CS 330 Module Two Milestone: Creating a 3D Scene Based upon a 2D Image

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I chose to use the following image as my 2D image breakdown:



To break down this image into simplified shapes, I had to carefully examine each item in the picture, then determine what type of shape it is closest to based upon the suggested shapes in the assignment prompt. I determined that the shapes I need are as follows:

* Desk: Plane
* Books: compressed cubes
* Coffee Mug: upside-down pyramid and compressed torus or sphere
* Computer monitor: plane
* Computer monitor stand: two planes
* Keyboard: plane
* Mouse: compressed sphere
* Pencil cup: cube
* Pencils: elongated cube and pyramid

To begin, I would use a plane as the desk, then place all other shapes on top of the plane to create the 3D images.

As you can see from the breakdown above, I will have two images that require me to use two different shapes to create – the pencil and the coffee mug. To form the pencil correctly, I can elongate a cube and add a small pyramid on top. To form the coffee mug correctly, I can turn a pyramid upside down and place a compressed torus or sphere on the top and bottom.

To simplify the image, I would combine the planes needed to create the monitor. Additionally, I could potentially combine the compressed cubes to create the book, although it would probably make the image look like one large book instead of several small books. I do not believe that I should omit any images, but I will know more as I try and recreate this image in the future.