LAB 2 TEXTURING

CODE TASKS

1. The code provided on Blackboard contains the TextureShader class, the shaders and an example project of them being used. You can copy this project into the existing solution from last week so it has access to the DXFramework and DirectXTK. You will need to set the project as the “startup project” and probably setup the required libraries and links (these can be copied from the week 1 example project. Make sure the project compiles and runs.

2. Create your own texture (.png) and swap out the texture on the quad mesh being rendered with this newly created texture.

3. Using your square mesh for last week (copy it to the new project and) modify the texture coordinates (of the mesh) and sampler so the texture is mirrored in both the x and y axis. Like this:

4. Return the sampler back to normal (and the UV coordinates or use the standard quadMesh) and in the shaders modify the UV coordinates and off set them by 0.5 units. This should shift the texture half way along the shape.

5. In the pixel shader invert the final colour being displayed.

6. Render two quads side-by-side each with a different texture.

7. Make the first quad constantly rotate around the z-axis.

RESEARCH TASK

1. Modify your application to send two textures for a single mesh (quad) and do a 50% blend between the two textures.