# **CS 557 Project #3 Submitted by: Aman Pandita**

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**Link:**[**https://media.oregonstate.edu/media/t/1\_qtgcqx4v**](https://media.oregonstate.edu/media/t/1_qtgcqx4v)

**Q: What you did and explaining why it worked this way?  
A:**    
By using displacement mapping and bump mapping, I was successfully able to:-

* A simple shape was transformed into a more interesting and complex one with added depth, texture and intricate details.
* The displacement mapping used a texture map to specify the height and depth, which was applied to displace the object's vertices. Re-computing normals involved recalculating the surface normal vectors based on the displaced vertices for a more accurate representation of the surface orientation.
* Bump mapping was applied to add visual detail and texture to the surface, using a texture map to simulate bumps and imperfections.
* Finally, lighting was added to bring the object to life and enhance its visual appeal, adding depth and dimension to the object. These techniques worked together to create a more detailed and lifelike representation of the object.

**Screenshots:**



