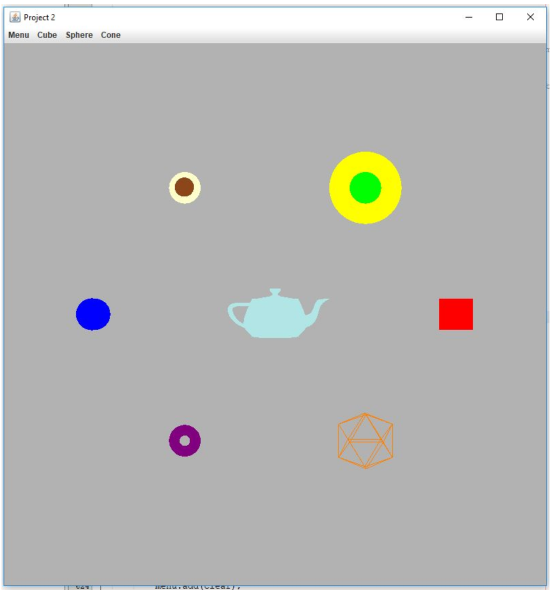
Key: PgUp : 25 strokes

Scales the objects up



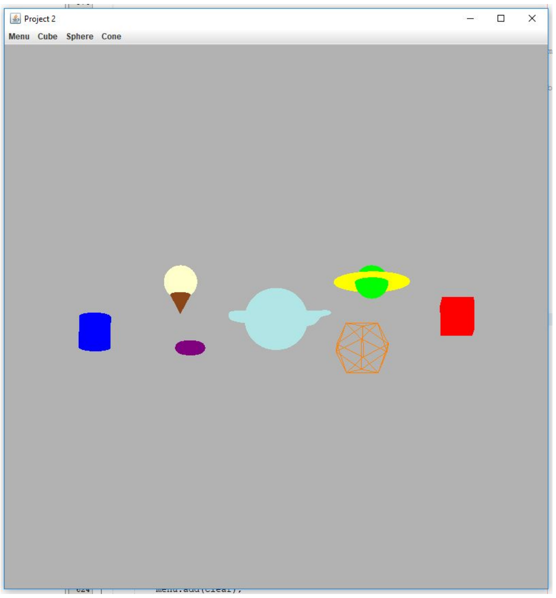
Key: PgDn : 5 strokes

Scales the objects down



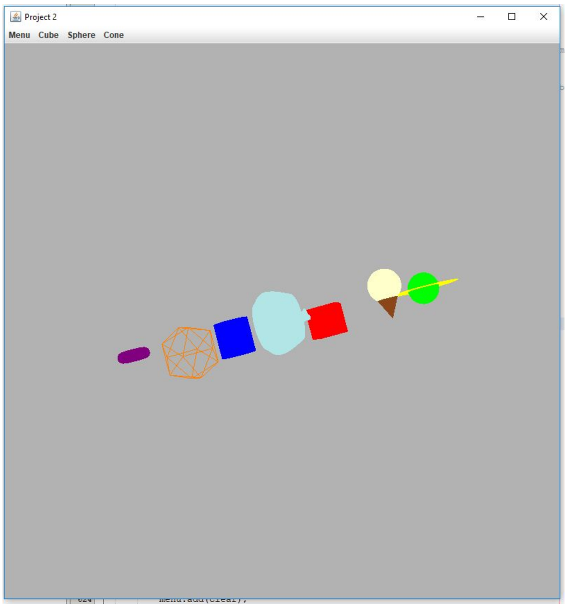
Key: q : 5 strokes

Rotates the objects positively on their x axis



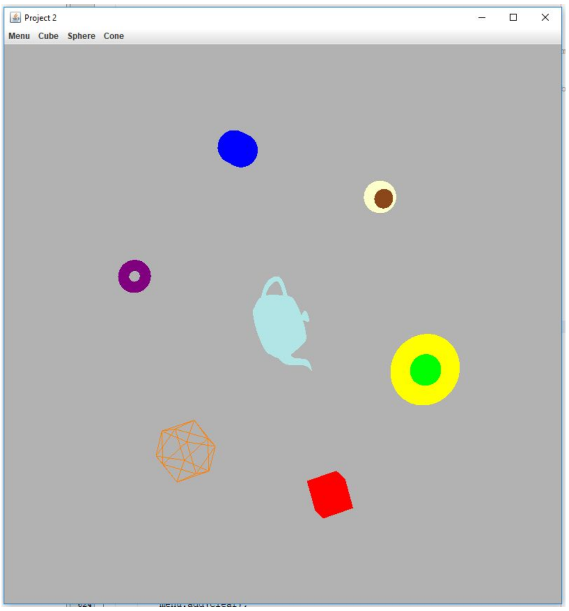
Key: w : 5 strokes

Rotates the objects positively on their y axis



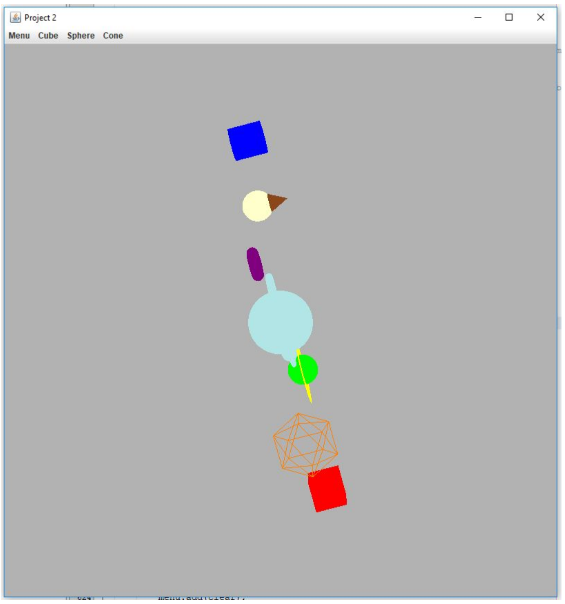
Key: e : 5 strokes

Rotates the objects positively on their z axis



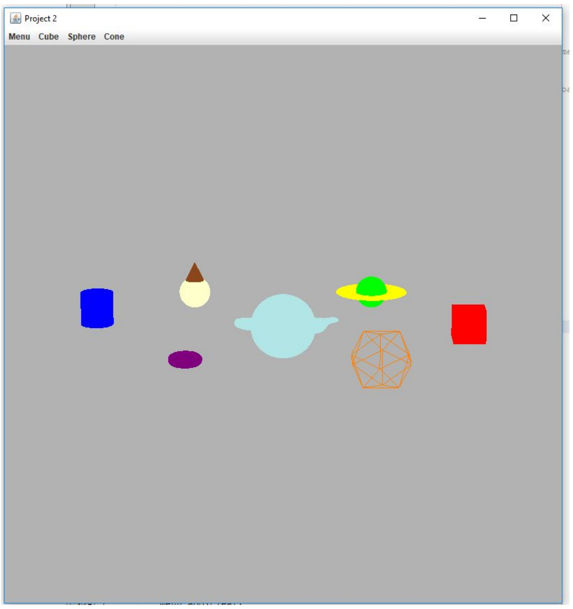
Key: a : 5 strokes

Rotates the objects negatively on their x axis



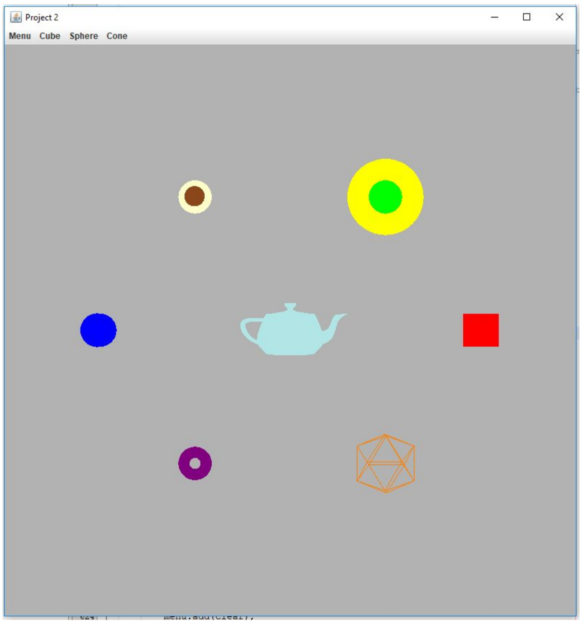
Key: s : 5 strokes

Rotates the objects negatively on their y axis



