Utah teapot is famous object for testing quality of various algorithms of computer graphics. In the contribution will be shown definition of data structure, using Bezier curves, patches, and symmetry for construction of the object, conditions assuring smooth shape of the surface, making object, counting outer normal and other necessary vectors, using illumination models (flat, Gourard and Phong shading) and applying 2D and 3D textures. There is used Matlab and especially its Image processing toolbox. Necessary programming is performed in the form of M files.

The previous two figures show initial step – 3D image of data structures, which will be used for making Bezier patches of the lid of the teapot (Fig. 1) and for the whole surface of the tea pot (Fig. 2).