

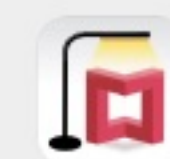
Matterhome

Move Freely. Build Easily. Live Happily.



■ Table of Contents

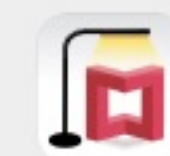
1	Objective	3
2	Concept Exploration	4
3	Ecosystem map	5
4	Value Creation & Market Research	6
5	User Interviews	9
6	Journey maps & Personas	10
7	Prototypes	14
8	Business Canvas Model	23
9	Validation Research	24
10	Appendix	30



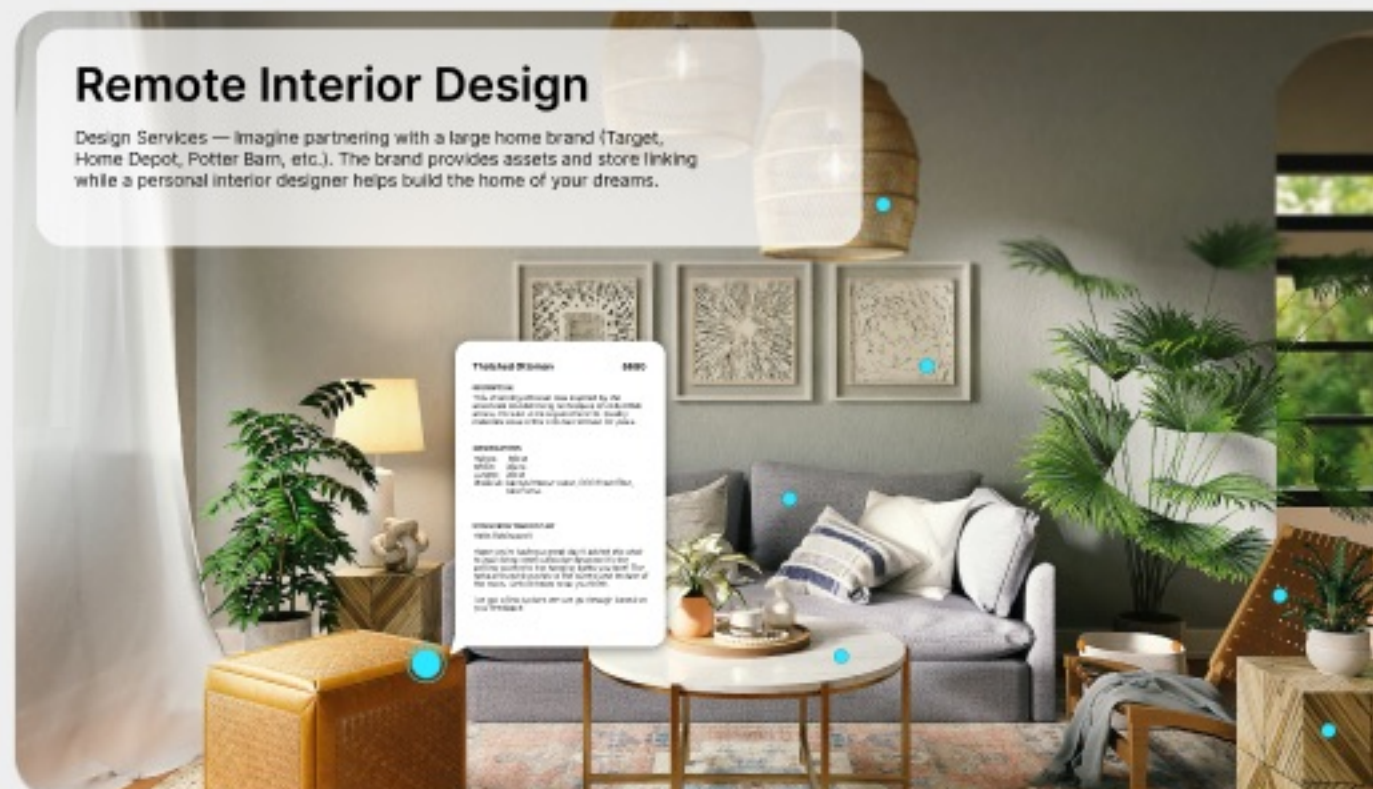
■ Project Objective

Move Freely. Build Easily. Live Happily.

Consumerization of home is discovering how Matterport can be utilized to create value for consumers in the home space, and “become an indispensable, beloved tool for home-owners by keeping their resident comfortable and happy.”



■ Concept Exploration



Product Reviews

Online Shopping

Yacht Charters & Sales

Car Sales Experience

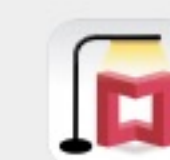
Remote Interior Design

Property Insurance

Airbnb Exploration

Home Efficiency

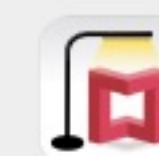
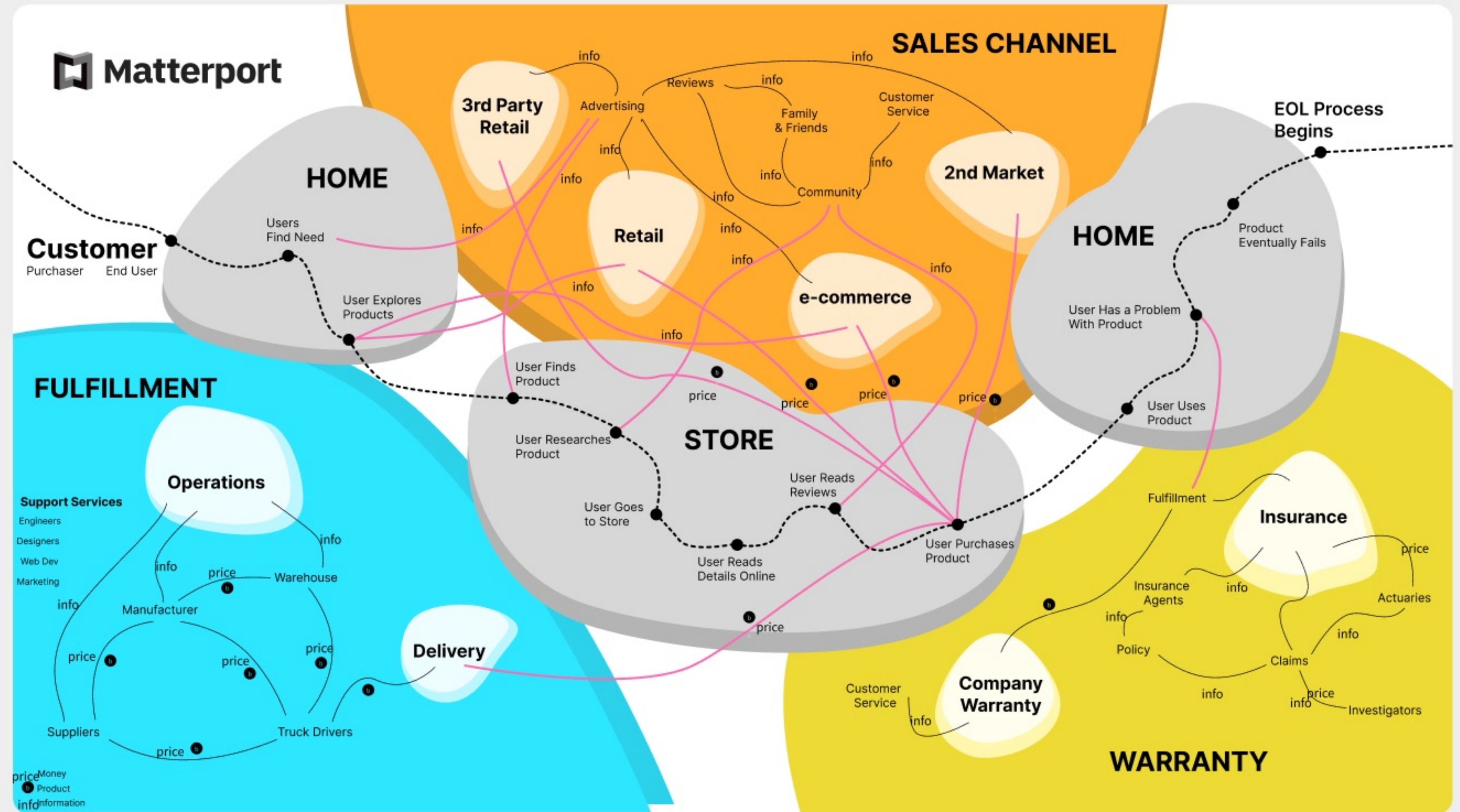
Heating & cooling



■ Ecosystem

Key Relationships

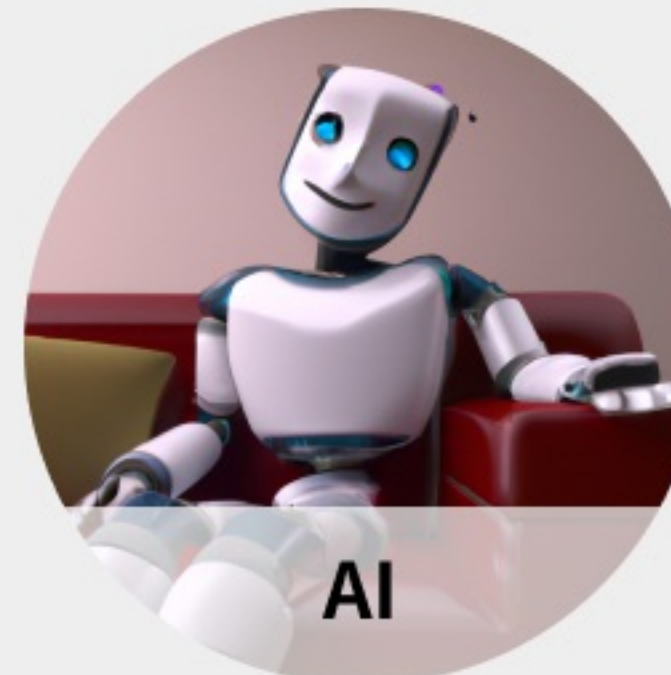
We identified the stakeholders at each level, from underlying technologies like blockchain & AI, to consumers, manufacturers, distributors, designers, and builders.



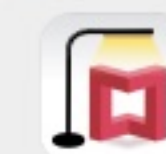
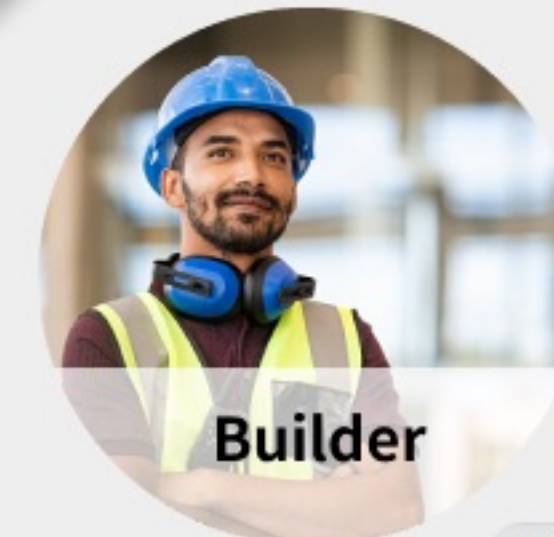
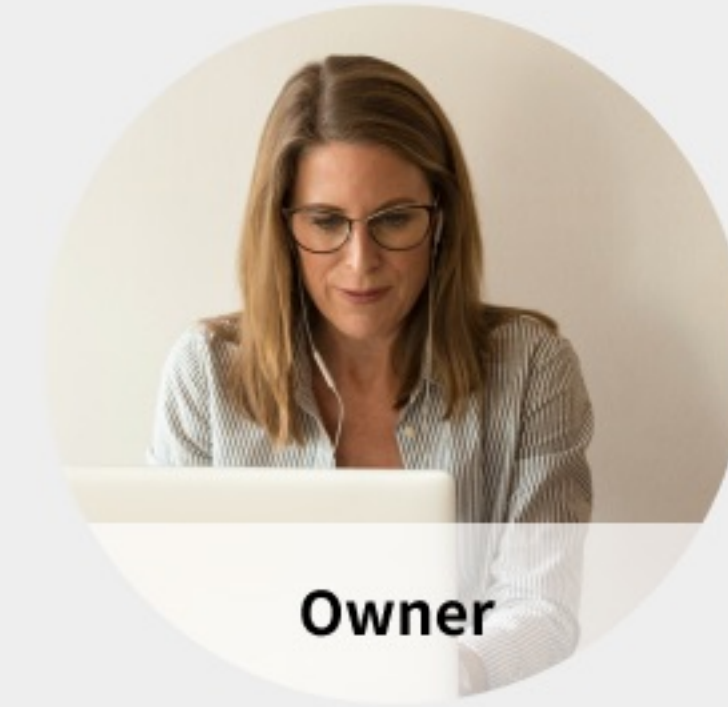
■ Key Players

Narrowing Stakeholders

We identified the stakeholders at each level, from underlying technologies like blockchain & AI, to consumers, manufacturers, distributors, designers, and builders.



