THE PROCESS OF MODELING A CARTOON CHARACTER

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To create a three-dimensional object, you need a computer program that has the necessary tools, functions and templates. To implement a three-dimensional model, starting points are set at the beginning of the path, from which the development of a 3D model begins. Thus, the creation of a three-dimensional model consists of the following stages: concept, modeling, texturing, consecration (Fig. 1). After performing these actions, the model is ready for further work with the three-dimensional model and subsequent visualization: rigging (creating a skeleton, a set of bones / joints), animation.

First of all, when creating a model, an idea is used. Usually, when creating a three-dimensional model, they look for references [1]. These can be both images and real-life examples, and a three-dimensional model is already being created on their basis. If there is a reference, it will be possible to understand the goals faster, it is easier to understand how a three-dimensional model will look and further actions of performing a three-dimensional model in practice are visible. After finding the reference, the next stage is the stage of modeling the model.

The blender program has basic modeling methods, such as: spline modeling, which is the creation of 3D objects using curved lines (splines) and polygonal modeling, which makes it possible to perform various manipulations with the grid of a 3D object at the level of subobjects: vertices, edges, faces, which are called B-splines. In addition, the blender program also has simple modeling methods -primitives, the method implies that we take a ready-made primitive that is already available in the program, for example, a cube or a ball. Consequently, we can deform the primitive as we want, but the complex method differs in that we will have to initially make an object to work with it

Begin

Collecting materials

Choosing a modeling method

Obtaining a low-poly 3D model

Initial position of the bone

Cutting into logical parts

Optimal cuts

Implementation of the scan

Errors in the scan

Ready-made 3d model scan

Applying a texture

3d model with texture

Creating details
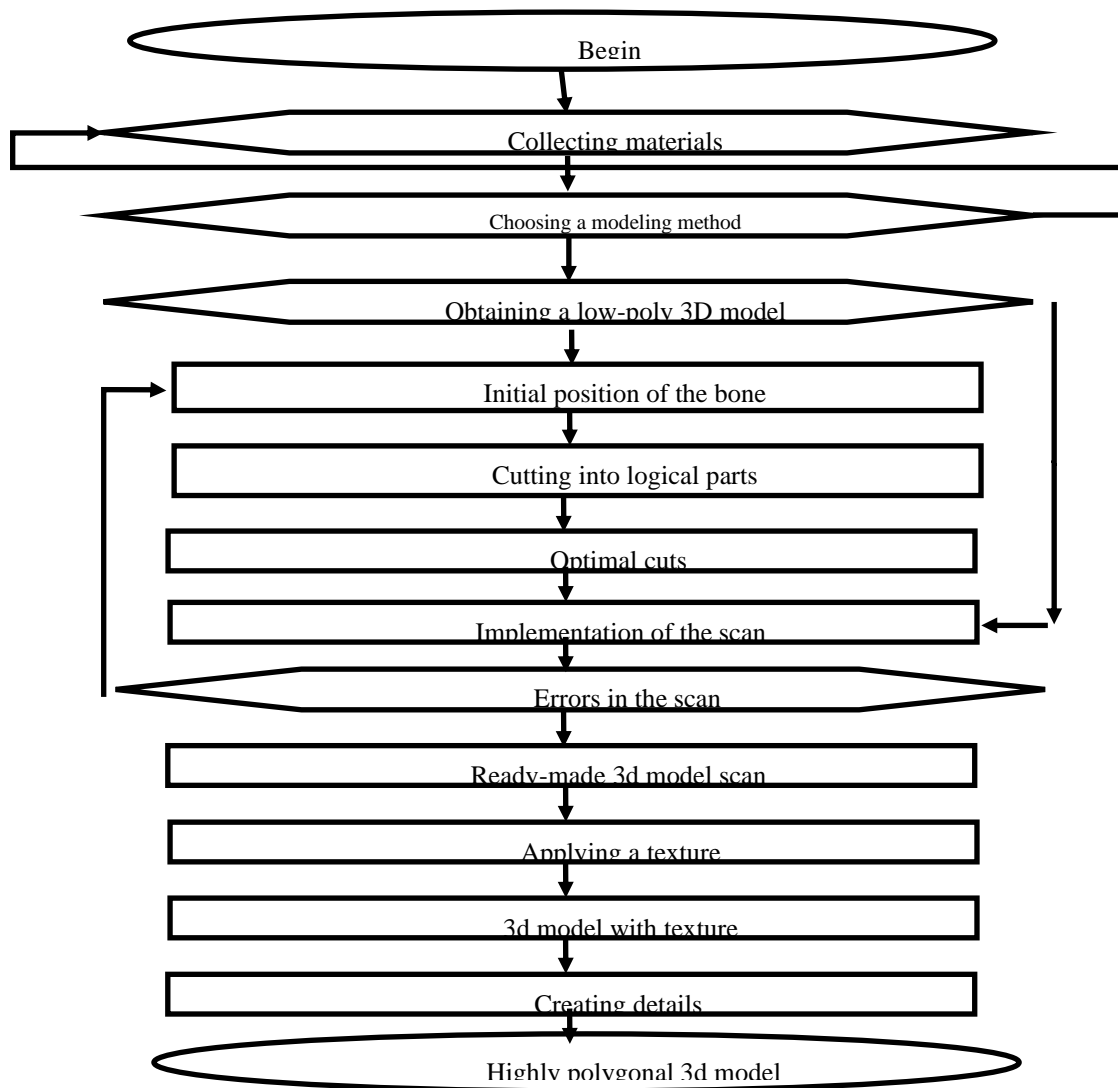
Highly polygonal 3d model

Fig.1. Flow diagram of the process of creating a three-dimensional model

Primitives are often chosen for the initial modeling of a three-dimensional object [1]. Most likely, such popularity is caused by the easy way of editing the structure, a large selection of tools and modeling methods. A plentiful offer to help the user. From tools for low-poly editing to high-poly parts. Any object can be created using the simplest primitives such as: plane (plane), cube (cube), circle (circle), cylinder (cylinder), cone (cone) and others [1]. A primitive such as a cube is used by users most often. It is difficult to imagine that a realistic human figure, equipment and much more can be made from a cube. And without adding other objects, just modifying the original primitive.

Reference:
1. Creating materials and textures for three-dimensional models. - Text : electronic//Masked Brothers:[website].-URL: https://www.maskedbrothers.ru /articles/texture_creation / (accessed: 05/20/2020).