

1. Brand Style Guide

- **Brand Name:** ARFurniture

Logo Concept

A sleek monogram combining “A” and “R” with a minimal furniture silhouette (e.g., chair or table) integrated into the letterforms. Elegant lines and balanced negative space convey sophistication.

Color Palette (Modern, Minimalist, Elegant)

Color Name	Hex	Usage
Charcoal Black	#212121	Primary text, headers, icons
Soft White	#FAFAFA	Backgrounds, card panels
Slate Gray	#607D8B	Secondary text, borders
Warm Taupe	#B39DDB	Accent highlights, CTAs
Gold Accent	#D4AF37	Premium badges, highlights

Typography

- **Headings:** Playfair Display (elegant serif)
- **Body Text:** Lato Regular (clean, modern sans-serif)
- **UI Labels:** Montserrat Medium (geometric, readable)

UI Elements

- **Buttons:** Thin borders with Warm Taupe, filled on hover; corner radius 6 px
- **Icons:** Minimal line icons with Slate Gray strokes, Gold Accent for active state
- **Layouts:** Generous white space, grid-based product galleries

2. AR SDK Integration Details

- **SDK Choice:**
 - **Apple ARKit** (iOS) and **Google ARCore** (Android) for native performance
 - **Unity AR Foundation** for cross-platform development

- **Key Integration Steps:**
 1. **Environment Setup:** Initialize AR session, request camera and motion permissions
 2. **Plane Detection:** Enable horizontal and vertical plane detection for furniture placement
 3. **Model Import:** Load optimized 3D furniture assets (GLTF/FBX) with compressed textures
 4. **Placement Controls:** Tap-to-place, drag to reposition, pinch-to-scale, rotate gestures
 5. **Lighting & Shadows:** Use AR light estimation API to adjust model lighting and cast realistic shadows
 6. **Interaction UI:** Overlay UI controls for “View Details,” “Change Color,” and “Add to Cart”
 - **Performance Considerations:**
 - Use mesh simplification and texture atlasing to maintain 60 fps
 - Lazy-load distant models and unload when out of view
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3. Product Catalogs & Images

Category	Sample Items	Image Requirements
Seating	Armchairs, Sofas, Stools	4–6 high-res angles; include scale reference
Tables	Coffee Tables, Dining Tables, Desks	Top, side, perspective views; material close-ups
Storage	Cabinets, Shelves, Drawers	Open/closed states; interior details
Beds	Platform Beds, Upholstered Beds	Frame detail; mattress optional

- **Image Guidelines:**
 - 2048×2048 px minimum, PNG with alpha channel for AR overlay
 - Consistent neutral background for catalog; full-environment renders for AR preview
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4. Example References

App/Platform Focus**Notable Feature****IKEA Place**

AR furniture placement at scale

True-to-scale 3D models, room capture alignment

Wayfair

AR view for thousands of home items

In-app purchase directly from AR view

Houzz

Home design inspiration with AR capability

Extensive product tagging and ideabook saving