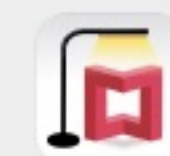
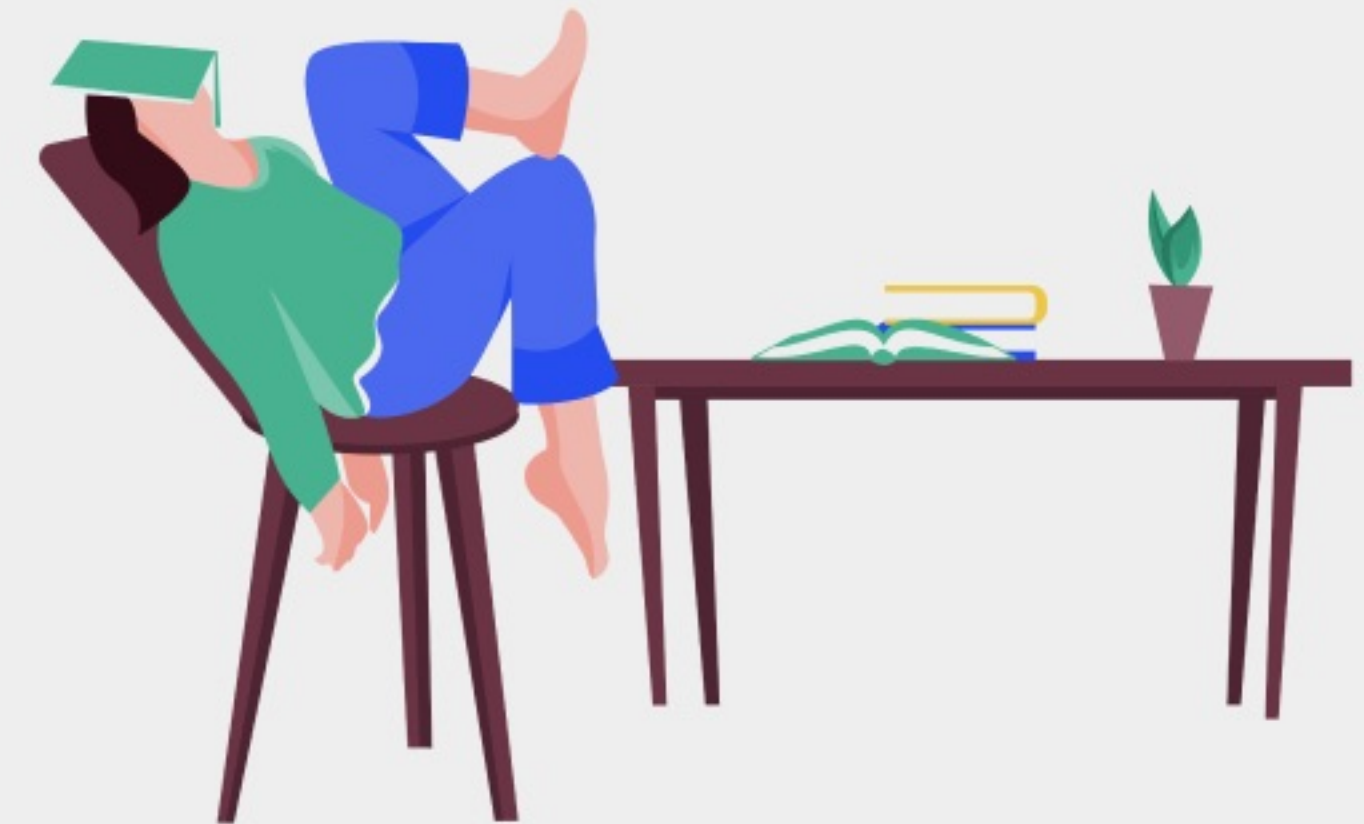
Consumers



MatterHome 6

■ How might we....

Use Matterport technology to empower consumers who would like to furnish or remodel their homes while lowering the complexity, creating visual clarity, and connecting them with professional help when needed to create their dream home?



■ Value Market & Trend Analysis

End Users



	UNDER 18	19-35	36-54	55 +
TOTAL POPULATION	79.0 M	76.3 M	79.8 M	97.6 M
HOME OWNER %	1%	9%	38%	52%
HOME OWNER #	0.8 M	6.9 M	30.3 M	50.7 M
RENTER %	32%	28%	20%	19%
RENTERS #	78.2 M	69.4 M	49.5 M	46.8 M



■ User Interviews

Design Opportunity

User Interview Goals

Understand the process that people follow when moving to a new place (rent or own), identify important decisions, discover pain-points and latent needs in the moving/renovating process.

Hypothesis

- Movers and new home-owners struggle with designing their spaces.
- Users are overwhelmed with the number of options.
- Interior Designers struggle capturing user preferences.
- Interior Designers struggle with conveying their ideas in a user format quickly.

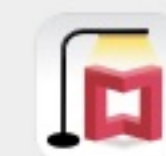
Target Stakeholders

Primary

- Homeowners
- Renter
- Interior Designer

Secondary

- Contractors
- Affiliate Partners
- Government Title Agencies



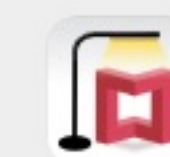
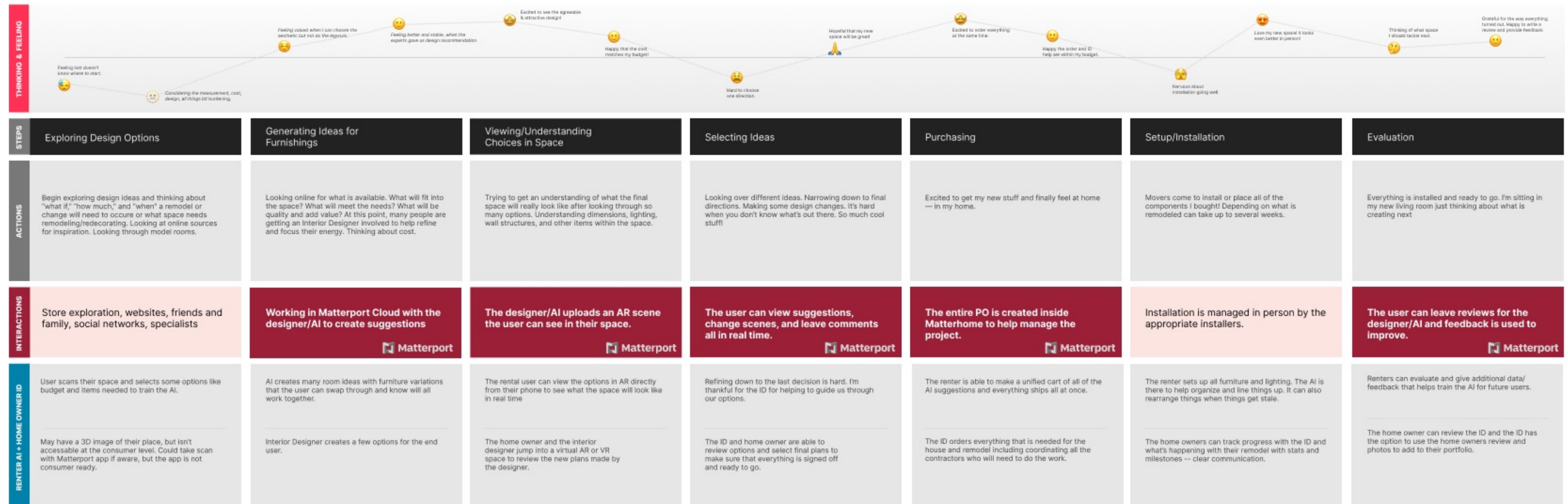
Journey Map

Design Opportunity

Consumerization of Home

Journey Map

To-Be Journey Map



■ DIY Persona



BUDGET

\$2.5K \$5K



HANDINESS

Not Handy

Professional



TECH FAMILIARITY

Tech Aware

Tech Savvy



Steve Wozowski

Meet Steve. He's a software developer from Cambridge that is moving to San Francisco for a new job with Google. Steve is a wiz at code, but doesn't know the first thing about buying a couch. He did most of his shopping for his college room at Ikea and is ready for an upgrade. Steve is very busy and he doesn't really have time to shop. He wants someone to create his space for him.

*A designer sounds nice, but I think this is **temporary**, so I'd rather **save money** and **do it myself**.*

AGE DEMOGRAPHIC

Under 35 representing
9% of US homeowners

INSTALLATION TYPE

Do-It-Yourself representing
17% of US homeowners

PROJECT TYPE

Discretionary representing
30% of US homeowners



■ Established Professional Persona



BUDGET



HANDINESS



TECH FAMILIARITY



Delilah Donahue

Delilah is a consultant for Deloitte. She's moving into a new home and needs to do some remodeling. She has a budget of ~\$40K and has a sense of the aesthetic she likes. Her plan is to remodel and furnish her new home over the next 4-6 months. Between work and her kids' extra-curriculars, she doesn't have time to manage the remodel. She needs someone to refine her designs and manage the project.

*I need someone who **understands my tastes**, makes **great recommendations**, and moves the project **forward**.*

AGE DEMOGRAPHIC

35-54 representing
38% of US homeowners

INSTALLATION TYPE

Professional representing
83% of US homeowners

PROJECT TYPE

Replacement & Discretionary representing
76% of US homeowners



■ Interior Designer Persona



RATE PER HOUR

\$100

\$300

CONNECTIONS

Just Starting

Established Network

TECH FAMILIARITY

Tech Aware

Tech Savvy

Anna Kensington

Meet Anna. She's an interior designer with 5 years of experience. She's starting to really hit her stride with knowing what contractors are the best for different types of work, and has built a strong portfolio that has led to clients finding her. Her day is really hectic between phone calls and site visits. She needs a better way to communicate and scale.

*I love working with residential clients because the space is so **personal**. Delivering **value** means providing a **worry free experience** and I need **good data** to execute.*

AGE DEMOGRAPHIC

20-30 completed projects

4.78 of 5.0 star rating from customers

INSTALLATION TYPE

Professional serving
83% of US homeowners

PROJECT TYPE

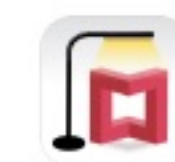
Replacement & Discretionary serving
76% of US homeowners



MatterHome

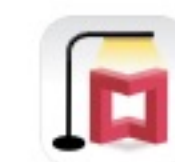
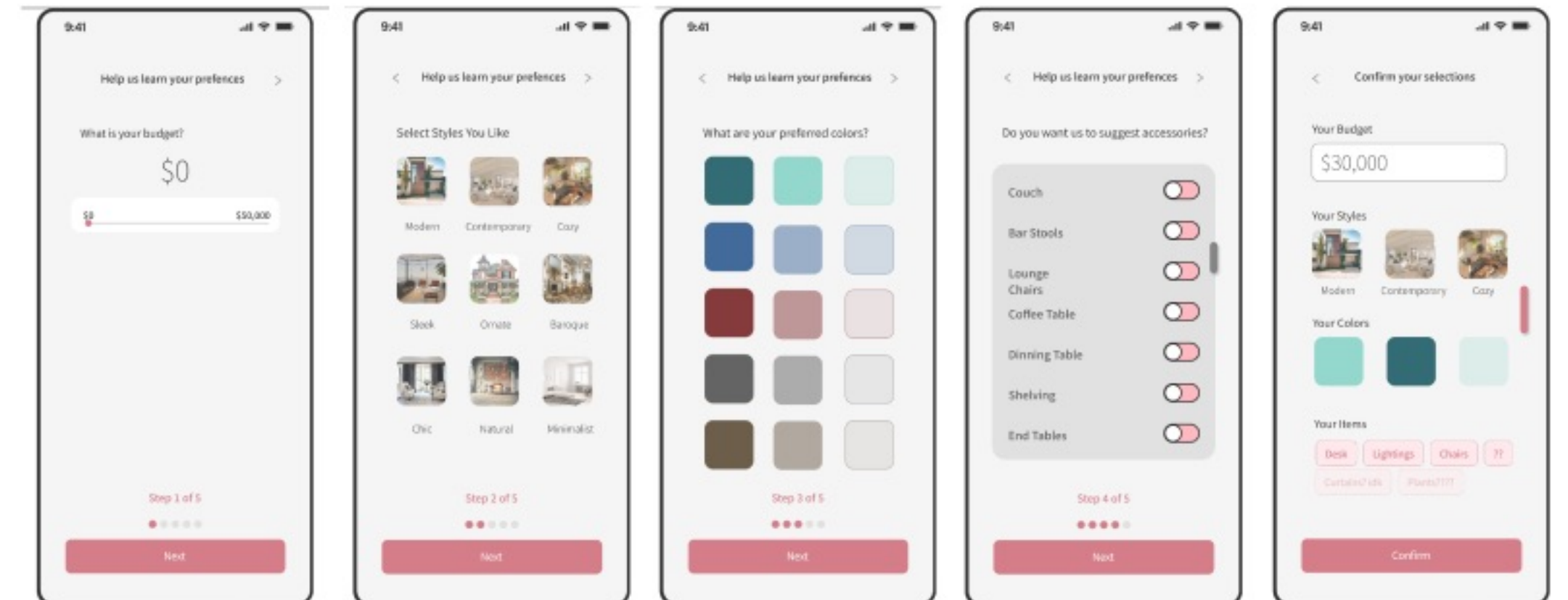
■ How does it work?

Scan the space that needs redecorating or renovating using the Matterhome app to create a 3D Twin.



