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1 How do I get started?

1. Do not wait till the last minute to start this project!
2. Draw out the scene graph on paper which will satisfy all the project goals.
3. Look for patterns in the graph and create classes encompassing those smaller scene graphs.
4. Work on one aspect of the project at a time.

2 How can I get a branch to rotate?

Look at the ModelTransformCallback in the osglight example. This example uses a position attitude transform, but you can also use a matrix transform instead.

3 How do I set the sphere’s texture coordinates?

Look at the texture coordinate methods in the osg::Geometry class. You will need to search (visit) the nodes in the model file you loaded for the actual geometry nodes.

4 How do I apply bump mapping?

Look at the osgfxbrowser example and osgFX::BumpMapping class.

5 How do I get stars to appear in the background?

The easiest way is to use a sky box, or sky dome (sphere) with the star texture applied to it. See the osghangglide example to see what this will look like.

6 How do I apply and environment map?

Look at the osgmultitexture example.
7 How do I get the camera to move?

Many of the example files provide simple interfaces. I suggest looking at the \texttt{osg\_hangglide} and \texttt{osg\_keyboard} examples.

8 How do I apply a mip-map to a texture?

Look at the \texttt{osg\_Texture2D} class for the methods to set mip-map filtering. There is also a complete example of 2D textures in the \texttt{osg\_texture2D} example.

9 How do I change shading parameters?

This would be done using the \texttt{osg\_ShadeModel} class.