

1. Experiment with the Crate demo by changing the texture coordinates and using different address mode combinations.
2. Using the DirectX Texture Tool, we can manually specify each mipmap level (File>Open Onto This Surface). Create a DDS file with a mipmap chain with a different textual description or colour on each level so that you can easily distinguish between each mipmap level. Modify the Crate demo by using this texture and have the camera zoom in and out so that you can explicitly see the mipmap levels changing. Try both point and linear mipmap filtering.
3. Given two textures of the same size, we can combine them via different operations to obtain a new image. More generally, this is called *multitexturing*, where multiple textures are used to achieve a result. For example, we can add, subtract, or multiply the corresponding texels of two textures. Multiply the two textures given in the folder, (flare.dds and flarealpha.dds) and apply the new texture on the crate.
4. Modify the solution to Exercise 3 by rotating the new texture as a function of time over each cube face.

Submit your exercises as a zipped file with the format

YYYY-MM-DD – GD2P04 – ExerciseDay006 – Student Name.zip