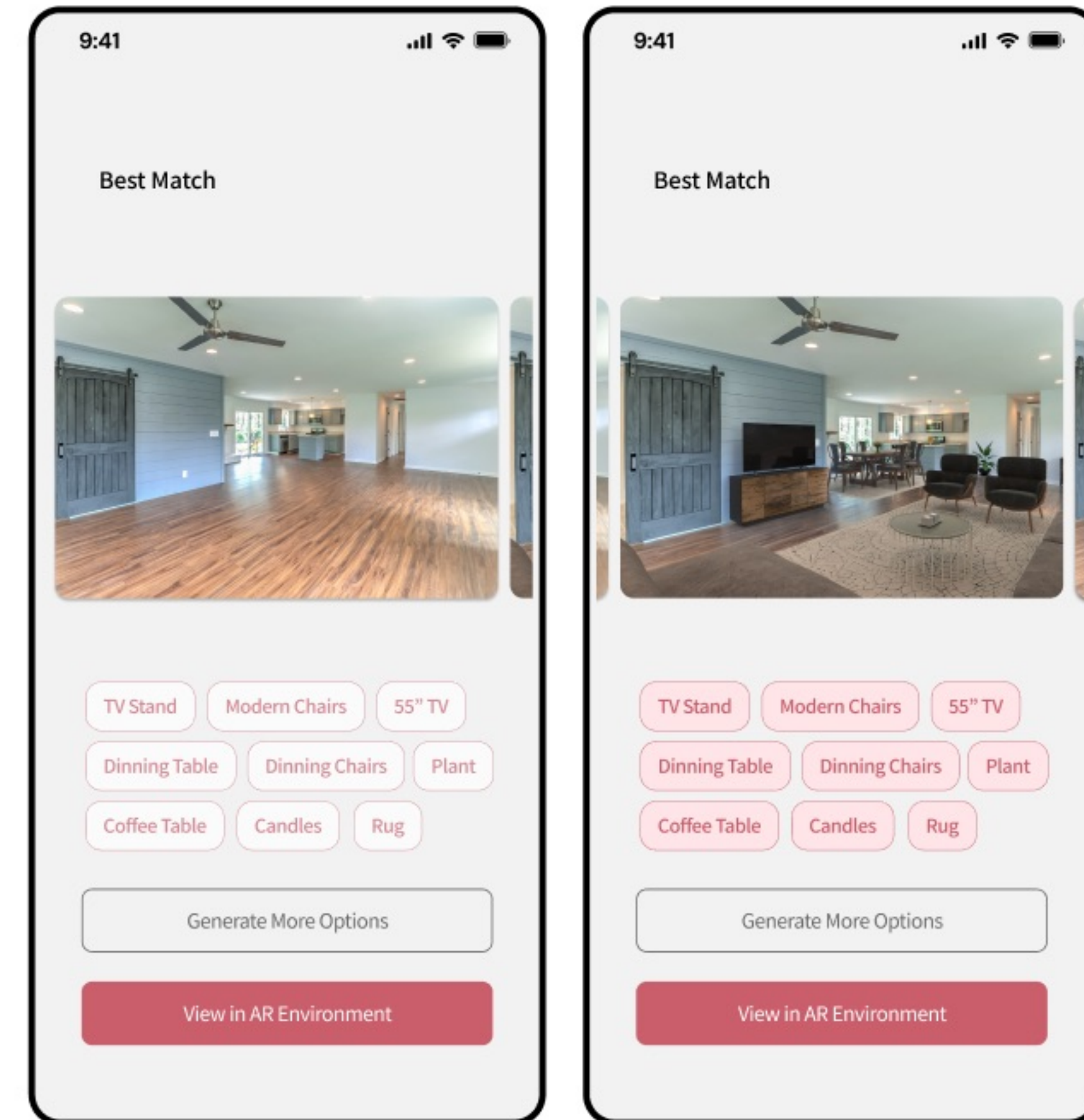
■ How does it work?

Using the **digital twin and AI**, the Matterhome app works with furniture and home decor brands to intelligently fill the space based on the budget and aesthetic questions posed to Steve. Steve needs to train the AI on his preferences, so he enters his budget, provides a style guide from existing photos, chooses his color preferences, and selects some key furnishings. He's shown a quick summary and then sends his information off to the AI.



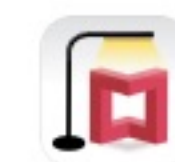
■ How does it work?

The AI sends back an augmented reality file that shows Steve a few options with all of the items it's suggesting placed in optimal locations so Steve can see exactly what his new space will look like all at once.



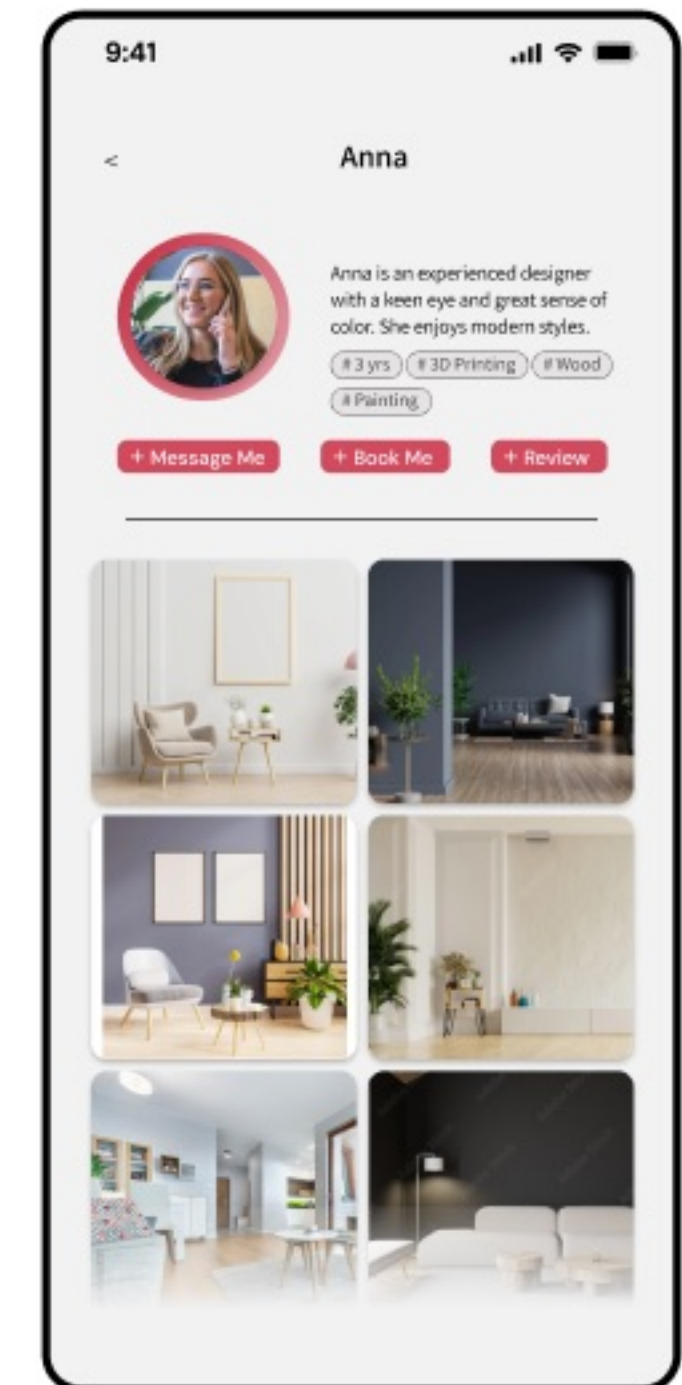
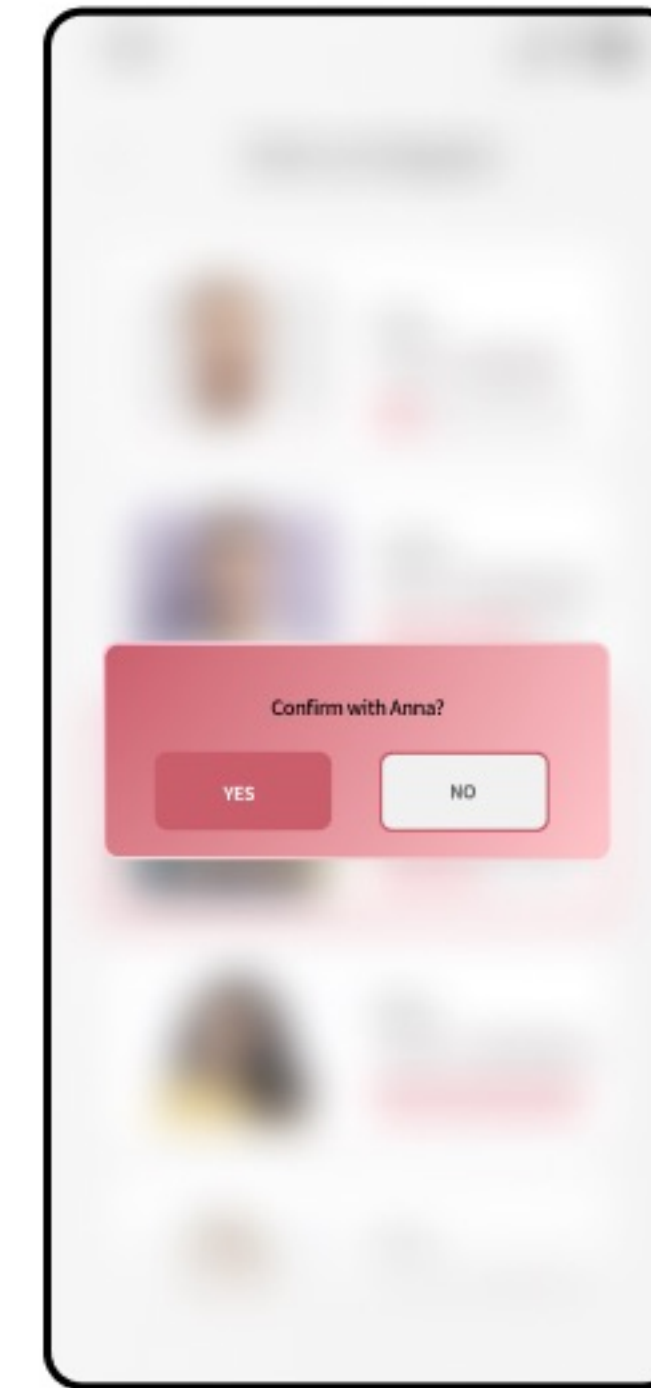
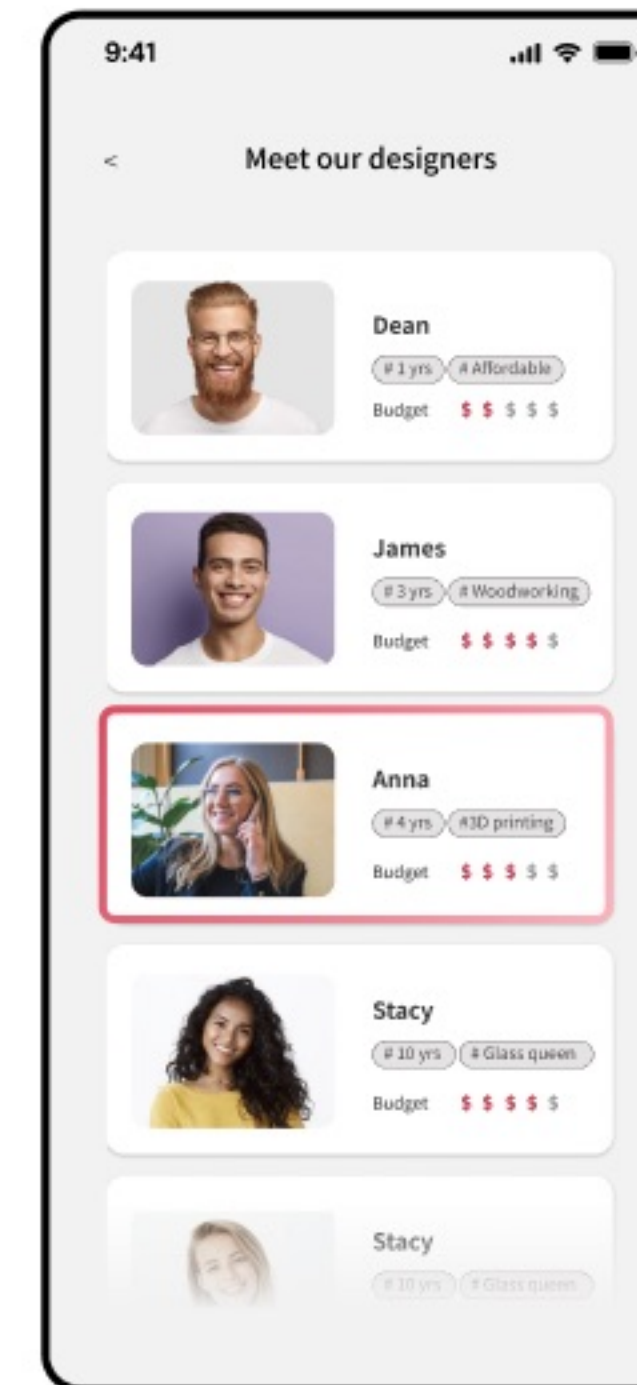
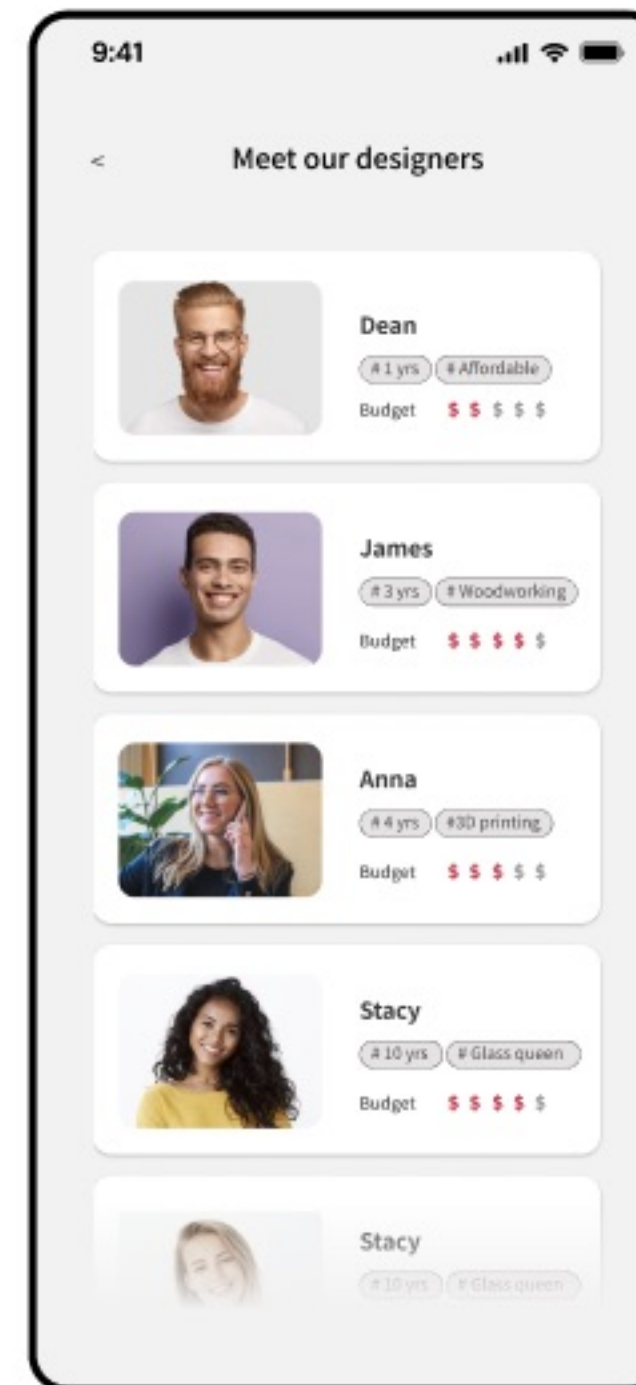
■ How does it work?

