**Personal Project Brief Proposal Thomas Simmons S176601**

Summary:

I have chosen to do a 3D environmental artist modelling based final project because I am very interested in getting into the modelling games industry for mobile based platforms. I have chosen assets for the mobile market because I play a lot of games on my current smartphone/tablet devices and want to be a part of the industry of mobile app games. What also interests me about 3D modelling is the attention to detail required to make very good assets towards a game and how important these assets must hit the briefs requirements. Also for most 3D models to be complete you have to work in teams and I enjoy working in teams.

I will use my 3D modelling skills I have acquired over the last four years in college and university and learn further skills to create assets with the targeted theme of historical weaponry, strictly Roman times. I have chosen this theme because I have played a lot of historical games, usually strategy based on my phone or on the PC. Also, I have always been interested in history and currently watch historical television programmes/ documentaries and sometimes read about historical events.

Brief outline of work:

What I want to explore with this project is the difficulty level of making assets for an historical weaponry based theme and how long this may take when it gets to creating one for a client at and given 3D environmental modelling job. I will also explore how much time it may take to make these assets which will help me improve my time management skills and the ability to prioritise my possible tasks I have to undertake when making assets for a game.

The research I will undertake will be to look different offensive and defensive weaponry and see which ones will not be too difficult to create but not easy enough so I can show my skills in modelling. I will also take reference photos from my own photo taking equipment in museums like the British museum and the Natural History museum to create annotated mood boards with references. I will also create mood boards showing current fighting based games on the mobile app store and use that to get an idea on how detailed my weapons will have to be. I will also look online for different kinds of 3D modelling type jobs and what they want to see in a possible employees portfolios in order to be a candidate for the job on offer.

I will then use and Attention to detail based assets to show I can model assets to different required qualities yet still make the asset look nice and useable.

Job availability and identifying tools requirements:

Current 3D Environmental Modeller based jobs require following key skills:

* Vast skill-set in 3D Model using either 3DS Max or Maya like skills in hard and organic surface modelling across any genre and the use in a 3D video pipeline (MZ) and great assets examples using custom normal workflow or high to low poly baking (Creative Personnel).
* The use of Photoshop to prepare textures in Photoshop based on real samples and photos (NIO) and creating materials/shaders like Diff/Spec/Norm maps and being responsible for the final look (TT Games).
* The ability to model assets to different limitations the ability to create game ready assets, that work well within the given technical limitations (Creative Personnel) and see proficient high-poly and low-poly in-game models (JumpStart Games)
* The ability to apply good lighting principles to all artistic output (TT Games).
* I will also have to understand PBR (Physically-Based Rendering) shader workflow (Rockstar Studios)
* Excellent communicator, able to present ideas both verbally and visually (MZ)
* Proactively seek feedback from Lead Artist, Producer and Creative Director.

Acquiring the constraints for my assets

Also since I have chosen a mobile app based format for my assets/props I had to find out what the poly limitations would be and be acceptable for the job offers. GameGorillaz ( ) and Unity 3D ( ) suggested:

* For low poly based mobile app game for example for the first IPad or IPhone 3GS the poly counts should be at most 1500.
* For IPad 2 and IPhone 4 to 5 it should be between 1800-2000
* For IPad Mini/ 4 it should be between 2500 to a max of 4000.

I also looked at the texture sizes required for these generations and Unity 3D texture forum ( ) said:

* A max of 1024\*1024 for Ipads/ IPhone 3GS
* 2048\*2048 for Iphone4/ Ipad2
* 4096\*4096 for IPhone 5/ IPad 3 but suggested to stay on 2048\*2048 for memory purposes.

I want to be able to show I can model to all these constraints with my final assets.

Investigating the tools, I will need to use

Hard surface models are a static object, such as a stone statue, gas pump, or street sign. The models that would deform or animate, such as an animated human character, flag, or animal would fall into the Organic Surface model category (Digital Modelling book).

High to low poly baking allows the artist to achieve the look of a highly detailed model, while still using a very low triangle count and relatively small texture sizes ( ).

The ability to apply good lighting principles like having an Directional light, Ambient light, Spot lights and Point/Omni lights in the game scene or render ( ).

PBR shader workflow is a rendering method used on 3DS Max to help the diffusion and reflection maps interact with one another ( ).

I will use free to use tutorial/ training services to learn or re-learn specific tools for the use of these tools on 3DS Max 2015 and Adobe Photoshop.

Brief proposal/ demonstrate uses of tools:

I will create, texture and render six suitable assets for mobile devices like iOS and Android.

I will create annotated mood boards showing historical defensive and offensive weapons in the Roman times. I will use studio 3DS Max scene to then create four assets with historical roman time’s weaponry.

I will design two assets with the following constraints:

* An Minimum poly budget of 1000 polys
* An Maximum poly budget of 1400 polys
* 1024\*1024 texture map
* A minimum of 4 textures
* A maximum of 8 textures

Two more assets will have the following constraints:

* An Minimum poly budget of 1600 polys
* An Maximum poly budget of 2000 polys
* 2048\*2048 texture map
* A minimum of 4 textures
* A maximum of 8 textures

All of my textures I will represent the usage of PBR workflow with tools like Mudbox, Z-Brush and Photoshop. I will also name the files for my textures and assets to a professional standard.

Annotated References:

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