HOW TO DESIGN A 3D CHARACTER

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**Description and technical requirements**

You provide us the detailed description of what you need to create. We also need details about the final assets that you are going to use:

- Game engine, target platforms and devices;
- What will be the size of the character on the game screen;
- General description of the game, game mechanics and what else will be on the screen besides characters.

**Character style references review**

We need to review the examples of graphics style. They can be provided from other games. Probably you found some examples in our portfolio. Proper references can be also found on social boards: Pinterest, Behance, Dribbble, Artstation, Deviantart etc.
Concept art

Firstly we create rough concept art based on the description and style references. At this stage the main target is to create the general shape and feeling of the character. So it can be just black and white.

If the general concept is approved we make a colored version.
When the colored version is approved, we work on smaller details of the character, so everything will be clear for 3d artists during the modeling stage.
3d modeling

Firstly, we create a high poly model of the character. High poly model is used to create high quality textures for a game model. It is also used for high quality renders for promo materials and in-game menus.
Engine optimization (lodding)

A model for the game engine differs from the initial high poly version. This model should be a low-poly and optimized for the engine. It means that the number of polygons should be decreased. After the optimization stage it does not load the device memory a lot. Besides that there can be several levels (lods) of optimization depending on the model distance from the camera: the further the object is, the fewer polygons are needed.

Texturing

Texturing stage goes right after that. Depending on the style a character should be hand painted to convey colors, shadows and light of the cartoonish style or covered with realistic or semi-realistic textures to achieve the realistic view.
Rendering and post processing

When the render setup is done, we create high-resolution renders and make final touches during the post processing. Finally, the artwork can be delivered for the further usage.
Rigging and animation

We also prepare the character for the animation stage doing skinning and rigging. Depending on the final quality requirements and the model usage it can include or exclude rigging of the face, clothes and other additional things on the character.

Basic list of animations include: **idle, attack, receiving damage, walk, run, death.** It is good to make several idle animations so the developer can mix them and it will look natural in the game. More advanced animations list should include several options per each type of animation.

If a character is holding a weapon, we will probably need additional animation for a weapon. Besides that character accessories can be also animated if it is required by the game mechanics features.