After selecting his items, all of Steve's purchases ship to him with the installment plans specified by item and vendor. Matterhome handles the transaction routing and takes an affiliate revenue cut.



■ How does it work?

For Delilah, the process is similar. She can scan her home, or use an existing digital twin, she simply selects her budget, chooses some aesthetic images, and is then given a list of interior designers who are vetted and ready to help. Delilah can look through past projects to ensure its a good fit, then it's off to the races.



■ Design System

Noto Sans JP

Noto Sans JP

Noto Sans JP



Laser

Pantone: 1787 C
CMYK: 0, 90, 45, 0
RGB: 255, 49, 88
HEX : #FF3158



Cherry

Pantone: Bright C
CMYK: 12, 60, 48, 36
RGB: 155, 32, 55
HEX : #9B2037



Moonstone

Pantone: WarmGrey 1C
CMYK: 3, 3, 6, 7
RGB: 245, 244, 243
HEX : #F5F4F3



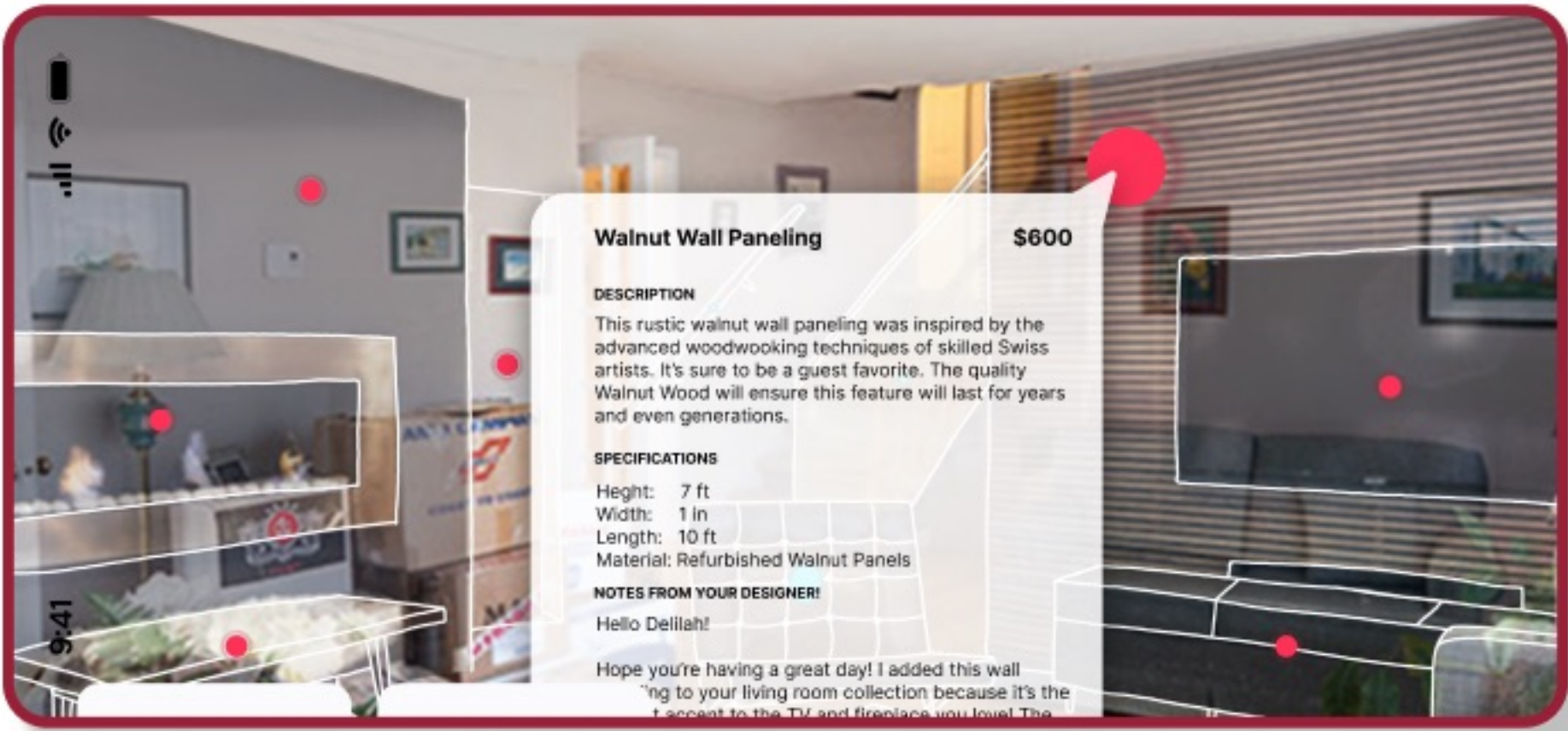
Portal

Pantone: Black C
CMYK: 52, 50, 48, 94
RGB: 34, 34, 34
HEX : #222222



White

Pantone: Black C
CMYK: 52, 50, 48, 94
RGB: 34, 34, 34
HEX : #222222



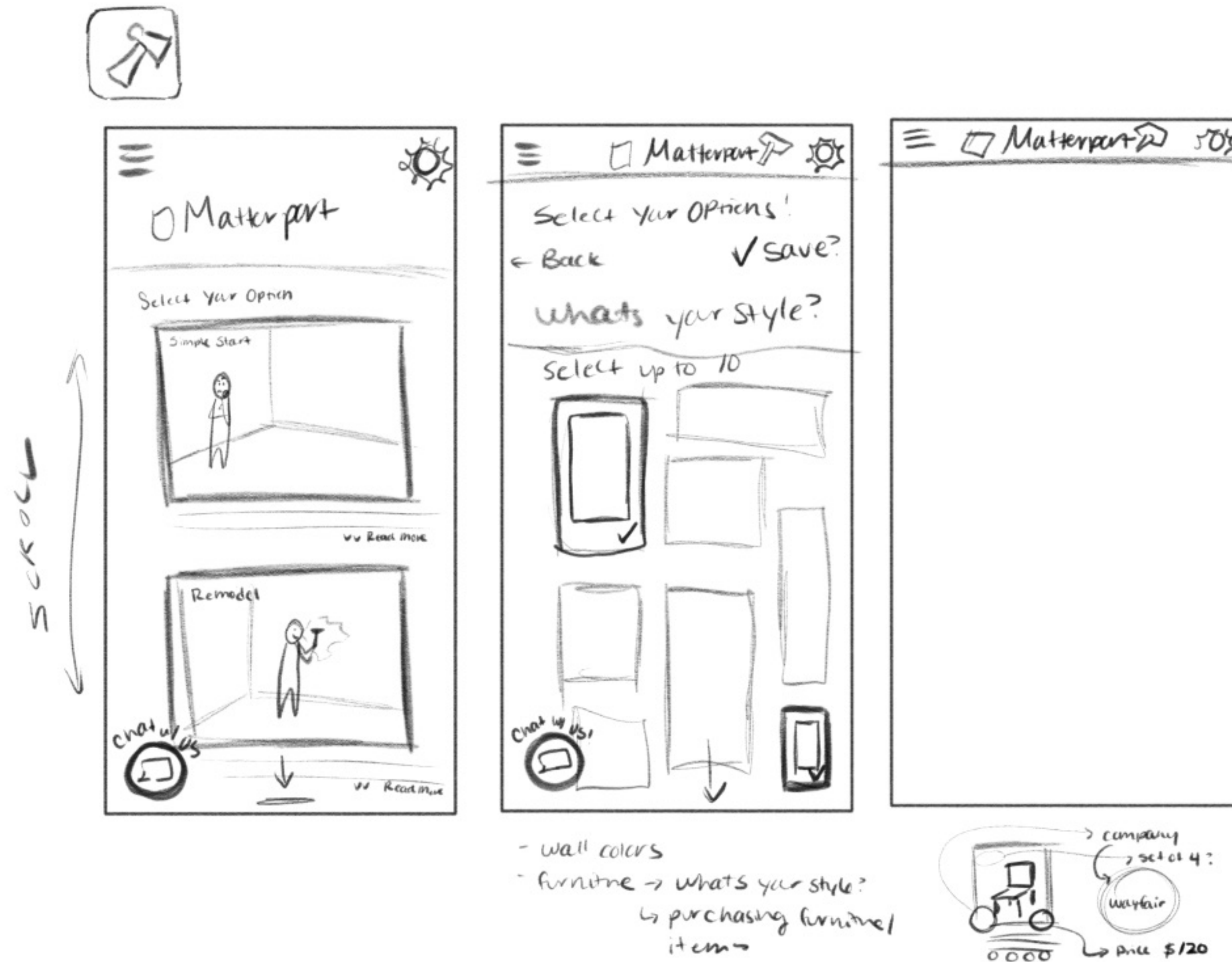
Projects in
Progress State



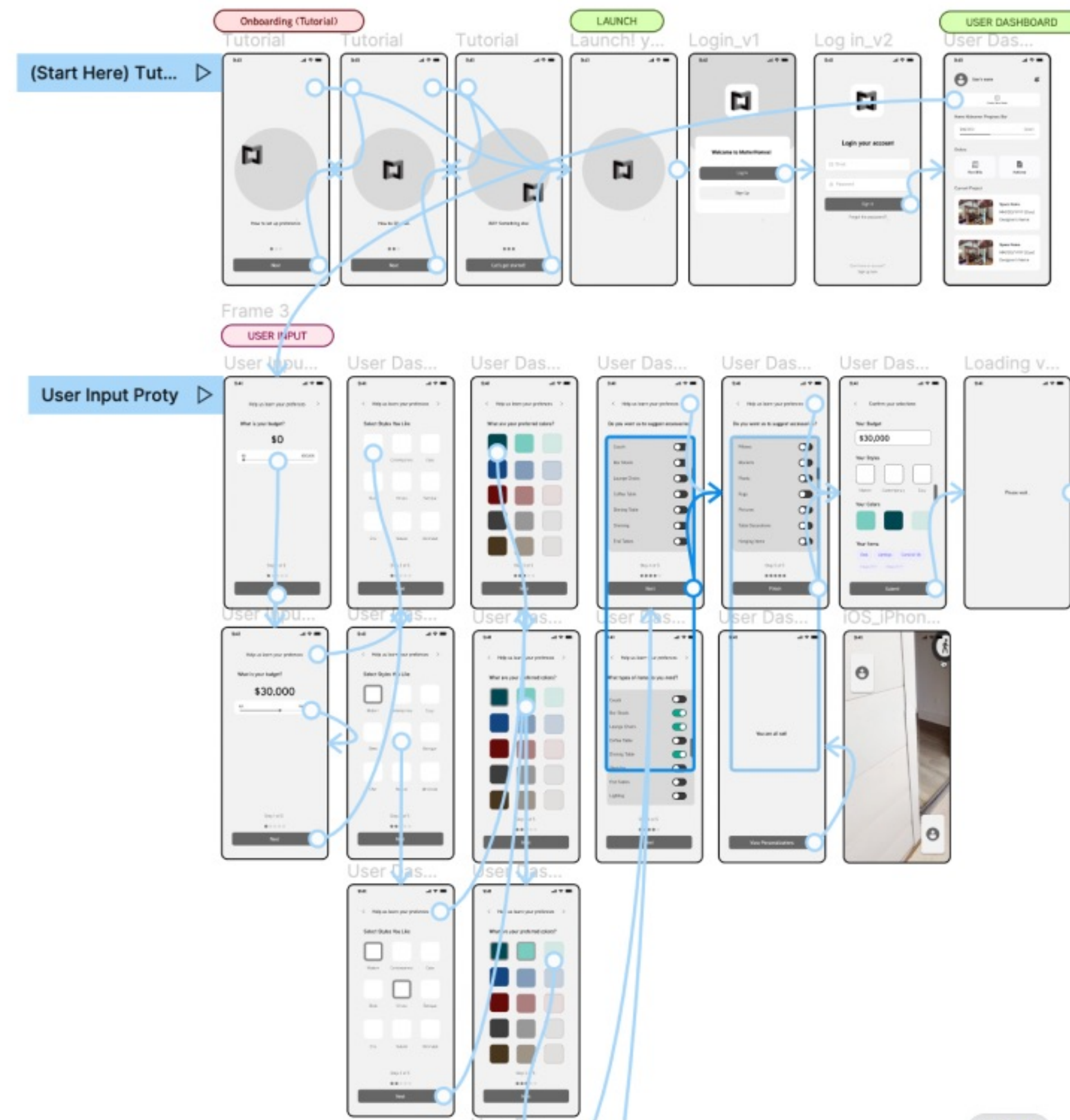
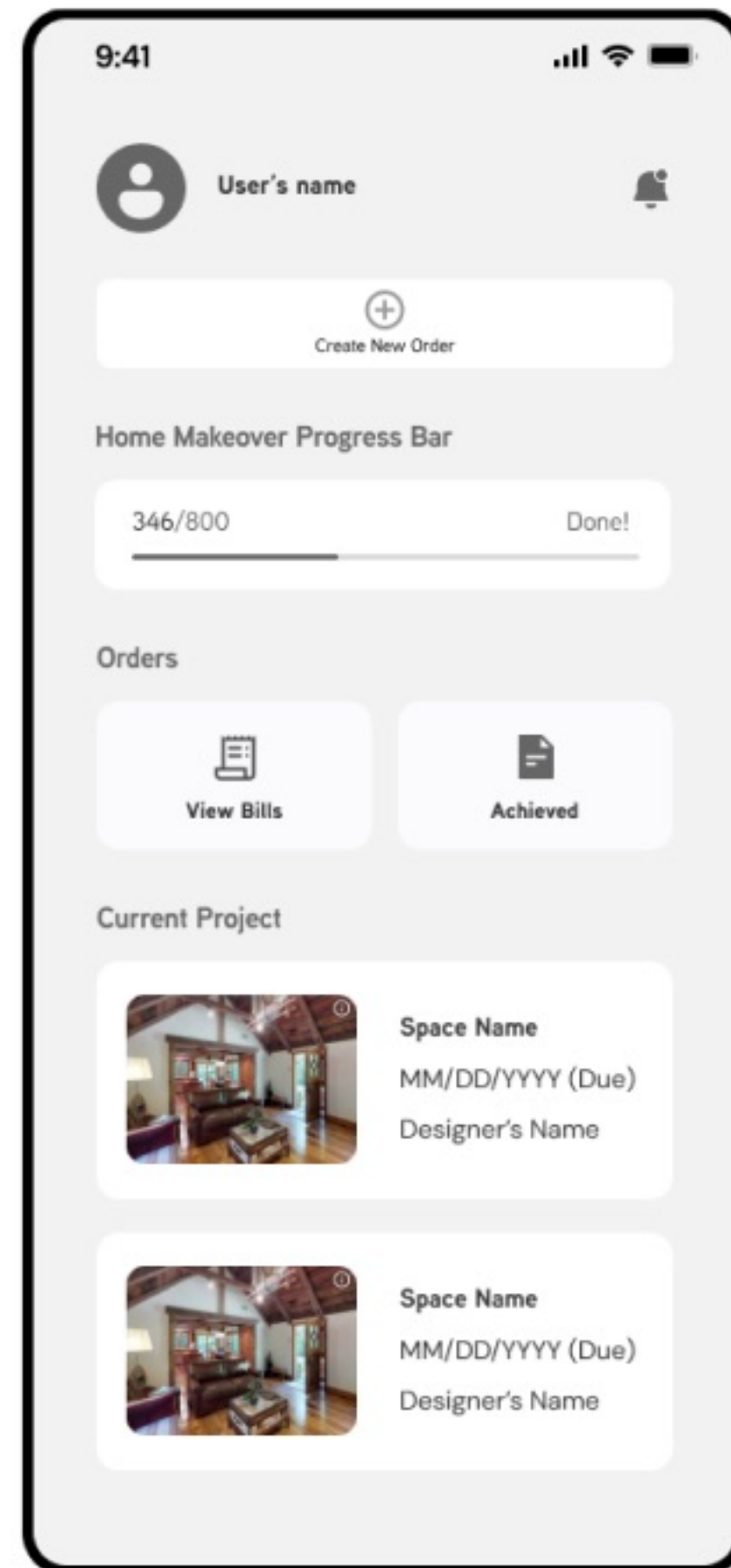
No Projects in
Progress State



