2023 Provincial Skills Canada Competition

Pre-Release Project

EVENT: 3D Digital Game Art	**LEVEL:** Secondary
EQUIPMENT DROP OFF MAY 2: 5:00PM – 6:00PM **EQUIPMENT SET UP AND TESTING** MAY 2: 7:30PM – 8:30PM	**LOCATION:** Hall B Edmonton Expo Centre, Edmonton
COMPETITION START & END TIMES: **MAY 3:** 8:00 AM – 4:30 PM **MAY 4:** 8:00 AM – 1:00PM (Detailed schedule below)	**REGIONALIZED:** NO
DURATION: 13.5 hrs. (2 days)	**WORLD SKILLS TRADE #:** 50

3D Digital Game Art 2023 Overview:

This pre-release project is intended to give you an idea of what to expect for the two-day competition. Please see the Contest Description for more details.

During this competition, you will be challenged with 6 modules to demonstrate your skills. Each module will be judged independently and is independent of the previous module, with the exception of the final module. Each module will have a distinct submission requirement. For the final module, you will combine your results from each of the modules to create a final scene. The modules will allow you to demonstrate:

1. Your ability to create a reference board based on a design brief.
2. Your ability to model a hard surface object and a sculpted organic object
3. Your skill with UV unwrapping
4. Your ability to surface models
5. Your skill to prepare a model for games, animation or film (retopology)
6. Your ability to combine files and publish them on a platform.

The two days of competition will be broken into modules for a total of 13.5 hours.

Day 1 will start with a modelling module followed by a UV mapping module. Any additional time is to be used to create the surroundings for your final export.
Day 2 will start with a surfacing module (including retopology) and finish with an exporting (rendering) module. You are asked to complete the concept art/reference board module prior to the contest and arrive with the concept art.

The game art you will create for these challenges will be styled after the dark fantasy aesthetic of the well known game, Elden Ring. The look you go for is up to you and your comfort with creating details and design. Stylized elements are easier to create and can still pop in a scene. Photorealistic elements are challenging, but really shine in a game such as Elden Ring.

A detailed design brief will be provided at the beginning of the contest. The brief will detail the required models and surfaces required.

Here are examples of assets you may be asked to create:
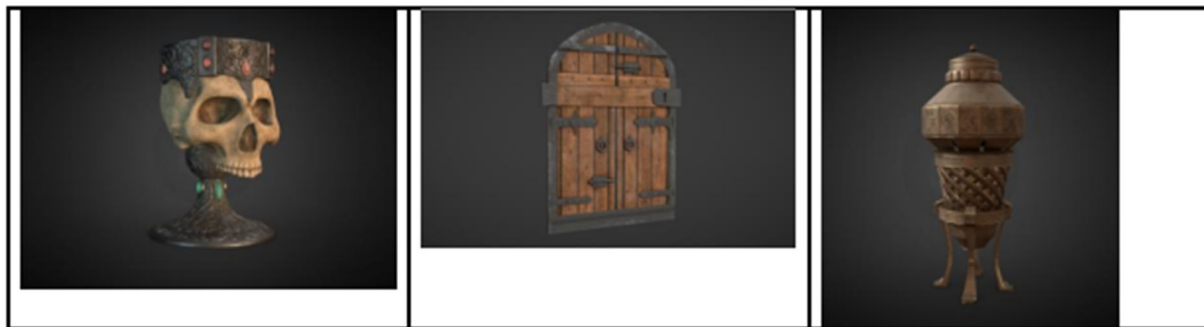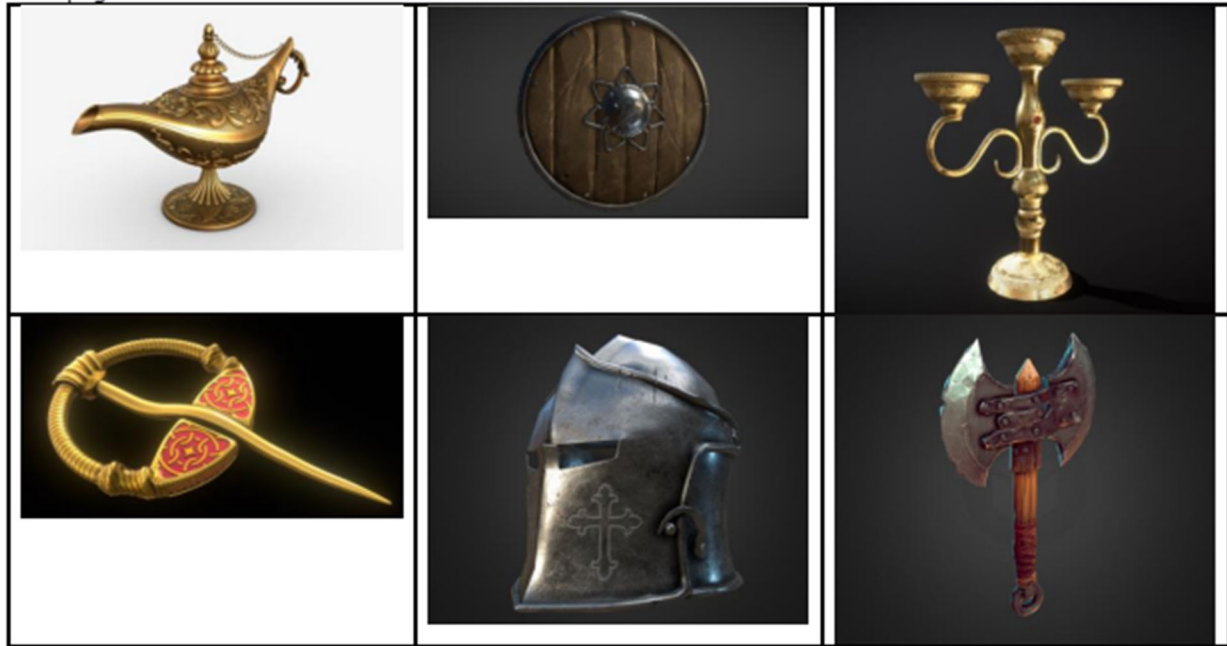
Modules

