



# *FurnitureLand*

AN AUGMENTED AR MOBILE APPLICATION

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# What is your project about?

- ▶ AR-enabled shopping website(prototype)
- ▶ online furniture retailer **FurnitureLand** is introducing an augmented reality feature in its mobile app for Android that will allow customers to visualize furniture in their own home ahead of purchase, just by holding up their smartphone.
- ▶ The feature, called “View in Room 3D,” was previously available on iOS, leveraging Apple’s AR platform ARKit.

- ▶ When the customer(user) wants to buy any furniture and enters(registers) into FurnitureLand web application and chooses the furniture that he likes and further he will be able to find an option called “**TRY ME**” where the access is given to the front and back camera of the mobile phone and thus placing it in an appropriate position an augmented furniture to that place will be depicted. Thus the user can choose whether the furniture is suitable or not.



[https://www.youtube.com/watch?v=4jrhw\\_ZRjV4](https://www.youtube.com/watch?v=4jrhw_ZRjV4)

<https://www.youtube.com/watch?v=IOrlHm1nePA>

<https://www.youtube.com/watch?v=ZDWRI9A1p6s>

# What does your prototype do and how?

- ▶ The idea for using augmented reality apps is simple:
  1. Download the app
  2. Get the marker image/code/flyer
  3. Place the marker in your environment
  4. Point the device at the marker and interact with augmented reality

# What are the challenges for the technical implementation ?

- ▶ Precise **tracking** across large environments to support pixel-accurate registration, both indoors and outdoors, and in all weather conditions, including at night.
- ▶ Once the tracking is perfect then Augmenting the furniture at a proper place is easy.

# What are the challenges for interaction design?

- ▶ Challenge 1: Regression to familiar smartphone interactions
- ▶ Challenge 2: Scene over screen
- ▶ Challenge 3: Three-dimensional objects in a two-dimensional space

# What is your current status?

- ▶ I have installed Unity Application and have downloaded Vuforia in Unity along with all Android SDK.
- ▶ I have created a new project in Unity with 3D features.
- ▶ I have made changes in the configuration by adding the license key of Vuforia and the Web camera is active and working.
- ▶ I am working on tracking of objects and building the prototype.



# Resolution of open questions

- ▶ How to deploy the prototype actually to the android mobile phone?
- ▶ Are there any codes that needs to written and how are they deployed?
- ▶ Does the application works fine for all conditions ?
- ▶ Testing and upgrading