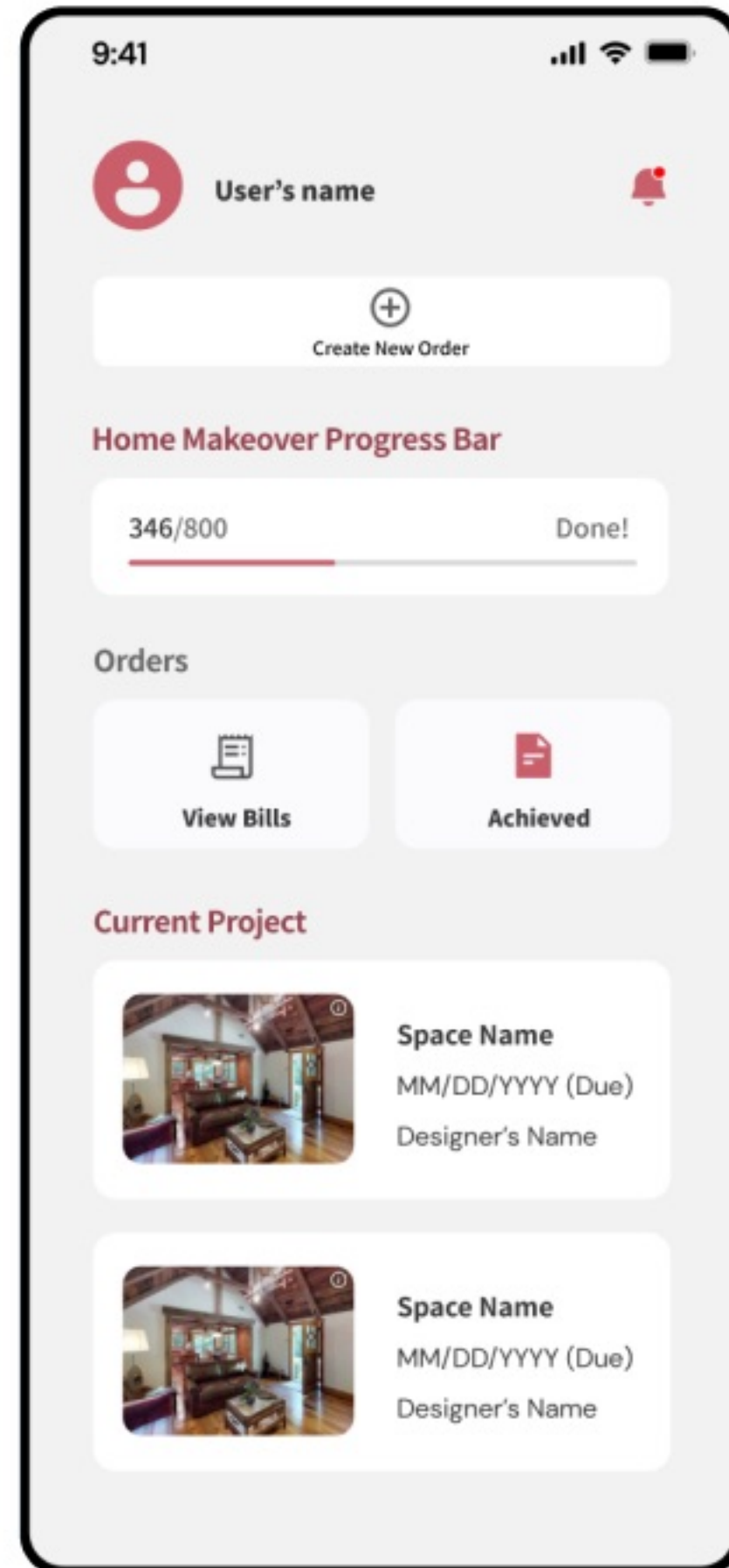
■ Brainstorming



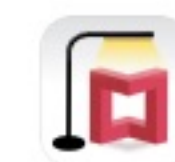
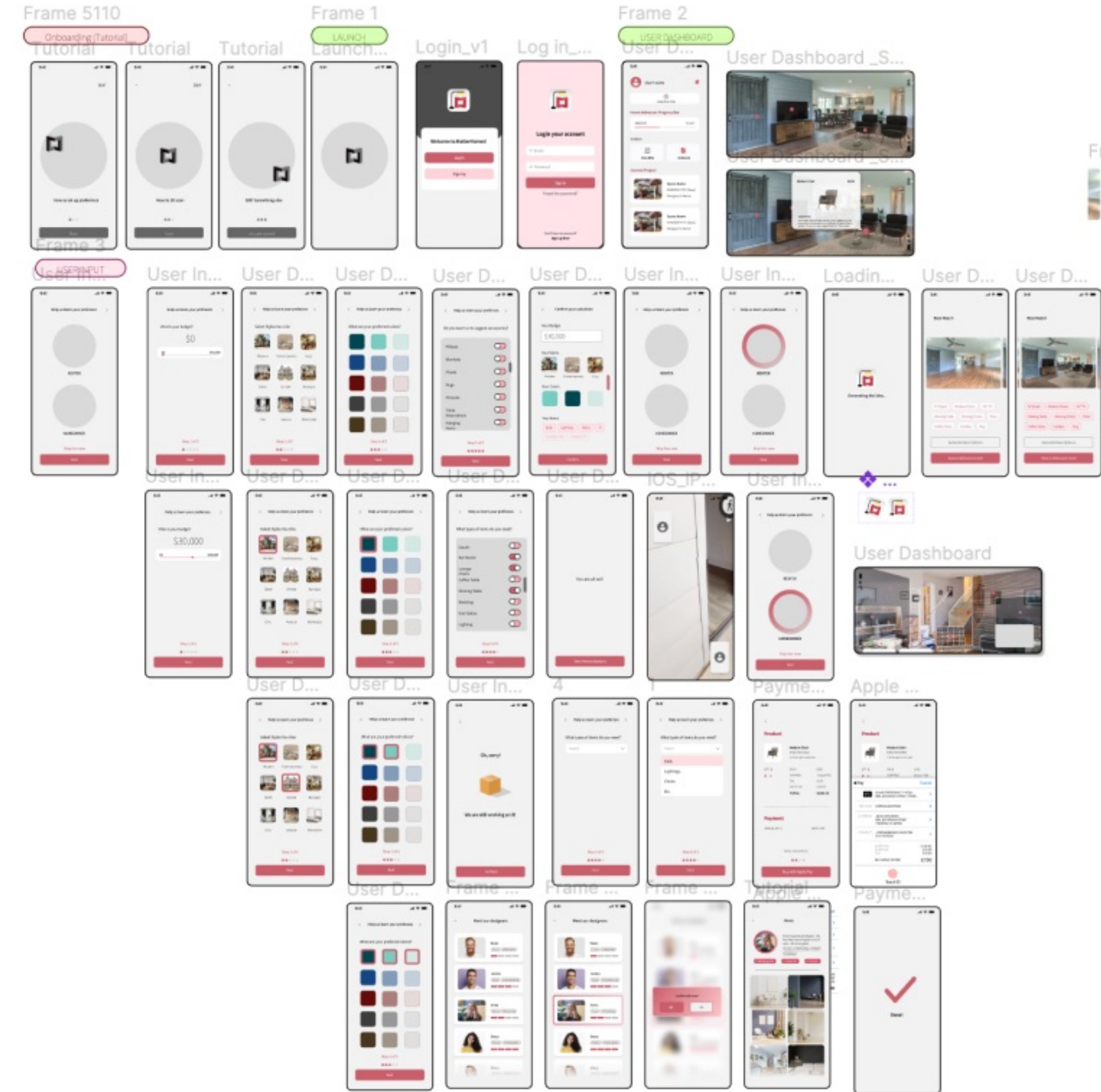
Low Fidelity Prototypes



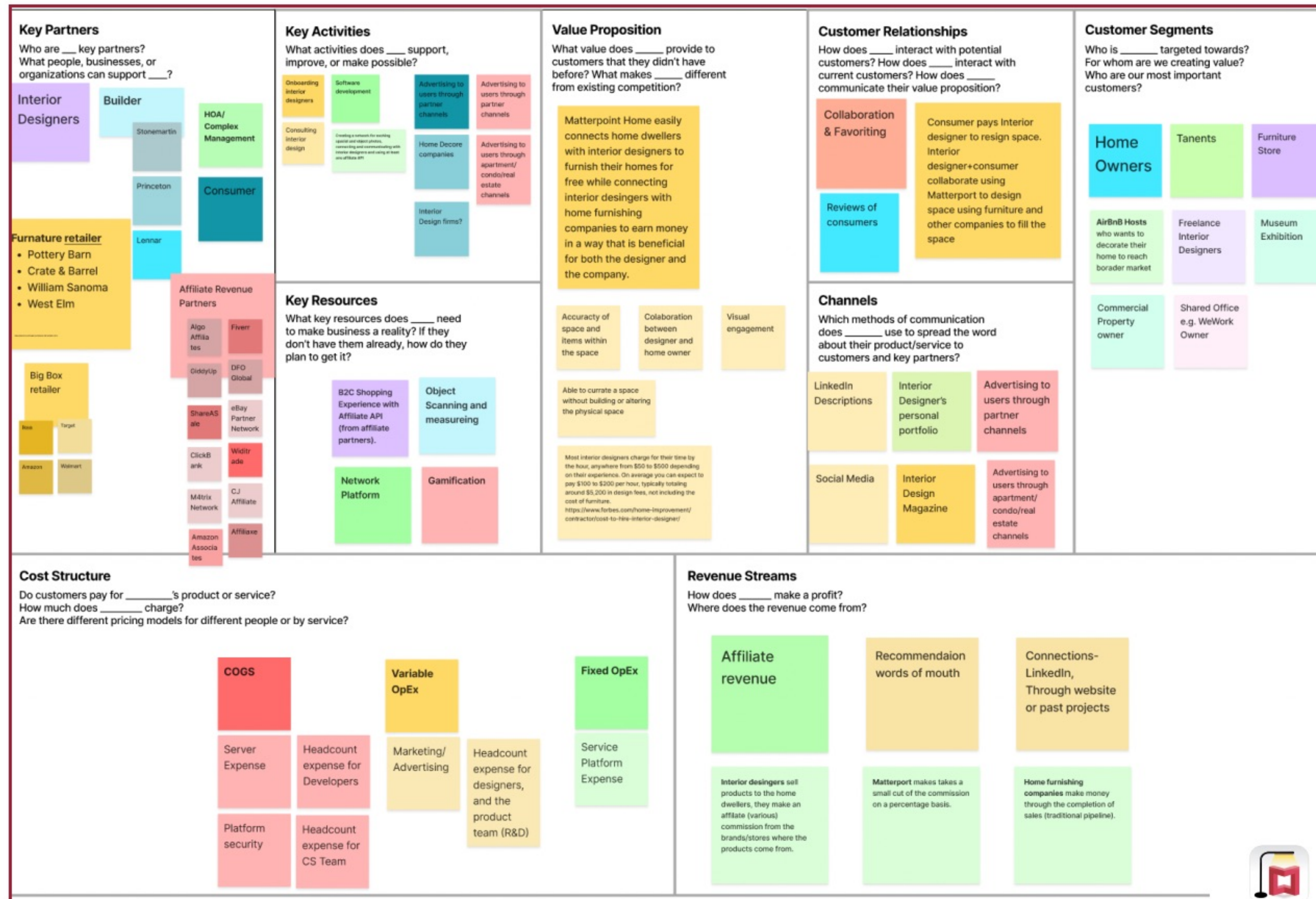
■ Hi-Fidelity Prototypes



SCAN QR CODE
FOR DEMO



■ Business Model Canvas



■ Vision & Key Objectives

Vision

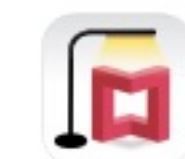
Use Matterport technology to empower consumers who would like to furnish or remodel their homes while lowering the complexity, creating visual clarity, and connecting them with professional help when needed to create their dream home?

