Case Study

Lux Art Institute Augmented Reality Art Gallery App

Project Overview

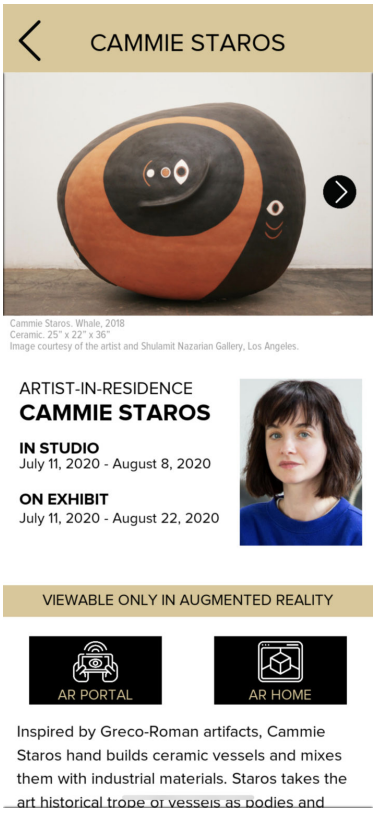
When you can't go to the latest art exhibit, this app brings the gallery home to you. Lux Art Studio wanted an interactive augmented reality (AR) experience for single artwork and gallery showings. ARS used AR to enhance and bring their sculptures, performance artwork, and paintings to life. This custom app allows users to manipulate and view sculptures in the real world or walk through an ancient ruins gallery to visualize and interact with exhibits. See this product demo video (https://youtu.be/NqbpgSrZchQ) to visualize the product created.

Key Features

- High Fidelity Visualizations
- Use the camera snapshot option for photo realistic renderings and pictures. This feature includes shadows, lighting, seamless materials, and post-processing to make your design look like a real photograph
- Multiple art pieces available
- Intuitive user interface
- Innovative add on: ARS made the environment a part of the artwork (underwater). The art pieces were inspired by ancient ruins so throughout the user's experience we modify the environment to appear flooded and ancient.
- VR to use standard finger gestures to view multiple perspectives and positions throughout the exhibit

Challenges and Core Considerations

- The Another Reality Studio project manager began the project with concept evaluation and feasibility. They collaborated with the client on user design, estimating, and planning to create project milestones and a timeline for completion.
- The developer team lead worked with in-house artists to create product models in 3D and depict realistic materials. The developers utilized ARkit and ARcore in Unreal Engine as the AR frameworks to create the app functionalities.
- After project delivery, ARS continued working with the client for maintenance/ support, new projects, and additional feature requests.



- The 3D models were created with 3DS max and Blender, using low-poly optimization techniques. The artists applied UV maps to create seamless materials and separate IDs. They used substance to create physically based rendering (PBR) materials for photo realistic quality
- The 3D models were created using a DSLR camera with photogrammetry. This is the process of taking a series of photos of the subject or object and stitching them together to create accurate 3D models with photo textures.

Impact: The ARS Solution

ARS created a custom app that allows the user to use augmented reality to view multiple sculptures on location. The user can choose between single art piece viewing and virtual gallery touring for unique experiences. The ARS solution allows users to experience the exhibit from their own location or enhances their viewing onsite.