Project 100%

Rationale

This course will give students an introduction to the preproduction stages of game development.

At the end of the course, students will be able to:

- Create 3D models by editing polygon meshes
- Create LODs (Level of Details) for models
- Learn the Hypershade and different materials in Maya
- Understand the project folder structure.
- Apply various texture maps in 3D materials
- Joins
- Ik Handles
- Apply controllers to joins
- Keys and Keyframes

Guidelines

The task for this assignment is to Rig and Animate a walk cycle to a biped 3D character.

3DModel for the exercise: Students can either create their own models, copy from the template in Maya or downloaded them from a royalty-free source. Models used in class exercises are not allowed in the final submission. If you are creating a model then it should be faithfully recreated where possible and mesh should be Freeze Transformed, History deleted, and edge flow should be carefully managed before adding a rig.

Rigging: Complexity in the rig is to be achieved through the application of constraints and the joint structure. Fingers are not required to be rigged. Legs should have IK setup and arms should have FK setup added. Number of spine joints and controls are left to the students to decide. Rig should be good enough to do a walk cycle animation.

Animation: A minimum of 25 frames of meaningful animation is to be created. Animation can be walk cycle of any style. (fast, slow, angry, happy etc.). Attention to details such as stretch and squash, anticipation, overlap and follow-through etc. are expected.

Report: A brief report on the walk-cycle should be submitted. The report explains the characteristics of the person, how it is reflected in the animation and different walk cycles considered for this assignment. Enough research should be conducted to find the unique characteristics of a walk cycle investigating walk cycles of people from different ethnic, gender, regional and socio-economic backgrounds. Proper ethical considerations should be made while creating the models and/or animations.

Brief

CS204 aims to familiarize students with the 3D content creation pipeline. You will learn fundamentals of 3D content creation for use with real-time systems. You will use Maya and Photoshop to understand modeling, texturing, rigging, and animation process in a game development scenario.

Copyright Authenticity

Academic dishonesty and plagiarism are considered serious offences at Yoobee Colleges. By completing and submitting this assessment you are authenticating that the work is original and does not violate copyright law.

Due Date/Timeframe

Assessment is due on **Week 16**

Submission Insructions

Submissions are accepted only via LMS containing the following,

Rigging and Animation

1. A *.zip file containing your project files organised in the folder structure provided by Maya. Scene files (*.mb and *.ma) and texture files should be copied to scenes folder and source images folder respectively.

Learning Outcomes

On successful completion of this course, students are able to:

1. Apply critical understanding of a range of industry-standard tools and procedures pertaining to a studio pipeline to generate technically-sound, fit-for-purpose animation assets for interactive media.

2. Develop engaging animation assets, through creative and critical use of layout, colour, animation and character performance, to contribute meaning to an interactive media.

3. Demonstrate an awareness of social contexts and ethical concerns influencing professional practice in software development.

4. Employ effective business and academic skills to research and plan for software production.

5. Integrate technical and procedural knowledge of animation production stages to participate productively and independently to generate high-quality, fit-for-purpose assets.