Key Objectives

Privatize the housing start and title transfer process on blockchain technology to integrate the digital twin.

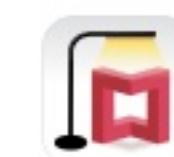
Create a high volume low interaction to capture the rental market.

Create a low volume high interaction to capture the remodel market (75% of remodel market)



■ Segmented Market Size

		Renters	Owners	
				
		19-35	36-54	55 +
TOTAL POPULATION	79.0 M	76.3 M	79.8 M	97.6 M
HOME OWNER %	1%	9%	38%	52%
HOME OWNER #	0.8 M	6.9 M	30.3 M	50.7 M
RENTER %	32%	28%	20%	19%
RENTERS #	78.2 M	69.4 M	49.5 M	46.8 M



■ Market Facts

 **\$262B**

Total home improvement spend in the US in 2019

 **76%**

Total spend was replacement (46%) & discretionary (30%)

 **83%**

Home remodels utilized professional services

 **34%**

Home improvement projects were over \$50K



■ Revenue Model

Renters



Affiliate Revenue

High volume Lower revenue

Owners



Affiliate Revenue

Low volume High revenue

Interior Designers



Freemium - \$15/month

AI Access

Design Tool

Vetted local contractor list

Etc.

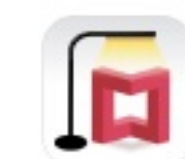


■ Partner Value Exchange



■ Go to Market Strategy

- Home Improvement Stores
- Rental Companies
- Apartment Complexes
- Home Builders
- Apartment Builders
- Brands for 3D Renders
- Commission Junction Affiliate API
- Retailers Strategic Partnerships for Content Creation



References

“3d Rendering.” n.d. Anna K Studio. Accessed September 26, 2022. <https://www.annakstudio.co.uk>.

“5 Key Technology Moves Lowe’s Is Making to Renovate Its Retail Business.” n.d. RIS News. Accessed September 28, 2022. <https://risnews.com/5-key-technology-moves-lowes-making-renovate-its-retail-business>.

“9 Important Home Improvement Market Size Stats in 2022.” n.d. Accessed September 28, 2022. <https://www.thefarnsworthgroup.com/blog/home-improvement-market-size-stats>.

“2021 Tesla Model 3 - Carvana.” n.d. Carvana.Com. Accessed September 28, 2022. <https://www.carvana.com/vehicle/2506560>.

“Advertising Models vs. Subscription Models.” n.d. Accessed November 21, 2022. <https://smallbusiness.chron.com/advertising-models-vs-subscription-models-70238.html>.

“Affiliate Program FAQs.” n.d. The Home Depot. Accessed October 24, 2022. https://www.homedepot.com/c/SF_MS_Affiliate_Program_FAQs.

“Bakken & Bæck on Instagram: ‘For the First Everyday Experiments Series Hosted by SPACE10, We Were Invited to Create 4 Prototypes That Explore Ways to Enhance Our Interactions with Space and Improve Our Everyday Lives. We Named One of Them Room Shuffle. Room Shuffle Is a Technical Prototype That Is Designed Not Only to Help You Furnish Your Space, but to Help You Generate New Ideas as Well. It Creates Furnishing Solutions Based on Common Interior Design Rules; How Much Space Furniture Needs in Relation to Walls or Other Pieces, How Furniture Tends to Be Positioned in a Room, and How Different Pieces Are Usually Combined. Unlike Data-Hungry Methods like Deep Learning, the Probabilistic Modelling of Room Shuffle Can Be Fed as Little as 10 Training Examples. It Is Also a Very Flexible Framework for Learning, and Can Easily Be Adapted to More Constraints in the Future: Modelling More Levels of Interior Designs, Such as Wall or Ceiling Objects or General Accessories, Can Easily Be Added down the Line. Credits Partners: @space10 & @ikea.’” n.d. Instagram. Accessed October 4, 2022. <https://www.instagram.com/p/CiKzd9usP7D/>.

“Become an Affiliate.” n.d. Anthropologie. Accessed September 26, 2022. <https://www.anthropologie.com/en-gb/become-an-affiliate>.

“Blockchain and Title Insurance: Will The Industry Change?” 2021. TRYON (blog). July 16, 2021. <https://tryontitle.com/blockchain-and-title-insurance/>.

Brohan, Mark. 2020. “Lowe’s Invests \$1.7 Billion to Update Its Digital Supply Chain.” Digital Commerce 360. January 24, 2020. <https://www.digitalcommerce360.com/2020/01/24/lowes-invests-1-7-billion-to-update-its-digital-supply-chain/>.

Bureau, US Census. n.d. “National Demographic Analysis Tables: 2020.” Census.Gov. Accessed October 25, 2022. <https://www.census.gov/data/tables/2020/demo/popest/2020-demographic-analysis-tables.html>.

“Business Models — Definition, Importance, and How To Create | Aha! Software.” n.d. Accessed November 21, 2022. <https://www.aha.io/roadmapping/guide/product-strategy/what-are-some-examples-of-a-business-model>.

“CloudMatos - Best Cloud Remediation Tools, Multi Cloud Observability, GCP Cloud Security.” n.d. Accessed September 28, 2022. <https://www.cloudmatos.com/blog/home-depots-digital-infrastructure-investment-enabled-growth-through-a-pandemic>.



References

Depot, The Home. n.d. "The Home Depot Announces \$150 Million Venture Capital Fund to Fuel Innovation in Retail and Home Improvement." Accessed September 28, 2022. <https://www.prnewswire.com/news-releases/the-home-depot-announces-150-million-venture-capital-fund-to-fuel-innovation-in-retail-and-home-improvement-301537608.html>.

"Driving up Used Car Sales with the Interactive 3D Visualization of Vehicles | by Cappasity | Cappasity Blog | Medium." n.d. Accessed September 16, 2022. <https://medium.com/cappasity-blog/driving-up-used-car-sales-with-the-interactive-3d-visualization-of-vehicles-4fb8e3b0346d>.

Giles, Martin. n.d. "Home Depot's \$11 Billion Digital Rebuild Hits A Legacy-Tech Speed Bump." Forbes. Accessed September 28, 2022. <https://www.forbes.com/sites/martingiles/2019/11/20/home-depot-digital-transformation-speed-bump/>.

"How Much Does an Interior Designer Cost in 2022?" 2022. Decorilla Online Interior Design. January 10, 2022. <https://www.decorilla.com/online-decorating/interior-designer-cost/>.

"How Much Does an Interior Designer Really Cost?" n.d. The Spruce. Accessed September 26, 2022. <https://www.thespruce.com/interior-designer-cost-5089128>.

"IBISWorld - Industry Market Research, Reports, and Statistics." n.d. Accessed September 16, 2022. <https://www.ibisworld.com/default.aspx>.

"Improving America's Housing 2021 | Joint Center for Housing Studies." n.d. Accessed October 24, 2022. <https://www.jchs.harvard.edu/improving-americas-housing-2021>.

"Insurance Industry VR/AR/XR Use Cases." n.d. ISM. Accessed September 28, 2022. <https://ismguide.com/integrated-strategies-3/vr-insurance/>.

"Leading Indicator of Remodeling Activity (LIRA) | Joint Center for Housing Studies." n.d. Accessed October 24, 2022. <https://www.jchs.harvard.edu/research-areas/remodeling/lira>.

Lloyd, Lauren. 2022. "How Much Does An Interior Designer Cost?" Forbes Home. September 26, 2022. <https://www.forbes.com/home-improvement/contractor/cost-to-hire-interior-designer/>.

"Metro Home Improvement Spending in 2019 | Joint Center for Housing Studies." n.d. Accessed October 24, 2022. <https://www.jchs.harvard.edu/iah-2021-metro-spending>.

"Metropolitan Home Improvement Spending: 2019." n.d. Google Docs. Accessed October 24, 2022. https://docs.google.com/spreadsheets/u/1/d/1RLUREKPE4AkbU4j3KVtB6-m7ywpFnR-A_262XYG2utk/edit?usp=embed_facebook.

Mostyn, Fiona. 2020. "Future Vision - 3D Design for Interior Designers." My Deco Marketing (blog). June 1, 2020. <https://mydecomarketing.com/3d-design-for-interior-designers/>.

"Publisher Sign-Up." n.d. CJ Affiliate (Formerly Commission Junction). Accessed September 26, 2022. <https://signup.cj.com/member/signup/publisher/?cid=5206455#/branded>.



References

“Statista - The Statistics Portal.” n.d. Statista. Accessed October 24, 2022a. <https://www-statista-com.eu1.proxy.openathens.net/markets/415/topic/469/furniture-furnishings-household-items//>.

“——.” n.d. Statista. Accessed October 24, 2022b. <https://www-statista-com.eu1.proxy.openathens.net/markets/415/topic/462/home-improvement//>.

“Studio – Bakken & Bæck.” n.d. Bakken & Bæck. Accessed October 4, 2022. <https://bakkenbaeck.com/case/studio>.

“U.S. Home Decor Market Size & Share | Research Report 2027.” n.d. Allied Market Research. Accessed September 23, 2022. <https://www.alliedmarketresearch.com/us-home-decor-market-A06775>.

“Virtual Shopping for Retail Stores: What It Is and How to Implement It.” n.d. Shopify. Accessed September 28, 2022. <https://www.shopify.com/retail/virtual-shopping>.

“What Is Blockchain Deed Registration in Real Estate?” n.d. Accessed November 21, 2022. <https://propy.com/browse/what-is-blockchain-deed-registration-in-real-estate/>.





MatterHome

Move Freely. Build Easily. Live Happily.

CHALLENGE

CONSUMERIZATION X DIGITAL TWINS

Consumerization is the specific impact that consumer-originated technologies can have on enterprises. It reflects the transfer of new technologies and models that originate in the consumer space and migrate to the enterprise sector. For example, the “bringing your device to work” movement led to iPhone being a prominent device in enterprise.¹

‘Consumerization of Home’ is discovering how Matterport can be utilized to create value for consumers in the home space and “become an indispensable, beloved tool for homeowners by keeping their residents comfortable and happy.”

FOCUS

HOME FURNISHING & REMODELING

How might we use Matterport technology to empower consumers who would like to furnish or remodel their homes while lowering the complexity, creating visual clarity, and connecting them with professional help when needed to create their dream homes?

Our research shows the home improvement market was \$262B in 2019. The following figures indicate a healthy market for a robust revenue model:²

- 76% was spent on replacement and discretionary projects
- 83% of remodels utilize professional services, and
- 34% of home improvement projects were over \$50K

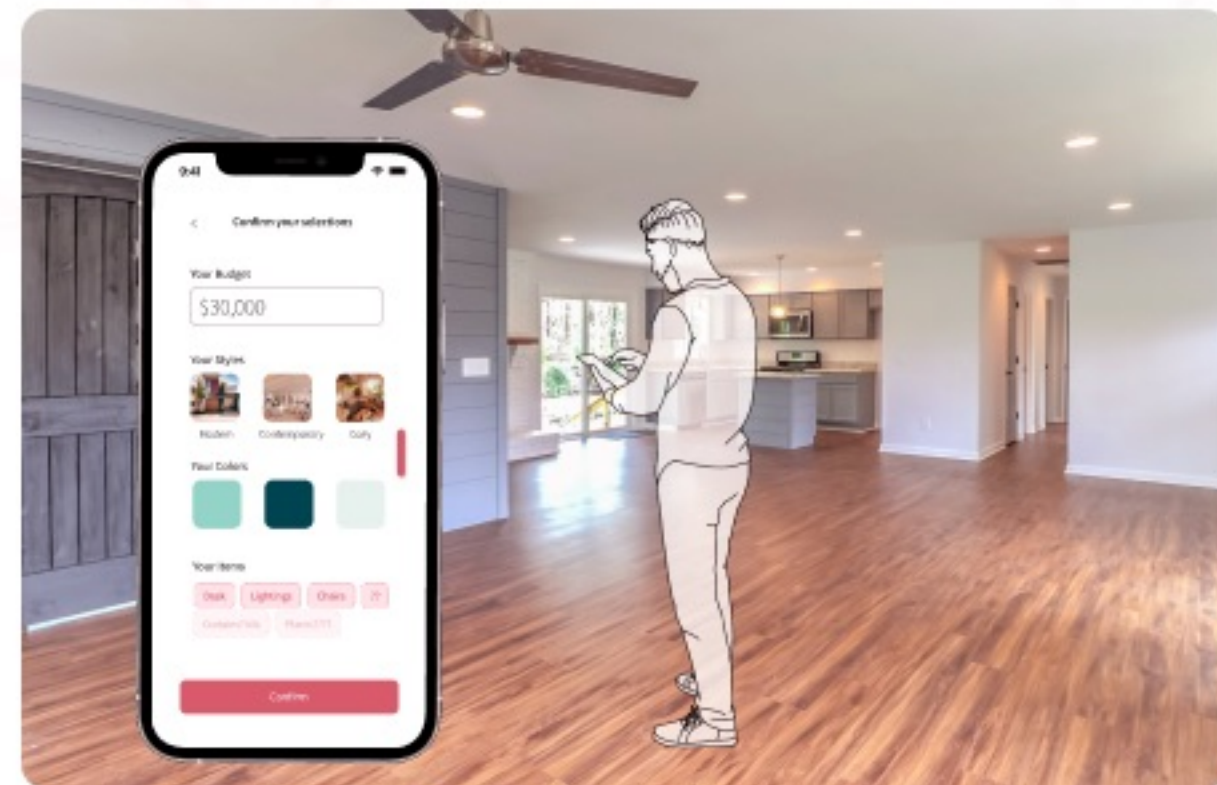
SOLUTION

MATTERHOME AI + AR PLATFORM

Introducing MatterHome. The MatterHome app is a network bridging furniture and home decor brands, interior designers, and AI to empower renters and homeowners to furnish or remodel their space in AR through two options:

1. Sophisticated AI — The AI intelligently fills the space based on the budget and aesthetic questions posed to the user. The user can select different options and mix and match them based on their preferences.
2. Interior Designer — A matching algorithm utilizes the users' style preferences and budget to match them with an interior designer to meet their needs.

