/*
 * Copyright (c) 1993-1997, Silicon Graphics, Inc.
 * ALL RIGHTS RESERVED
 * Permission to use, copy, modify, and distribute this software for
 * any purpose and without fee is hereby granted, provided that the above
 * copyright notice appear in all copies and that both the copyright notice
 * and this permission notice appear in supporting documentation, and that
 * the name of Silicon Graphics, Inc. not be used in advertising
 * or publicity pertaining to distribution of the software without specific,
 * written prior permission.
 * THE MATERIAL EMBODIED ON THIS SOFTWARE IS PROVIDED TO YOU "AS-IS"
 * AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE,
 * INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR
 * FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL SILICON
 * GRAPHICS, INC. BE LIABLE TO YOU OR ANYONE ELSE FOR ANY DIRECT,
 * SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY
 * KIND, OR ANY DAMAGES WHATSOEVER, INCLUDING WITHOUT LIMITATION,
 * LOSS OF PROFIT, LOSS OF USE, SAVINGS OR REVENUE, OR THE CLAIMS OF
 * THIRD PARTIES, WHETHER OR NOT SILICON GRAPHICS, INC. HAS BEEN
 * ADVISED OF THE POSSIBILITY OF SUCH LOSS, HOWEVER CAUSED AND ON
 * ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE
 * POSSESSION, USE OR PERFORMANCE OF THIS SOFTWARE.
 * US Government Users Restricted Rights
 * Use, duplication, or disclosure by the Government is subject to
 * restrictions set forth in FAR 52.227.19(c)(2) or subparagraph
 * (c)(1)(ii) of the Rights in Technical Data and Computer Software
 * clause at DFARS 252.227-7013 and/or in similar or successor
 * clauses in the FAR or the DOD or NASA FAR Supplement.
 * Unpublished-- rights reserved under the copyright laws of the
 * United States.  Contractor/manufacturer is Silicon Graphics,
 */

#include <GL/glut.h>
#include <stdlib.h>

static GLfloat spin = 0.0;

void display(void)
{
    glClearColor (0.0, 0.0, 0.0, 0.0);
    glClear (GL_COLOR_BUFFER_BIT);
    glPushMatrix();
    glRotatef(spin, 0.0, 0.0, 1.0);
    glColor3f(1.0, 1.0, 1.0);
    glRectf(-25.0, -25.0, 25.0, 25.0);
    glPopMatrix();
    glutSwapBuffers();
}

void spinDisplay(void)
{
    spin = spin + 2.0;
    if (spin > 360.0)
        spin = spin - 360.0;
    glutPostRedisplay();
}

void init(void)
{
    glClearColor (0.0, 0.0, 0.0, 0.0);
double.c Fri Feb 25 18:09:12 2005 2

73:    glShadeModel (GL_FLAT);
74: }
75:
76: void reshape(int w, int h)
77: {
78:    glViewport (0, 0, (GLsizei) w, (GLsizei) h);
79:    glMatrixMode(GL_PROJECTION);
80:    glLoadIdentity();
81:    glOrtho(-50.0, 50.0, -50.0, 50.0, -1.0, 1.0);
82:    glMatrixMode(GL_MODELVIEW);
83:    glLoadIdentity();
84: }
85:
86: void mouse(int button, int state, int x, int y)
87: {
88:     switch (button) {
89:       case GLUT_LEFT_BUTTON:
90:          if (state == GLUT_DOWN)
91:             glutIdleFunc(spinDisplay);
92:          break;
93:       case GLUT_MIDDLE_BUTTON:
94:       case GLUT_RIGHT_BUTTON:
95:          if (state == GLUT_DOWN)
96:             glutIdleFunc(NULL);
97:          break;
98:       default:\n99:          break;
100:    }
101: }
102:
103: /*
104:  * Request double buffer display mode.
105:  * Register mouse input callback functions
106: */
107: int main(int argc, char** argv)
108: {
109:     glutInit(&argc, argv);
110:     glutInitDisplayMode (GLUT_DOUBLE | GLUT_RGB);
111:     glutInitWindowSize (250, 250);
112:     glutInitWindowPosition (100, 100);
113:     glutCreateWindow (argv[0]);
114:     init ();
115:     glutDisplayFunc(display);
116:     glutReshapeFunc(reshape);
117:     glutMouseFunc(mouse);
118:     glutMainLoop();
119:     return 0;  /* ANSI C requires main to return int. */
120: }