CPS 499 Creating Mobile Apps

FINAL Project User Guide (Manitej Ankam)

Shop for Home App (with Augmented Reality)



Introduction

Shop For home is online shopping app which has home decor, furniture and other home utilities. This app allows users to test out their desired product in their home space with the experience of augmented reality using google's ARcore.

This app is being designed to have 5 screens which are as follows:

- 1. Login screen.
- 2. Home screen which has different products represented as cardview.
- 3. Product screen which has the selected product's image and options below as BUY and TRY OUT in AR.
- 4. Camera View with AR model.
- 5. Shopping cart with ListActivity View.

Dependencies Used

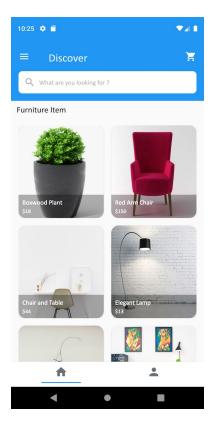
- 1. 'com.android.support:cardview-v7:28.0.0': Used for supporting card view
- 2. 'com.google.ar.sceneform.ux:sceneform-ux:1.10.0': Used for creating and viewing AR assets.
- 3. 'de.hdodenhof:circleimageview:3.0.0': Used for circle image view in the profile section.

User Guide:

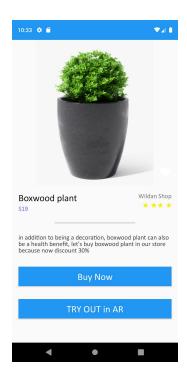
1. Launch the App and Login with these Credentials. (Case Sensitive & No spaces)

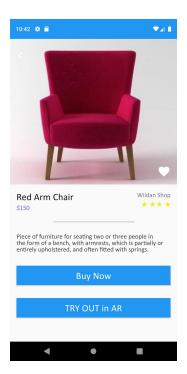


2. Select a product in the home screen.



3. This will take you to product details screen. You can hit BUY or TRY out in AR.



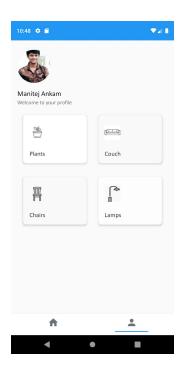


4. If you click TRY OUT in AR it launches the AR fragment class which takes you to the Camera view.





5. You can go to Profile View by coming back to the Home screen and pressing Profile Tab at the bottom.



6. You can view the Shopping cart by clicking cart icon on the home screen of the app. If you click on the list item it takes you to a website using implicit intents.





Note:

- 1. Not all cardViews on the home screen work, I only built layouts for first two of them i.e Boxwood plant and Red Armchair. This is because the AR assets are taking up a lot of space without back-end API endpoint these AR assets and these images save up a lot of space.
- 2. This AR feature only works on devices with Android Nougat or Higher i.e API level 24.
- 3. While trying the AR it will redirect you to Playstore, it will redirect you to install Google AR core app which is important for AR features to work.
- 4. Also try finding a Horizontal surface to try out this AR feature, it is important for this feature to work. You will see a dotted mapping in the camera view when Horizontal surface is found, Until then try moving your device.

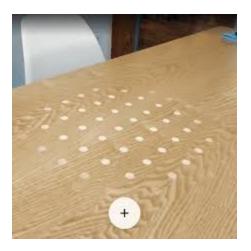


Fig: Just an illustration of detecting Horizontal surface.