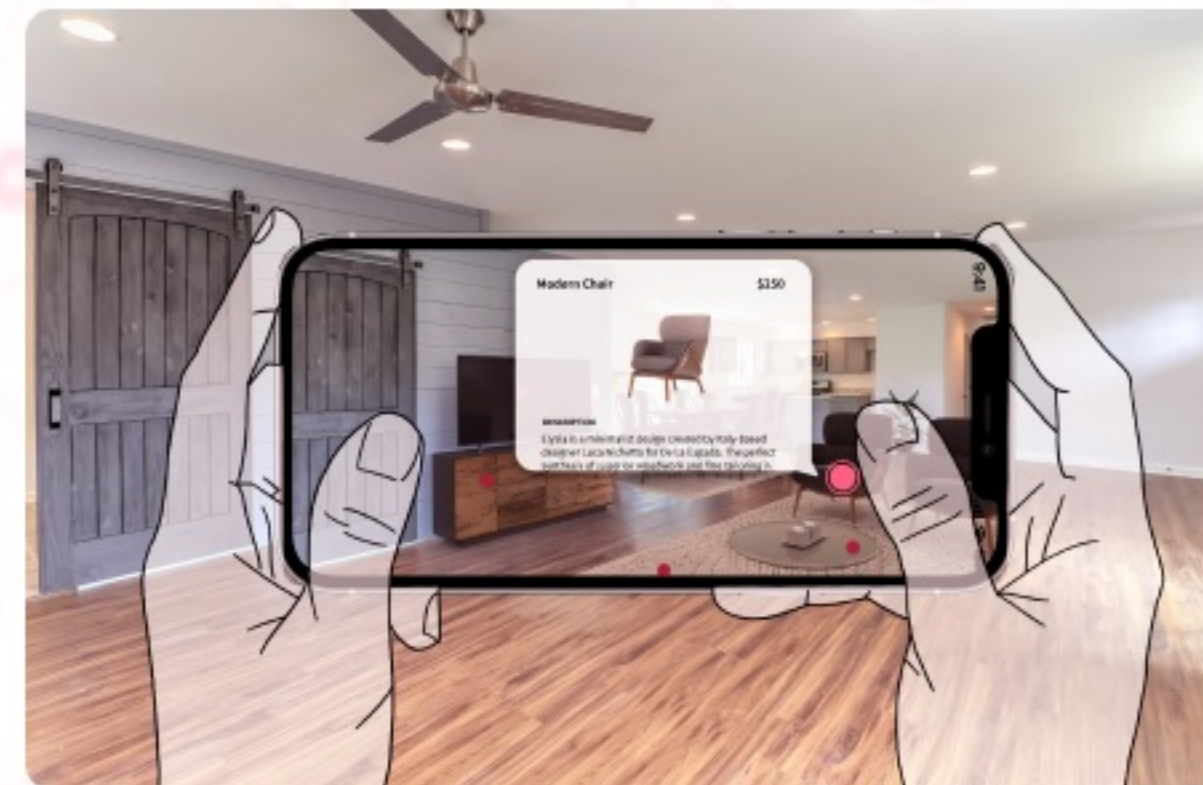
1 SELECT DESIGN PREFERENCES



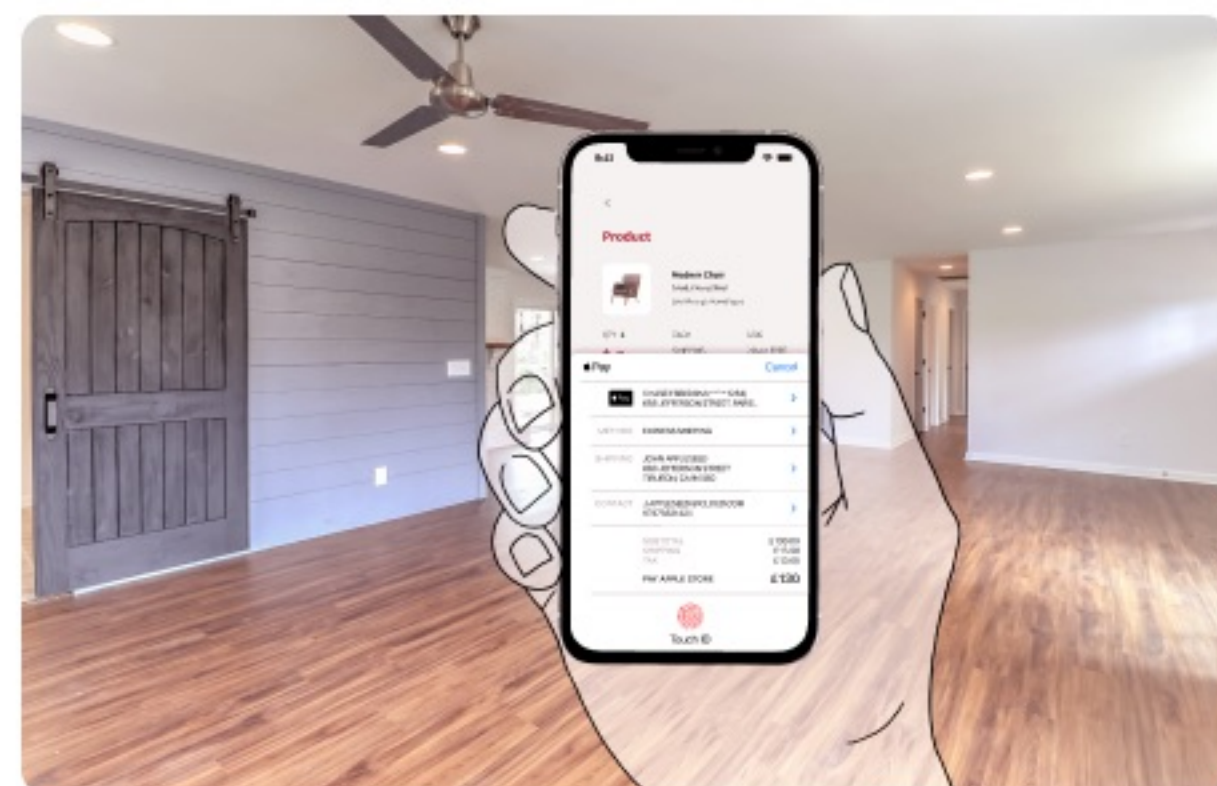
2 SCAN THE SPACE



3 AI GENERATED SUGGESTIONS



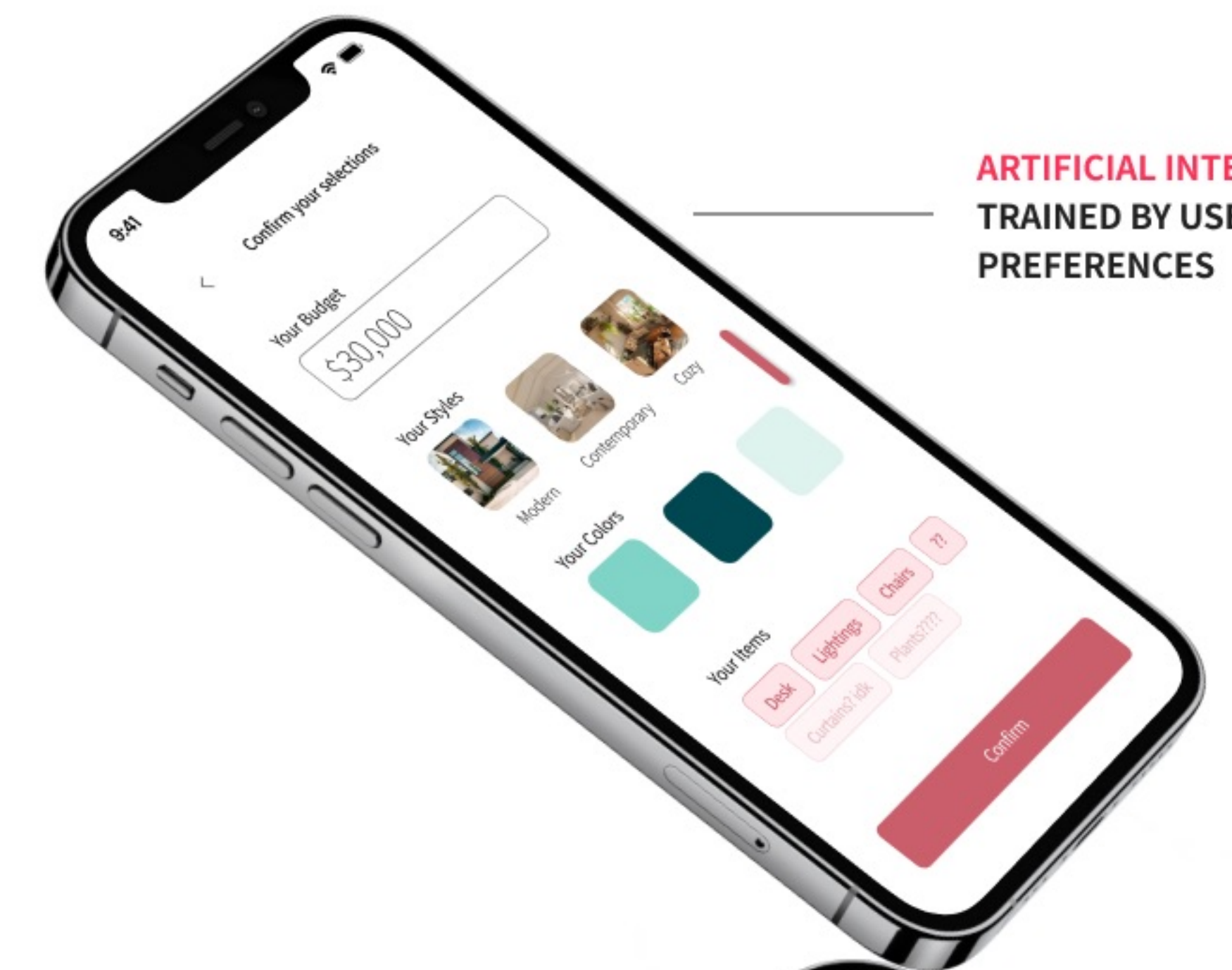
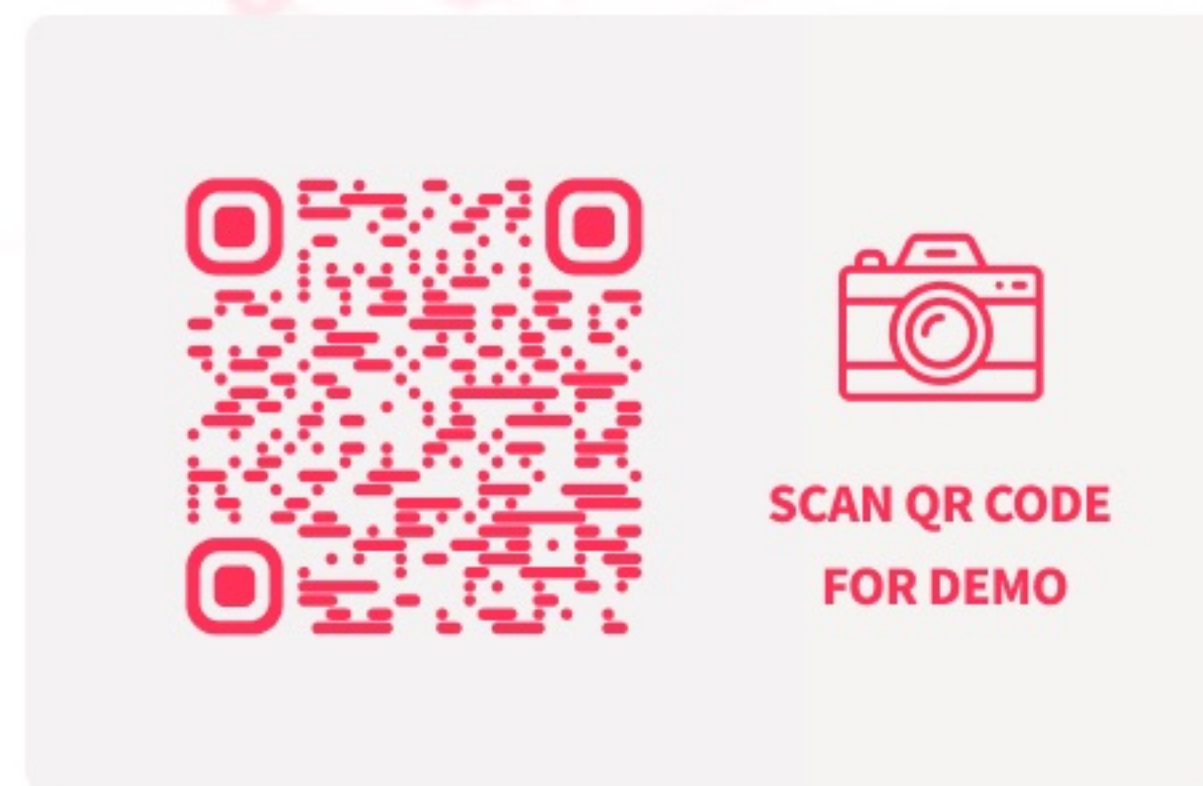
4 PURCHASE ITEMS



