German University in Cairo Department of Computer Science Dr. Rimon Elias DMET 502 - Computer Graphics



Lab 2

Transformations and animations in OpenGL:

```
glTranslated(translateX, translateY, translateZ);
adds translateX to x coordinate value
adds translateY to y coordinate value
adds translateZ to z coordinate value
glTranslated → d is double
glTranslatef → f is float
glScaled(scaleX, scaleY, scaleZ);
multiplies each value with the corresponding coordinate
cannot be zero
glRotated(angle, xaxis, yaxis, zaxis);
rotate by an angle about a certain axis
glPushMatrix();
starts pushing the objects and the transformations onto a stack
glPopMatrix();
pops the elements from bottom to top. The stack is used for grouping objects and
transformations.
glutIdleFunc(anim);
continuous animation function
glutPostRedisplay();
refreshing the display to see the new changes
```