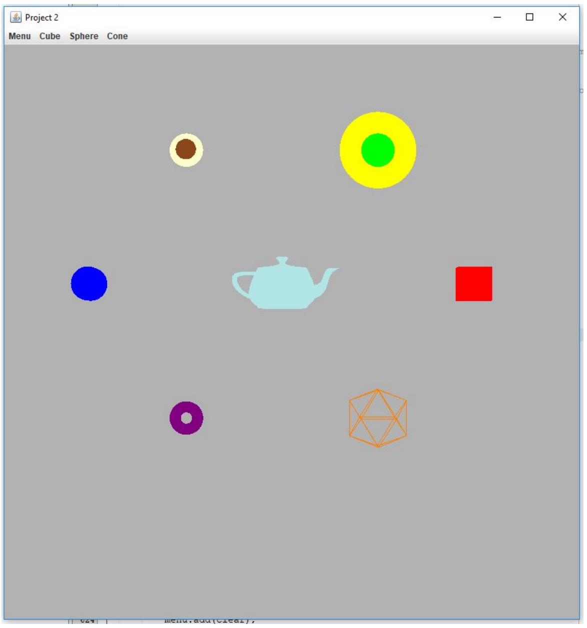
Key: d : 5 strokes

Rotates the objects negatively on their z axis



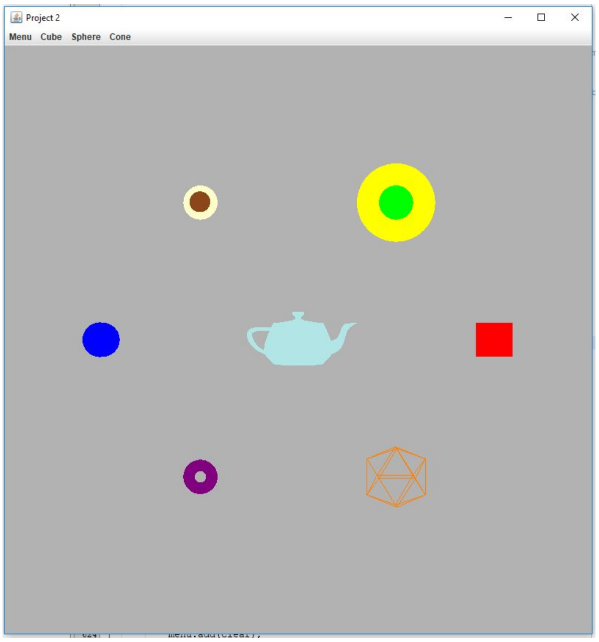
Key: up arrow : 25 strokes

Moves the objects up



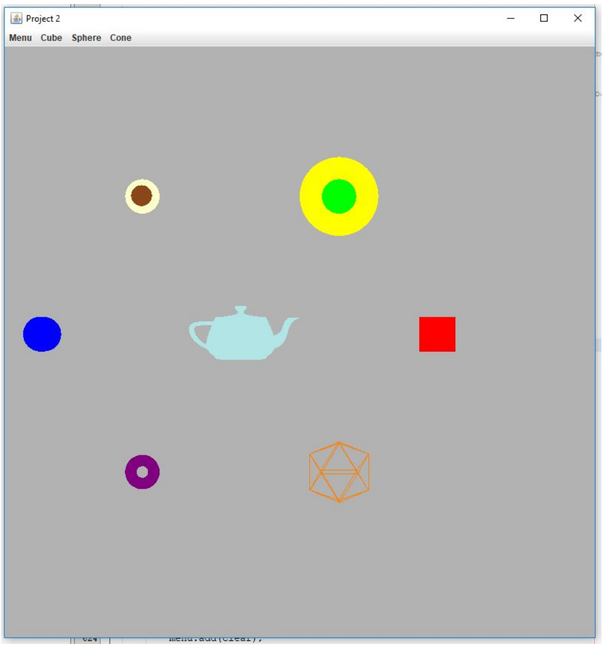
Key: down arrow : 25 strokes

Moves the objects down



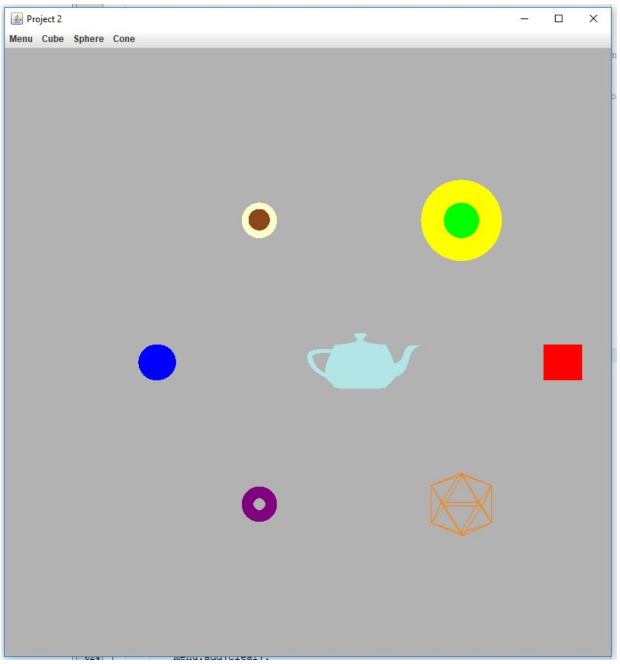
Key: left arrow : 25 strokes

Moves the objects left



Key: right arrow : 25 strokes

Moves the objects right



Key: Home : 1 stroke

Reorients the objects to their original orientation (rotation wise). Providing a screen capture of this is pointless, as it would just be another screen cap of the program running initially, which has been provided a couple of times.

Test 3 : Test the menus quit option. The menu testing only got this far because a ran out of time. I plan on continuing to work on this program, which is why I left it as is. There was no screencap to take upon completion of this test, but it does close successfully.

All tests functioned as they were supposed to. The only thing I would like to note about my code is that it is still a little messy. A lot of the comments from copy and pasted code from the templates provided I left in. I actually did this on purpose, because, as I stated earlier, I plan on using this code in the future to provide a more polished product to place in my portfolio. I hope this is okay, as I do know that much of the breaks official Java style guidelines.