DATE	LOCATION
Friday March 31, 2023	**NSCC Ivany Campus**

TIME	TASK
9:00am	Hand in Create 2 detailed labelled model sheets with 3 views of each of the two models. (Created prior to contest and submitted at beginning of contest as PNGs. Model sheets should be a minimum of 2000 x 1200.
9:00am – 9:15am	Orientation, wild card element revealed
9:15am – 12:00pm	Production time
12:00pm – 12:30pm	Lunch
12:30pm – 3:45pm	Production time
4:00pm-5:00pm	Judging
5:00pm	Awards

PURPOSE OF THE CHALLENGE:

To provide competitors with the opportunity to experience the 3D Game Art production process and demonstrate their knowledge and skill. The 3D Digital Game Artist takes a designer's brief and, through a combination of conceptualization, creativity, selectivity, technical, and specialist skills, completes the brief to the satisfaction of the client.

SKILLS AND KNOWLEDGE TO BE TESTED:

Employability Skills:	Preproduction:	Production:
Reading, problem solving, Critical thinking	Interpretation of a Design Brief	Preproduction, Planning
Time management	Creation of Concept Art	Asset Construction
Planning		Texture mapping & UV Unwrapping
Attention to detail		Exporting
		File Management
		Appeal of Final Product

CONTEST DESCRIPTION

Overview

Competitors will be given 6 hours to develop assets including designs, concept art, models, textures, uv maps and exported artwork which will be uploaded to Sketchfab. The look this year is Greedfall King's Quest. Your models should follow this design aesthetic. The model should use no more than 6,000 polygons. Individual texture maps should be no more than 1024x1024 pixel resolution.

Task: You will model and texture the environment and assets described. The intention of this competition is to create original artwork. All assets must be created on site during the competition with the exception of the model sheets which can be done before the competition but must be submitted as digital PNG files at the beginning of the competition. All models must be clearly labeled and have 3 views.

Your work can be created in whatever 3D software you are familiar with and be exported into Sketchfab for judging. Note: You should be familiar with uploading FBX files Sketchfab and ensuring your animation and lighting is optimized.

Design Brief

This year you will model, UV, texture a crown with a sculpted coat of arms and a realistic case for the crown based on the game Greedfall King's Quest. The case will animate opening to reveal the crown.   You will also create a "King's Quest" like section of background for your case that provides context.

Assets to create:

Model 1: an ornate antique cabinet or case for the crown that has 2 hinged doors that open to reveal an object

Model 2: an ornate royal crown that is revealed when the doors to the cabinet are opened. The crown should display a sculpted crest, have gems and jewels and be made from metal, glass and fabric.

Background Context: Model enough wall and ground plane or props to establish location and setting.

Concept Art: Computer software such as Photoshop should be used to complete a PNG image containing the finalized designs. You may use Substance Painter or similar software for textures.

Exported Models: Competitors are required to illuminate their model and export to Sketchfab Finished models should not exceed the limit of 6000 polygons. Efficient distribution of edges, polygons and vertices will be examined during judging. Texture maps for the model should be created in Photoshop or similar software. No texture map should exceed a pixel resolution of 1024 x 1024. Texture files and names must follow a standard naming convention. Competitors should make maximum use of the texture maps so its pixels are not wasted. Multiple texture maps should be incorporated into materials or shaders which are applied to the competitor's model. The finished artwork should be UV unwrapped to distribute pixels evenly and efficiently over the surface of the models.

Competitors are required to illuminate their model and export it to a Sketchfab. It should be viewed from a fixed camera position and be able to be rotated in 360-degree rotation Models, maps and materials should conform to the design specification and art style defined in this brief.

All work is to be created onsite. No files, rigs, materials can be brought in or accessed onsite.

Internet Use: You can use the internet for research but not for downloading files or rigs or to communicate with any coaches. You are not permitted to communicate with your coaches or tutors during the competition hours.

SCNS Prerequisites

- Attend a public or private recognized post-secondary institute.
- Be registered as a competitor with Skills Canada – Nova Scotia;
- Possess Canadian citizenship or Landed Immigrant status and be a resident of Nova Scotia. Competitors are responsible for verifying this information, if requested; Note: International students are eligible to compete in the Nova Scotia Skills Competition, however they are not eligible to advance to the Skills Canada National Competition. International competitors will be required to sign an additional release form acknowledging.
- Have completed and submitted a signed release form or submitted by a parent or guardian if under the age of 19.
- Have completed and submitted a signed covid-19 release form or submitted by a parent or guardian if under the age of 19.
- Provide proof of vaccination for Covid-19 either prior to the competition day or at the registration desk upon entering the competition location

EQUIPMENT, MATERIAL, CLOTHING

The 3D Game Art competition will be BYOD, (Bring Your Own Device for each competitor.) No equipment will be supplied.

