SKSANIM15

Render animation

Overview

This Standard is about using previously created elements to prepare and render an animation and should include the set-up of all passes required for compositing.

This standard is for you if you render animation.

Performance criteria

You must be able to:

1. determine requirements that will affect your work by analysing briefs, components, scene files, technical and production parameters
2. identify and use the software that is most appropriate to the production
3. undertake test renders at appropriate times to determine the length of time required for rendering and check for errors
4. establish the render settings that gain the required appearance and create sufficient flexibility for compositing
5. apply render settings that enable the required degree of realism
6. prioritise renders in accordance with production priorities
7. calculate render times and storage space required to meet production requirements
8. respond to feedback in a positive way, making refinements as needed
9. remain flexible and adaptable to new directions, creative requirements and technical developments on an ongoing basis

Knowledge and understanding

You need to know and understand:

1. the creative style, overall concept and level of animation required for the production
2. the technical requirements of the project, such as the aspect ratio, frame-rate, format, film, image resolution and colour space
3. production constraints, schedule, production and editing pipeline, budget, equipment and software available
4. the rendering requirements for the production
5. the intended appearance and required degree of realism of the finished image you are working on
6. the computer processing power and storage space available for rendering
7. factors affecting render speed, such as size of texture map, ray and reflection depth, global illumination, ambient occlusion, anti-aliasing, blurry reflections or area shadows
8. rendering techniques, such as: ray tracing, texture mapping to define the colour, texture and reflectance of objects and environments, exposure depth of field to alter the sense of depth or focus on objects and environments, toon rendering and stereo rendering
9. use of z-buffering techniques to simulate a sense of perspective to describe the distance between objects and environments
10. how creative blurring and transforms give the appearance of live-action
11. how to save and duplicate render settings across multiple files
12. surface properties and how shading models can be applied to represent variations in different materials
13. how to exploit the possibilities of the animation software you are using

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Developed by	Creative Skillset
Version Number	3
Date Approved	March 2017
Indicative Review Date	March 2020
Validity	Current
Status	Original
Originating Organisation	Creative Skillset
Original URN	SKSANIM15
Relevant Occupations	Arts, Media and Publishing; Animation Professionals
Suite	Animation
Keywords	render; 3D; animation; elements; prepare; animated; scene; set-up; passes; compositing