XR Design Challenge

Introducing Key Concepts
of
Creating for the
Knowledge Metaverse

XR Design Challenge

Overview:

You have just started a journey of lifelong learning focused on creative applications of digital technology such as simulation content development, 3D modeling for games and simulations, software and hardware systems and other skills including project management and design.

This field of study is very fun and rewarding, but it is also very demanding in terms of being able to manage your time, take initiative to problem solve and find new solutions/better ways of doing things. Another rewarding aspect of this field of study is that you will always be challenged to learn how something works, how to replicate the real world in the digital world or metaverse.

In this assignment, you are faced with the following challenges that, if you can complete them, will help you understand what is involved with creation of all types of virtual games, simulations, training programs, and other skills that determine your success in this field or your ability to apply these skills in other occupations.

This hands-on learning assignment will hopefully help develop your foundational skills related to understanding client expectations, creating quality solutions, and completing a project on time. Please actively engage yourself in this assignment and create the best solution you can that is ready for others to use and meet the client expectations as outlined below.

Outcomes:

As a result of completing this assignment you will....

- ○ Experience and engage in learning how to create using a new development application with limited instruction
- ○ Experience and design a metaverse application based on meeting client expectations
- ○ Develop and build upon an understanding of fundamental requirements for developing a 3D asset for use in multiple applications
- ○ Experience and engage in presenting your solutions to your peers or clients for review and approval
- ○ Experience and create applications using mixed media such as audio, video, 3D assets, documents or others external content.
- ○ Experience and create presentation solutions using video and live presentations

Challenge:

Today is your first day as a developer, modeler, or content creator for a simulation and game design company. You are tasked with creating an XR experience application for a very important client who conducts education and workforce training in the global market. Getting a contract with this client is extremely important to your company and there are others who are competing for this contract.

Your task will be to review the customer expectations and select one of the subject areas to create a proof of concept application within the next two days, review that project and then present it to the client and company leaders in both live and video format.

Fortunately, in this case, you have flexibility to choose the content, lesson topic, logic and flow of the experience along with the topical research required. In order to succeed, you must make a complete, meaningful, factual application that meets the stated client expectation and you must present your solution by both video and live demonstration before close of business on the last day.

XR Tasks (Statement of Work):

The following outlines the challenge you have been given by your employer. You can choose your own topic from the selected list, or you can identify a topic of your own interest and choosing, provided you get approval before you begin. The requirements for the challenge are outlined below:

Identify the topic you will use for creating your solution (Anatomy, Animals, Electronics, Health, Mechanical, Forestry, Oceans, Construction, Manufacturing or others)

1. Begin research on your chosen topic and design the application using a flow chart or lesson plan (see link) This step is crucial to make sure the application is meaningful and relevant.
2. Identify Asset(s) required to create the solution
3. Build the application using the EON-XR Platform, which is owned and specified by your employer for this project
4. Create and review the application for completeness and accuracy
5. Create a short video of the application in use to highlight the features applied
6. Present your final solution for review and publish your solution to the platform

Requirements to meet Client Expectations:

Remember your task is to create an application to show a client what is possible in the XR Knowledge Metaverse to help them deliver education and workforce training on a global scale. Therefore you must include all of the following elements that are complete in terms of knowledge content and relevant information. The following are the requirements for this challenge:

1. Set up your profile in the app for your avatar and language
2. Choose a relevant, accurate 3D Asset(s) (Can include an environment)
    ■ You must set a 1:1 scale
    ■ Create a Thumbnail
    ■ Set Home position
3. Create Knowledge Content based on the Complete Asset
    ■ Audio
    ■ Video

- Identify
- Quiz
- 3D Recording and 3D Assessment
- Add a Relevant PDF File
- Add a Relevant Image file

4. Edit and Create Annotations for Main Topical Areas (Minimum of 3 Annotations with Content)
    - Audio (Recorded and Text to Speech)
    - Different Video Sections
    - Identify
    - Locate
    - Quizzes (more than one)
    - Relevant PDF on Annotated Topic
    - Relevant Image on Annotate Topic
5. Publish your completed App to the Library
6. Create a highlight video of your application
7. Other Creative Additions of Your Own Design

Closing

The purpose of this assignment is to introduce you into the sometimes complex and chaotic world of simulation and game design as a developer and team leader. This assignment challenges you to think about content design, how to determine client expectations, asset requirements, using video recordings and sharing content, designing and building a simple proof of concept application and presentation.

Key Questions

1. **What did you learn from this assignment? What was of value to you from this experience?**

2. **What are your observations about 3D assets? What did you notice about certain assets, asset design, annotations?**

3. **What did you find most challenging about this assignment?**

4. **What would you do differently going forward?**

5. **How and where could you apply lessons learned?**

Creating an XR Learning Experience Template

Learning Experience Title:

Topic:

Expected Learning Outcome:
(What should someone know and be able to do after completing this lesson?)

Objective:
(This should be in statement form for inclusion in the XR Learning Experience)

 In this lesson…

Required 3D Asset:

Introduction Script: Complete Asset
(Create a brief introduction to introduce the lesson, lesson topic, or other pertinent information.)

- Audio
- Video Links:
- Identify
- Quiz
- PDF
- Image

3D Recording Control/Assessment Sequence:
(In this space create the script or procedures that you want to highlight about the 3D asset. This includes specific items on the asset that you want to point to, specific additional demonstrations. Primarily this is the script you will record, in real time, as you create the lesson demonstration.)

Annotations:
(In this space, identify the topics that would be covered in each annotation.   The list below provides you with features available for each individual Annotation.) See Video from link: http://www.

New Annotation:
- Audio Script:
- Video Links:
- Identify: Yes No - Correct Spelling
- Locate
- Quiz Question(s)

- PDF Name and Link
- Image Name and Link

New Annotation:
- Audio Script:
- Video Links:
- Identify: Yes No - Correct Spelling
- Locate
- Quiz Question(s)
- PDF Name and Link
- Image Name and Link

References/Sources/Citations
(Please capture the links, sources, and other citations about sources for content here. You must make sure you have permission to use assets, content, and other IP information that you include in your application.)