This is the suggested Hardware Requirements:

- Intel Graphics Workstation i7 Quad Core Processors
- 1 TB HD
- 16Gb RAM
- Dedicated video card (suggested 2GB) as approved by Autodesk
- Flat Panel Display 1920 X 1080
- Sound card
- Operating System –Windows 10 or Mac OSX
- WiFi enabled computer system.

Suggested software:

- 3D Software: 3D Studio Max, Maya, Blender.
- 2D Software: Adobe Photoshop or Illustrator. Autodesk Sketchbook. Krita, Clip

Studio or GIMP, Zbrush, substance painter.

- Viewing Software: VLC
- Additional Equipment and material suggested.
- Tablet and driver (Driver compatible with your system)
- Headphones
- Pencils and erasers
- Required clothing (Provided by competitor)
- No special requirements

SAFETY REQUIREMENTS

List of required personal protective equipment (PPE) provided by competitors
No (PPE) required.

ASSESSMENT

Point breakdown

Follow design brief specifications	5
Create 2 detailed labelled model sheets with 3 views of each of the two models. (Created prior to contest and submitted at beginning of contest as PNGs. Model sheets should be a minimum of 2000 x 1200.	10 Submitted at start of contest
Modeling: Model 1: an ornate antique cabinet or case for the crown that has 2 hinged doors that open to reveal an object (see 4)	10
Model 2: an ornate royal crown that is revealed when the doors to the cabinet are opened. The crown should display a sculpted crest, have gems and jewels and be made from metal, glass and fabric.	10
Background: Model enough wall and ground plane to provide context for your models.	10
Unwrap uv's for the crown and cabinet and background.	10
Texturing all models	20
Rigging and Animation: Rig and animate the doors to the cabinet opening using animation principles	15
File Management: Organize your files and textures for export to Sketchfab	5

Upload: Upload your files to Sketchfab and test 15 minutes prior to the end of competition. Provide link to judges	5

ADDITIONAL INFORMATION

Consecutive translation

If consecutive translation is required on site, the Skills/Compétences Canada Provincial/Territorial offices must advise Skills/Compétences Canada National Secretariat a minimum of 1 month prior to the competition or this service might not be guaranteed.

French Software

If you require French software, you must bring it to the competition.

Test Project change at the Competition

Variations in the design brief may be given onsite to test competitors' creativity.

Tie (No ties are allowed)

In the event of a tie, the team with the highest score in the Modeling will be declared the winner. If there is also tie in Modeling, then the highest score in the UV and texturing will be declared the winner.

Competition rules

Please refer to the competition rules for the Skills Canada National Competition

FAQ:

What do I design?

 Competitors will be given written descriptions of game assets and a description of the game world to which it belongs.

What do I create?

By the end of the 6 hour event, you will create 3D models mapped with texture maps created during the competition exported to Sketchfab.

What happens if my work does not adhere to competition specifications?

Work that does not conform to or exceeds the specifications described in the design brief will not be judged and will be disqualified.

How much time do I have?

During the 6-hour competition, all tasks must be completed by the end of the competition.

Can I use my own files?

Competitors are not permitted to bring their own files, rigs, materials, or maps for use during the competition

Can I use the Internet as a resource?

Competitors can use the internet for general help or reference during the competition but may not receive online coaching.

Can I use my own tools?

Digital Drawing tools such as tablets are permitted. If competitors bring their own tablet, please bring your tablet drivers to the competition. Contestants will responsible for installation and troubleshooting their devices.

Can I use my cell phone during the competition: During the competition your may use your cell only for listening to music or as an emergency resource.

What software should I use?

Remember you are providing your own computer and software. It is suggested that you use 3D software that you own such as Maya, Blender, 3DS Max. Competitors need 2D software such as Adobe Photoshop or Krita. Competitors are responsible for their own IT support so ensure that everything works in advance.

Do I need to stay in the competition area the whole time?

Yes, during the competition all competitors must remain within the proximity of the competition area, as specified by the National Technical Committee

Can I communicate with my coaches, friends, and family during the competition?

