CCS4361 - Immersive Technology Development – Final Project

Assignment Description

You are tasked with designing and developing a basic AR application that solves a real-world problem or enhances an existing experience. The project should showcase your ability to apply AR technology creatively, and you are free to choose your domain (e.g., education, gaming, entertainment, retail, healthcare, tourism, or any other industry).

Project Requirements

1) Choose an AR Platform: Select an AR platform for development (e.g., ARKit, ARCore, Unity with Vuforia, Spark AR). Your choice should be based on the features, ease of use, and the nature of your project.

2) Define Your Use Case: Identify a specific problem or experience that AR can enhance. Briefly describe the problem you aim to solve or the experience you intend to improve. Examples include:
   - An AR guide for museum visitors.
   - A virtual try-on app for fashion items.
   - An AR-based educational tool to teach a subject.

3) User Interaction Design: Design how users will interact with the AR application. Describe the following:
   - How AR elements will be integrated into the real world.
   - The interactions users will perform (e.g., gestures, touch, voice commands).
   - The user interface (UI) elements that help users navigate the experience.

4) Develop Key Features: Your AR project should include at least 3 key features, such as:
   - Object recognition and tracking (e.g., recognizing a real-world object and overlaying information).
   - Marker-based or marker less AR to trigger AR content.
   - 3D models that interact with real-world environments.
   - Dynamic content based on user inputs or environmental factors.

5) Prototype and Test: Develop a working prototype of your AR application. Ensure that it functions as expected on the selected platform and test it under different conditions (lighting, environment, etc.).

6) Submit Documentation: Along with the project, submit a brief report (2-3 pages) that includes:
   - **Project Overview:** Describe the problem you aimed to solve, your approach, and the AR features you implemented.
   - **Development Process:** Outline the tools used, key challenges faced, and how you overcame them.
   - **User Testing:** Summarize how the app was tested and any feedback received from users.

Deliverables

1) AR Application: A functional prototype demonstrating the AR experience.
2) Project Documentation: A written report (3-4 pages).
3) Presentation: A 5-minute presentation of your project, explaining the concept, design, and implementation.

Submission

Upload the deliverables to your Google Drive and share the link through LMS