

Código: Textura sintética raw

```
#include <GL/glut.h>
#include <stdio.h>
#include <malloc.h>

GLuint texture;
int ancho = 128; // imagen en disco
int alto = 128; // imagen en disco
unsigned char * data;

int LeeImagen()
{
    FILE * file;

    file = fopen( "batlogo.raw", "rb" );
    if ( file == NULL ) return 0;
    data = (unsigned char *)malloc(ancho*alto*3);
    fread( data, ancho * alto * 3, 1, file );
    fclose( file );
}

void CargaTextura()
{
    glGenTextures(1, &texture);
    glBindTexture(GL_TEXTURE_2D,texture);
    glTexImage2D(GL_TEXTURE_2D, 0, GL_RGB, ancho, alto, 0, GL_RGB, GL_UNSIGNED_BYTE, data);
    glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MAG_FILTER, GL_LINEAR);
    glTexParameteri(GL_TEXTURE_2D, GL_TEXTURE_MIN_FILTER, GL_LINEAR);
}

void dibuja(void)
{
    glClear(GL_COLOR_BUFFER_BIT);
    glEnable(GL_TEXTURE_2D);
    LeeImagen();
    CargaTextura();
    glBindTexture(GL_TEXTURE_2D,texture);
    glBegin(GL_TRIANGLES);
        glTexCoord2f(0.0,1.0); glVertex2f(-2.0,-2.0);
        glTexCoord2f(1.0,1.0); glVertex2f(2.0,-2.0);
        glTexCoord2f(0.5,0.0); glVertex2f(0.0,2.0);
    glEnd();
    glFlush();
}

void reshape(int width,int height)
{
    glClearColor(0.7,0.7,0.7,0.0);
    glViewport(0,0,width,height);
    glMatrixMode(GL_PROJECTION);
    glLoadIdentity();
    gluOrtho2D(-2.5,2.5,-2.5,2.5);
    glMatrixMode(GL_MODELVIEW);
    glLoadIdentity();
}

void keyboard(unsigned char key,int x,int y)
{
    if (key==27){
        glDeleteTextures(1,&texture);
        exit(0);
    }
}

int main(int argc,char **argv) {
    glutInit(&argc,argv);
    glutInitDisplayMode(GLUT_RGB|GLUT_SINGLE);
    glutInitWindowSize(256,256);
    glutCreateWindow("textura sintética raw");
    glutDisplayFunc(dibuja);
    glutReshapeFunc(reshape);
    glutKeyboardFunc(keyboard);
    glutMainLoop();
    return 0;
}
```