Module 1: Concept Art

The first module will test your ability to create and/or seek effective concept art related to the design brief presented. You are tasked to generate a reference board for a "Treasure Room" within a fantasy style dungeon. Your chosen images must demonstrate your understanding of perspective, shading, and proportion to illustrate the interior of the Treasure Room.

Concept Art Design Brief

Hidden deep in the layers of a dangerous and dark dungeon, lies the mysterious vault of stolen treasures. This room features sturdy grey stone walls. The bricks and cobblestones of the walls and floors are hewn from the same granite stone material. The door is constructed from heavy black iron and wood.. The room is dimly lit by torches mounted to the walls. The torches are mounted to the walls with black iron brackets. Within the chamber, there is a large chest sitting at an angle atop a pile of loose treasure. The pile of treasure is a mix of gold coins, and colourful jewels. The locked chest itself is very sturdy, constructed of heavy wood panels and iron metal braces. It features some decorative elements in the form of gold accents and runes hammered into the iron. There is a fortified lock built into the front of the chest.

Submission Guidelines

- Digital images compiled in multiple image documents (original (PSD or other to demonstrate file organisation)
- Images are in a large enough resolution to clearly see the details that will be used for your project. This means you will likely need multiple boards!
- Submissions will be collected by PTC members at the beginning of day 1 of the contest. (Communication systems will be explained on Day 1)

Module 2: Modelling

You will be modelling two assets for this module. Competitors will be provided with a detailed design brief on the day of the contest for each item noted below. For the practice project you are to generate ideas and gather references that could be used for the competition.

- Item 1 (hard surface modelling) - Competitors will model a solid surfaced item. UV mapping is not required for this module. The model will only require materials like glass and metal. The required item is a **treasure chest**.

- Item 2 (sculpting) Competitors will be challenged to model an intricate sculpted object. No UV mapping required. The model will only require basic materials to demonstrate potential color use. The required item is the **Skull Chalice.**

  Note: There is a reference provided in this document for this object to provide a solid practice point, however, the required model will be different for the competition.

Modelling Guidelines
- Appropriate distribution of polys
- No Ngons
- Clean unified geometry
- Designs conform to the design brief

Module 3: UV Mapping

All competitors will be provided with the same unmapped model (FBX format) by the PTC. Competitors will create a UV map within their chosen 3D software. Submission of the UV map is required for judging.

UV Mapping Guidelines
- UV Unwrap the objects provided. UV unwrap should cause as little distortion as possible to the wireframe and keep seams to a minimum. Note: Distortion of polygons should be kept to a minimum.
- Create UV Map appropriate to the model and professional standards.

Module 4: Surfacing & Retopology

All competitors will be provided with the same model to retopologize and surface. The competitors will have to generate simple UV maps for texturing. Auto UV mapping tools are permitted during this module. Competitors will use their preferred tools to create detailed surfaces. Surfaces and textures are expected to follow the design brief that will be provided on the day of the contest.

For this practice project you will need to provide your own models. Use a sculpted model to retopologize, UV, and then import into your surfacing software of choice. Use your best judgement for texture components, but review the guidelines to support your workflow.

Surfacing Guidelines
- The art style for these assets is inspired by games such as Elden Ring and Dark Souls. Materials and maps should use a PBR workflow. A stylized look is encouraged as it is easier to achieve and provides more freedom, however to show mastery in your surfacing skills you could attempt a photorealistic look.
- Base shaders and tones represent the model successfully
- Maps are baked and then exported to represent materials correctly. The appropriate maps have been created for the objects. Maps look seamless on model, no obvious joins or break in texture.
- A variety of physical materials have been represented
- Multiple PBR maps have been used (normal, transparency, etc)

Module 5: Exporting & Rendering

- In addition to the final presentation, ensure you have exported the individual assets as explained in each module at the end of each module.
- For the final module, competitors must combine all of the required assets into a complete scene. For the practice project you must utilize all the components you created within a treasure room scene. You may need to model a background to suit the items you generated.
- Prepare the scene, lighting, composition, and post processing effect settings in your chosen renderer and render out a 1600 x 1600 .JPG image of your treasure room. Ensure all required components are shown and well staged. Provide 3 different views of your space.

Questions?

Please contact Kennedy Mayer at kennedym@skillsalberta.com if you have any questions regarding the Pre-release Project.

COMMITTEE MEMBERS
Chair - David Brown

UPDATES

Date	Description
Mar 23, 2023	- Adjusted modelling section to be more specific regarding the required items. Allows for practicing the forms that could be used, however the true design is still unknown and will be provided the day of competition. - Formatting adjustments for readability. - Adjusted Day 1 description as competitors will need time to create their scene and there should be plenty of time to work on that on Day 1.