## Assignment 5: Multitextured Bunny

In this Assignment, you are supposed to apply multiple textures over a bunny model. At first, you have to generate texture coordinates for the bunny model. One of the approaches for generating texture coordinates is to import obj model via Meshlab (<a href="http://www.meshlab.net/">http://www.meshlab.net/</a>). Next, use the following steps:

## Filters → Textures → Parametrization: Flat Plane

Next, export the obj model with the generated texture coordinates. I have already uploaded the obj file that generate texture coordinates for the bunny model. If you open the obj file using wordpad or notepad, you'll find that lines containing texture coordinates start with  $\mathbf{v}_t$ .

Please find attached two dds files: **test.dds** and **test3.dds**. Both of these files need to be used for texturing the bunny model. Figure 1 shows that multiple images ( at the left) have been used for texturing the bunny model at the right.



Figure: Applying multiple textures onto a model.

You can start working on this assignment with the codes for Assignment 2 and uploaded code on multitexturing. In shader, compute the final texture color as the summation of the two texture colors. You can start looking on the shader file on multiple texture already uploaded on canvas.

Next, discard some fragment based on the value of the red color component of the texture color. If the red component of the calculated texture color is more than 0.95, discard that part of the fragment.

## **Submission:**

Submit the assignment in a zipped file via canvas. Name the file as Firstname Lastname 5 CSCD470.zip. Deadline is Tuesday, May 22, 11:59 pm.

This assignment carries a weightage of 10% of this course.