# FurnishARt-An Augmented Reality Based Online Furniture Store

## Background:

The rise of **Augmented reality (AR)** technology has revolutionized the way we interact with digital content, blurring the lines between the virtual and physical worlds. In the context of e-commerce, **Augmented reality (AR)** offers unprecedented opportunities to enhance the online shopping experience by allowing customers to visualize furniture or other products in their real-world environment before making a purchase.

## Introduction:

The proposed AR-Based Online Furniture Store will provide customers with an immersive and interactive shopping experience by integrating AR functionality directly into the online furniture store. Users will be able to view and interact with virtual 3D models of products like furniture and other products in their own physical space, enabling them to make more informed purchasing decisions. The AR-based Online Furniture Store will allow people to use their smartphone or tablet to place virtual furniture models in their living room, bedroom, or any other space they choose. They can then visualize how the furniture will look and fit in their environment, helping them to confidently select the perfect piece for their home.

# Major Modules and their Functionalities:

1. Admin Panel
   1. Creation of 3D Models of each furniture item
   2. Manage crud operations(create, view, edit and delete) on 3D models of furniture
   3. Manage crud operations(add, view, edit and delete) on furniture item which include description, pricing and images
   4. Enable AR mode for visualizing products in real environments, which can be accessible via camera of mobile device
   5. Integration of detailed information and specification of furniture item with 3D model of furniture
   6. Order Management
   7. Manage customer reviews
2. Customer Panel
   1. User registration(sign-up and sign-in, account editing)
   2. View 3D models of furniture items via mobile camera
   3. View detailed information and specification about furniture items
   4. Add to cart the desired furniture items
   5. View recommended furniture according to previous purchase/search history
   6. Place furniture order
   7. Give online payment
   8. feedback

# Benefits:

* **Enhanced User Experience:** AR enhances shopping by providing an immersive experience, boosting engagement and satisfaction.
* **Reduced Returns:** Visualizing products in AR reduces returns by aligning customer expectations with reality.
* **Competitive Advantage:** Implementing AR differentiates the platform, showcasing innovation and customer-centricity.
* **Increased Sales:** AR previews lead to higher conversion rates and sales as customers gain confidence.
* **Improved Brand Perception:** Offering AR technology enhances the brand's image as forward-thinking and customer-focused.