AR Furniture Placement

Enhance online furniture shopping with augmented reality. This project allows customers to visualize furniture in their space before purchasing, reducing hesitation and improving the shopping experience.

Problem Statement

1 Customer Hesitation

Online furniture shoppers struggle struggle to imagine products in in their space, leading to uncertainty.

2 Return Rates

Uncertainty can result in higher higher return rates for furniture furniture retailers.

3 AR Solution

Augmented reality allows customers to visualize furniture in furniture in their environment before purchasing.

Design Elements

Surface Detection

Uses AR plane detection to find flat surfaces for furniture placement.

Furniture Placement

Users tap detected planes to instantiate selected furniture models.

User Interaction

Intuitive button-based UI for selecting selecting different furniture items.

Tools and Technologies

Unity

Primary tool for building the AR application and UI design.

AR Foundation

Unity's AR framework for plane detection detection and user interactions.

C# Scripting

Used for AR logic, raycasting, object instantiation, and touch interactions. interactions.

Execution Instructions

To use the AR Furniture Placement app, make sure your device supports supports ARCore or ARKit. You will also need to install Unity with AR Foundation. Once you have these prerequisites, you can configure the build the build settings for Android or iOS in Unity. After that, build an APK for for Android devices. Finally, transfer the APK to your device, install it, and and launch the app.

Unique Features

Furniture Switching

Switch between furniture items in real-time within the AR environment.

Multiple Placements

Place multiple objects in the same environment for comparison.

Simplified Interaction

Easy tap-to-place functionality for quick furniture visualization.

UI Responsiveness

Prevents accidental object placement when interacting with UI buttons.