Communication with non-competitors is not permitted during the competition through any means. (i.e. Cell phones, text, email)

SCORESHEET

A) Followed Design Brief specifications	5%
Model Sheets follow design brief specifications.	1__ 2__ 3__ 4__ 5__
B) Model Sheets of crown and cabinet (submitted at beginning)	10%
Model 1 sheet • Digital sketch is clearly labelled and illustrated in 3 views • Digital painting demonstrates perspective and proper proportion • The final concept features blending/smoothing to represent form of the object • Shading techniques employed Model 2 sheet • Digital sketch is clearly labelled and illustrated in 3 views • Digital painting demonstrates perspective and proper proportion • The final concept features blending/smoothing to represent form of the object • Shading techniques employed	1__ 2__ 3__ 4__ 1__ 2__ 3__ 4__
C-1) Model 1	10%

• Similar to model sheet • Meets triangle budget • No N-Gons present • Chamfered edges on any 90-degree edge • Model's distribution of triangles is even across fixed areas and concentrated for areas of deformation and detail. • Edgeflow follows the topology of the object	1__2__3__4__5__6__
C-2) Model 2	10%
• Similar to model sheet • Meets triangle budget • No N-Gons present • Chamfered edges on any 90-degree edge • Model's distribution of triangles is even across fixed areas and concentrated for areas of deformation and detail. • Edgeflow follows the topology of the object	1__2__3__4__5__6__
C-3) Background Model	10%
• Similar to model sheet • Meets triangle budget • No N-Gons present • Chamfered edges on any 90-degree edge • Model's distribution of triangles is even across fixed areas and concentrated for areas of deformation and detail. • Edgeflow follows the topology of the object	1__2__3__4__5__6__
D-1) UV Unwrapping	12%
Model 1 UV unwrapping • Demonstration of UV unwrap tools: model has been unwrapped correctly	1__ 2__ 3__ 4__

• Smooth and even UV shells: major asset has separate UV shells that represent understandable elements of the model • Use of UV Spacing to maximized texture sheet use without bleeding. model has very little negative space • Model repeats UVs or mirrors them where possible	
Model 2 UV unwrapping • Demonstration of UV unwrap tools: model has been unwrapped correctly • Smooth and even UV shells: major asset has separate UV shells that represent understandable elements of the model • Use of UV Spacing to maximized texture sheet use without bleeding. model has very little negative space • Model repeats UVs or mirrors them where possible	1__ 2__ 3__ 4__
Background UV unwrapping • Demonstration of UV unwrap tools: model has been unwrapped correctly • Smooth and even UV shells: major asset has separate UV shells that represent understandable elements of the model • Use of UV Spacing to maximized texture sheet use without bleeding. model has very little negative space • Model repeats UVs or mirrors them where possible	1__ 2__ 3__ 4__
D-2) Texture Mapping	18%
Model 1 texturing • Base shaders and tones represent the model successfully • Surface Textures describe materials correctly. The appropriate materials have been created for the textures, skin on skin, metal on metal etc.	1__ 2__ 3__ 4__ 5__ 6__

• Texture looks seamless on model, no obvious joins or break in texture. • Texture is consistent with model sheet, textures conform to the overall art style of the project • A variety of physical materials have been represented, e.g. wood, plastic, metal, fabric, skin, hair • Multiple maps have been used, Normal, transparency, etc	
Model 2 texturing • Base shaders and tones represent the model successfully • Surface Textures describe materials correctly. The appropriate materials have been created for the textures, skin on skin, metal on metal etc. • Texture looks seamless on model, no obvious joins or break in texture. • Texture is consistent with model sheet, textures conform to the overall art style of the project • A variety of physical materials have been represented, e.g. wood, plastic, metal, fabric, skin, hair • Multiple maps have been used, Normal, transparency, etc	1__ 2__ 3__ 4__ 5__ 6__
Model Background texturing • Base shaders and tones represent the model successfully • Surface Textures describe materials correctly. The appropriate materials have been created for the textures, skin on skin, metal on metal etc. • Texture looks seamless on model, no obvious joins or break in texture. • Texture is consistent with model sheet, textures conform to the overall art style of the project • A variety of physical materials have been represented, e.g. wood, plastic, metal, fabric, skin, hair • Multiple maps have been used, Normal, transparency, etc	1__ 2__ 3__ 4__ 5__ 6__

E) Rigging & Animation	15%
- The model has been rigged for animation - Animation shows slow in slow out - At least two animation principle can be seen - The animation loop is appropriate for the intention/item - The animation loop plays smoothly without skips	1__ 2__3__4__5__
F) Uploading to Sketchfab & file management	10%
- Logical naming conventions are used for objects, files and textures - Models open and view without errors - Animation is working in Sketchfab - Final product is enhanced with sketchfab's lighting - File is properly submitted on time to competition	1__ 2__ 3__4__5__
TOTAL	**100%**