

# MS Visual Studio + GLUT Installation & Config Guide

1. Downloads:  
VS <https://www.dreamspark.com/student/Default.aspx>  
GLUT <http://user.xmission.com/~nate/glut.html>
2. Install MS Visual Studio
3. Extract the GLUT archive and copy the files to the following directories (Please change accordingly if your installation is in a different location):

## For Windows 64-bit:

glut32.dll -> C:\Windows\SysWOW64

glut.h -> C:\Program Files (x86)\Microsoft Visual Studio 10.0\VC\include\GL

glut32.lib -> C:\Program Files (x86)\Microsoft Visual Studio 10.0\VC\lib

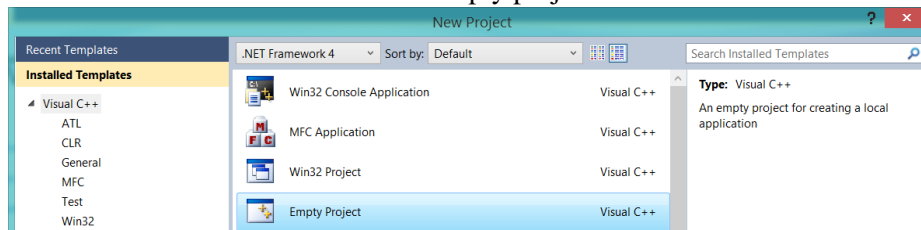
## For Windows 32-bit:

glut32.dll -> C:\Windows\System32

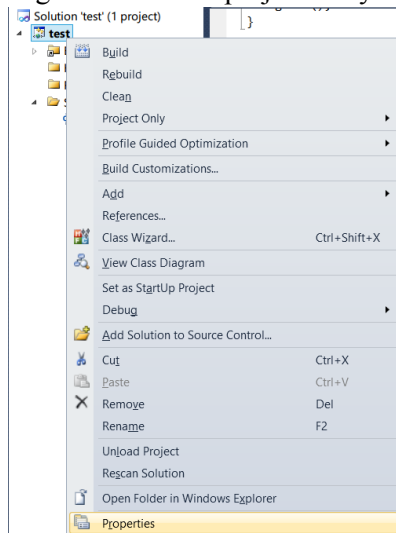
glut.h -> C:\Program Files\Microsoft Visual Studio 10.0\VC\include\GL

glut32.lib -> C:\Program Files\Microsoft Visual Studio 10.0\VC\lib

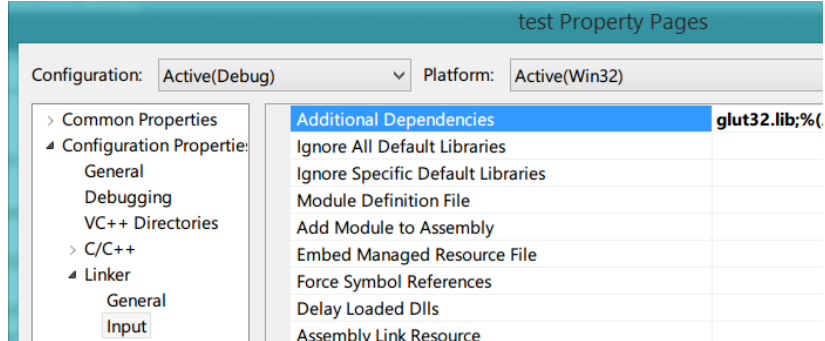
4. Launch Visual Studio and create an empty project



5. Right click on the project entry in the Solution Explorer panel, click "Properties"



6. Open the dropdown list from Linker – Input – Additional Dependencies, click Edit, and then add glut32.lib



7. Copy-paste the following code and compile

```
#include <gl/glut.h>

void init( void )
{
    // set background to white
    glClearColor(1.0, 1.0, 1.0, 0.0);

    glMatrixMode (GL_PROJECTION);
    gluOrtho2D(-100.0, 100.0, -100.0, 100.0);
    glMatrixMode (GL_MODELVIEW);
}

// Main drawing routine. Called repeatedly by GLUT's main loop
void display( void )
{
    //Clear the screen and set our initial view matrix
    glClear(GL_COLOR_BUFFER_BIT);
    glMatrixMode(GL_MODELVIEW);
    glLoadIdentity();

    //TODO: Perform drawing here
    glColor3f(0.0, 1.0, 0.0);
    glBegin(GL_POLYGON);
        glVertex2f(-50.0, -50.0);
        glVertex2f(50.0, -50.0);
        glVertex2f(50.0, 50.0);
        glVertex2f(-50.0, 50.0);
    glEnd();

    glutSwapBuffers();
}

// Entry point - GLUT setup and initialization
int main( int argc, char** argv )
{
    glutInit( &argc, argv );
    glutInitDisplayMode (GLUT_DOUBLE | GLUT_RGB);
    glutInitWindowSize (300, 300);
    glutInitWindowPosition (100, 100);
    glutCreateWindow( "OpenGL 2D" );
}
```

```
glutDisplayFunc( display );  
init();  
glutMainLoop();  
return 0;  
}
```