

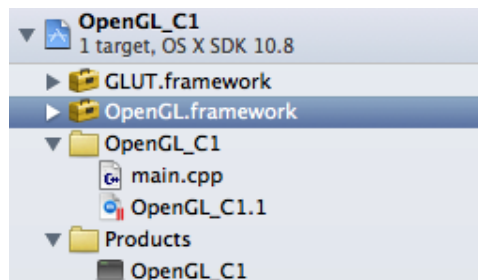
---

SimSun zh = 0pt plus 1pt

# OpenGL C1

## 1

Mac OS X10.8.2XcodeOpenGLGLUT



## 2

openGLOpenGLOpenGL

## 3

Listing 1: Main

```
int main(int argc, char ** argv)
{
    glutInit(&argc, argv);
    glutInitDisplayMode(GLUT_DOUBLE|GLUT_RGBA|GLUT_DEPTH);
    glutInitWindowSize(400, 400);
    glutInitWindowPosition(100, 100);
    glutCreateWindow("xf");
    glutSetCursor(GLUT_CURSOR_CROSSHAIR);
```

```

    glutDisplayFunc(&myDisplay );
    glutIdleFunc (&myDisplay );
    glutMainLoop ();
    return 0;
}

```

Listing 2: Display

```

void myDisplay ()
{
    glClear (GL_COLOR_BUFFER_BIT|GL_DEPTH_BUFFER_BIT);
    glLoadIdentity ();
    glRotatef (angle , 0.0 , 0.0 , 1.0);
    glTranslatef (-0.5, -0.5, 0);
    glBegin (GL_TRIANGLES);
    glColor3f (1.0 , 0 , 0);
    glVertex3f (0.0 ,0.0 ,0.0);
    glColor3f (0.0 , 1 , 0);
    glVertex3f (0.7 ,0.0 ,0.0);
    glColor3f (0.0 , 0.0 , 1.0);
    glVertex3f (0.227 ,0.446 ,0.0);
    glEnd ();
    glutSwapBuffers ();
    angle -=0.2;
}

(5,5,3)SMOOTH

```

Listing 3: Display

```

void myDisplay ()
{
    if ( paint ) glShadeModel (GLSMOOTH);
    else
    glShadeModel (GL_FLAT);
    glClear (GL_COLOR_BUFFER_BIT|GL_DEPTH_BUFFER_BIT);
    glLoadIdentity ();
    glRotatef (angle , 0.0 , 0.0 , 1.0);
}

```

```
glTranslatef(-0.5, -0.5, 0);

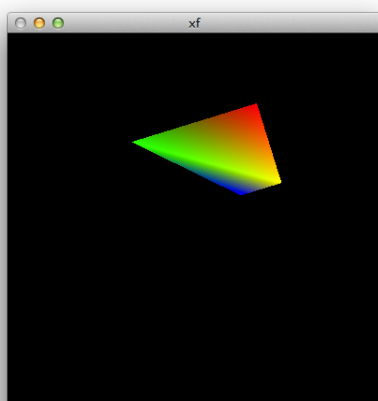
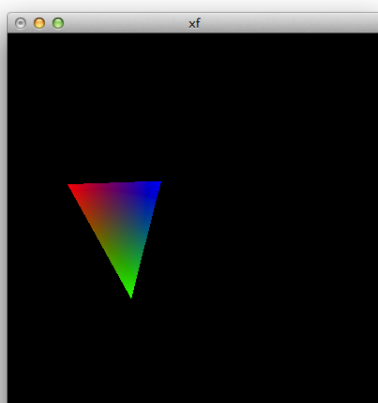
glBegin(GLQUADS);
glColor3f(1.0, 0, 0);
glVertex3f(0.0,0.0,0.0);
glColor3f(0.0, 1, 0);
glVertex3f(0.7,0.0,0.0);
glColor3f(0.0, 0.0, 1.0);
glVertex3f(0.227,0.446,0.0);
glColor3f(1.0, 1.0, 0.0);
glVertex3f(0,0.446,1);

glEnd();
glutSwapBuffers();
angle+=0.2;
}
```

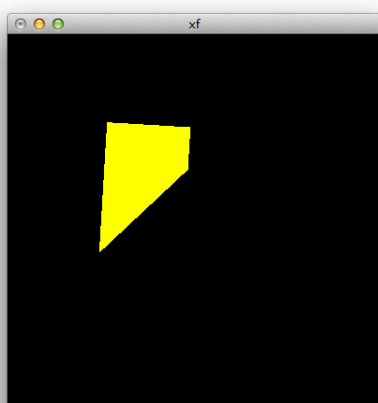
Listing 4: Keyevent

```
void processNormalKeys(unsigned char key, int x, int y) {

    if (key == ' ')
        paint = !paint;
}
```



FLAT



**5**

[1] OpenGL()

## 6

2012

:(+86)15652799536

:xf1280@gmail.com