5 ENJOY!

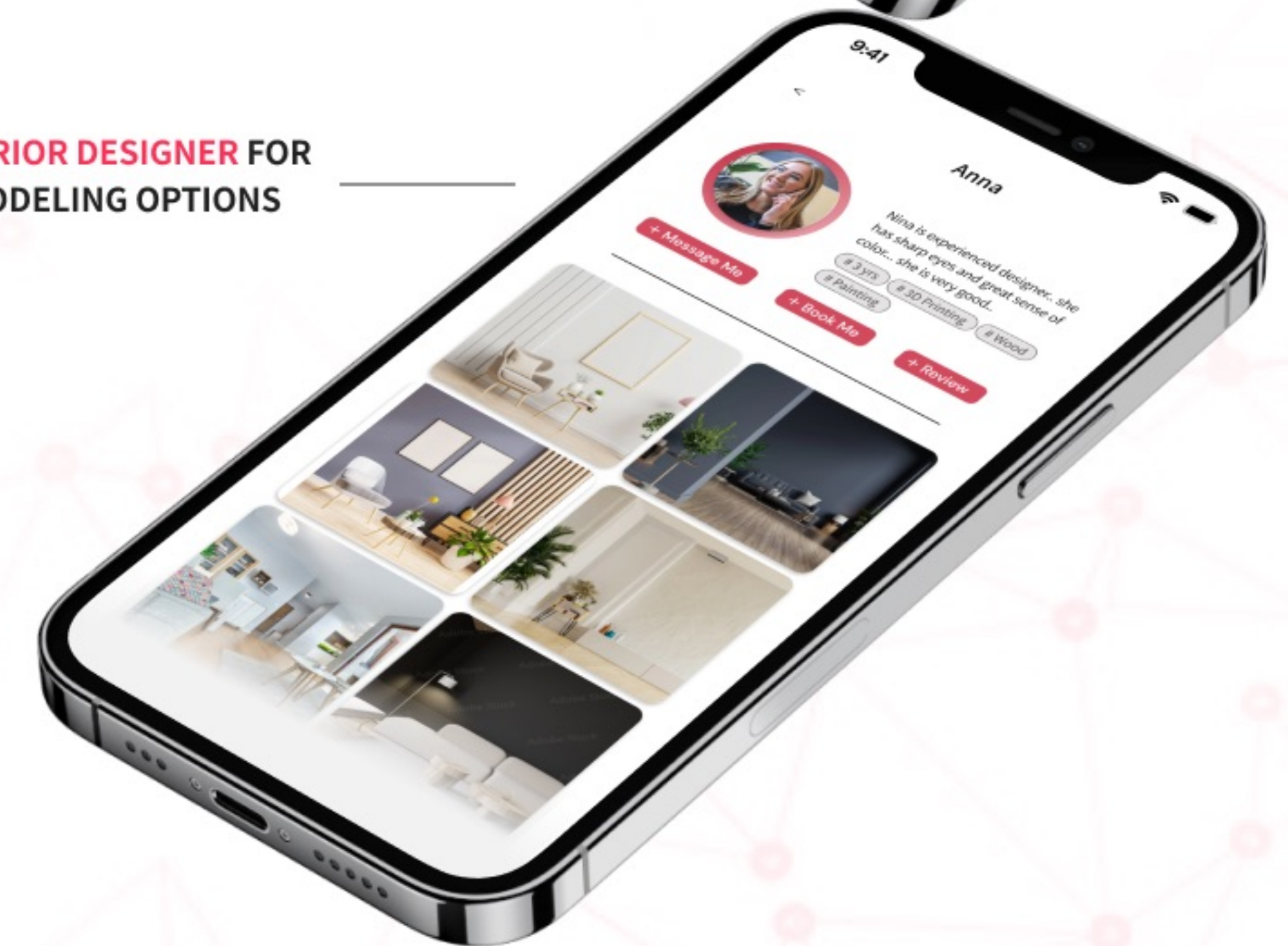


6 YOUR TURN!

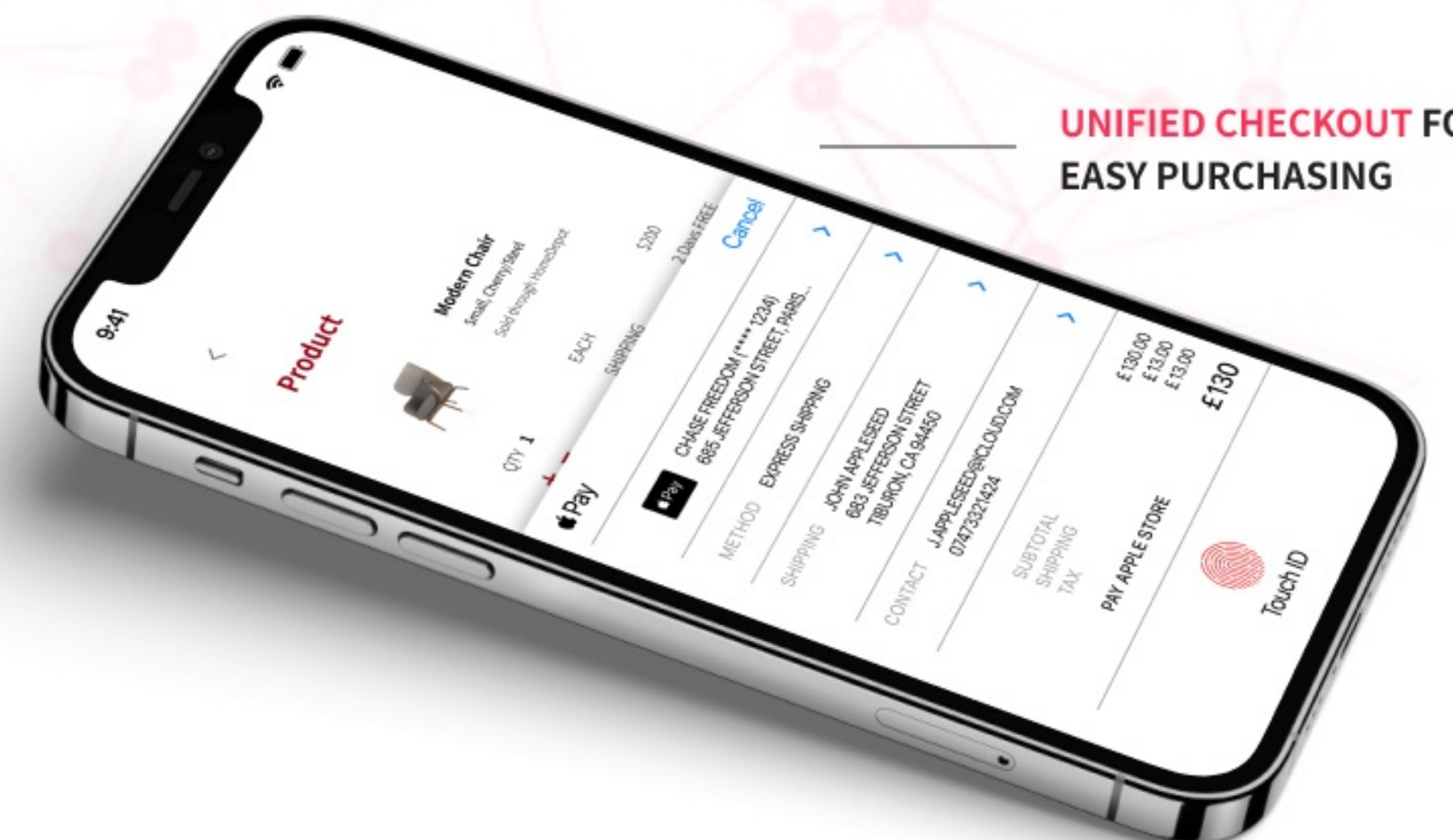


ARTIFICIAL INTELLIGENCE
TRAINED BY USER
PREFERENCES

INTERIOR DESIGNER FOR
REMODELING OPTIONS



UNIFIED CHECKOUT FOR
EASY PURCHASING



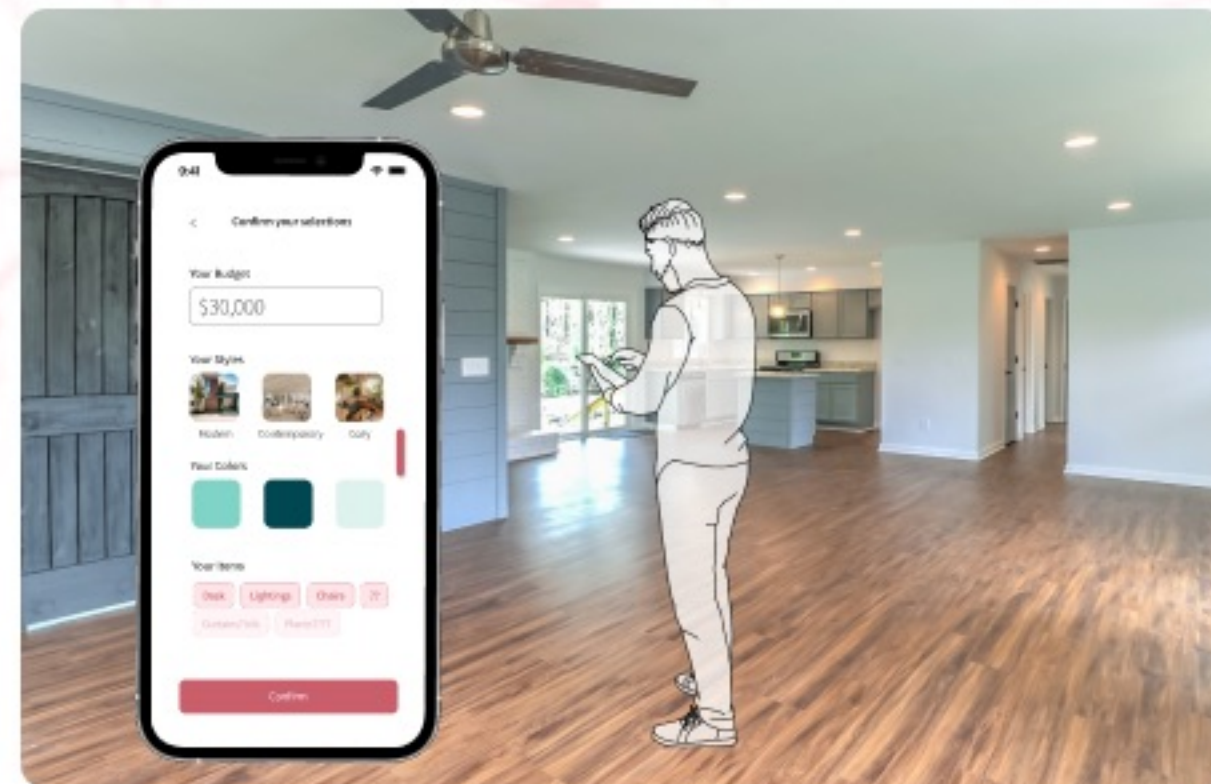
¹ <https://freshservice.com/itsm/consumerization-of-it-blog/>
² <https://www.jchs.harvard.edu/improving-americas-housing-2021>



MatterHome

Move Freely. Build Easily. Live Happily.

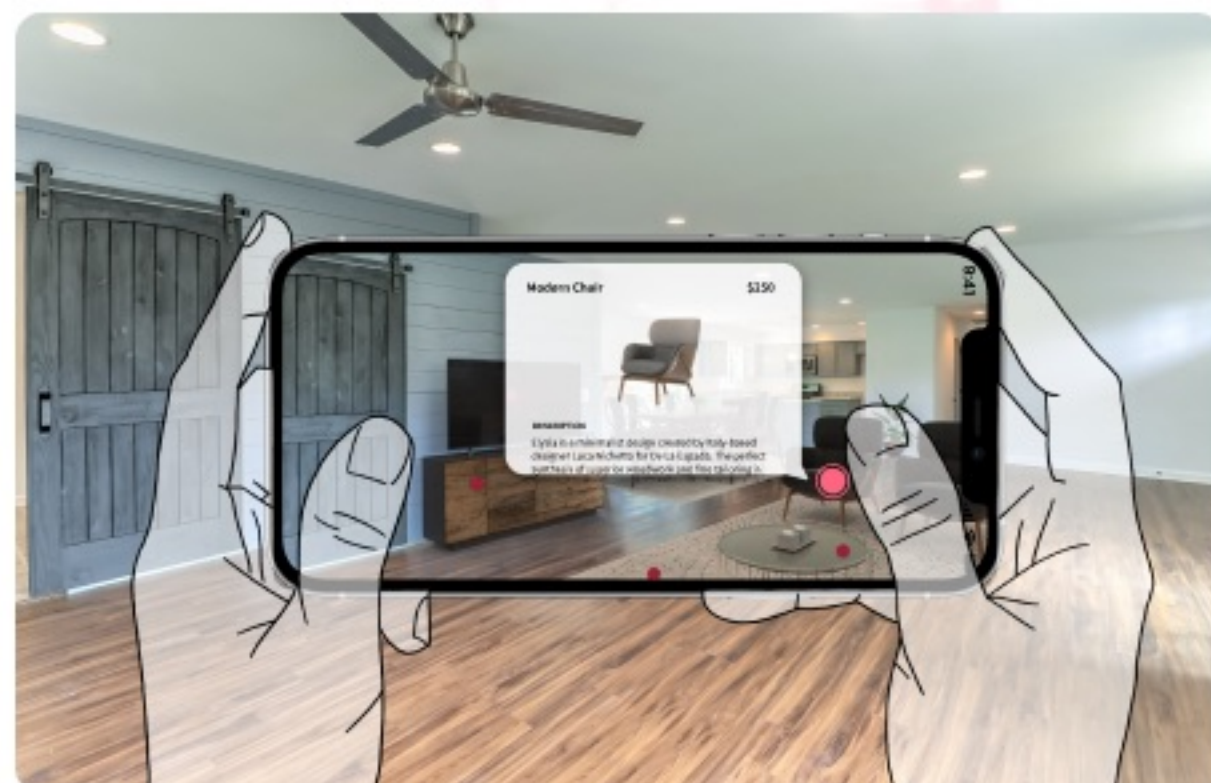
1 SELECT DESIGN PREFERENCES



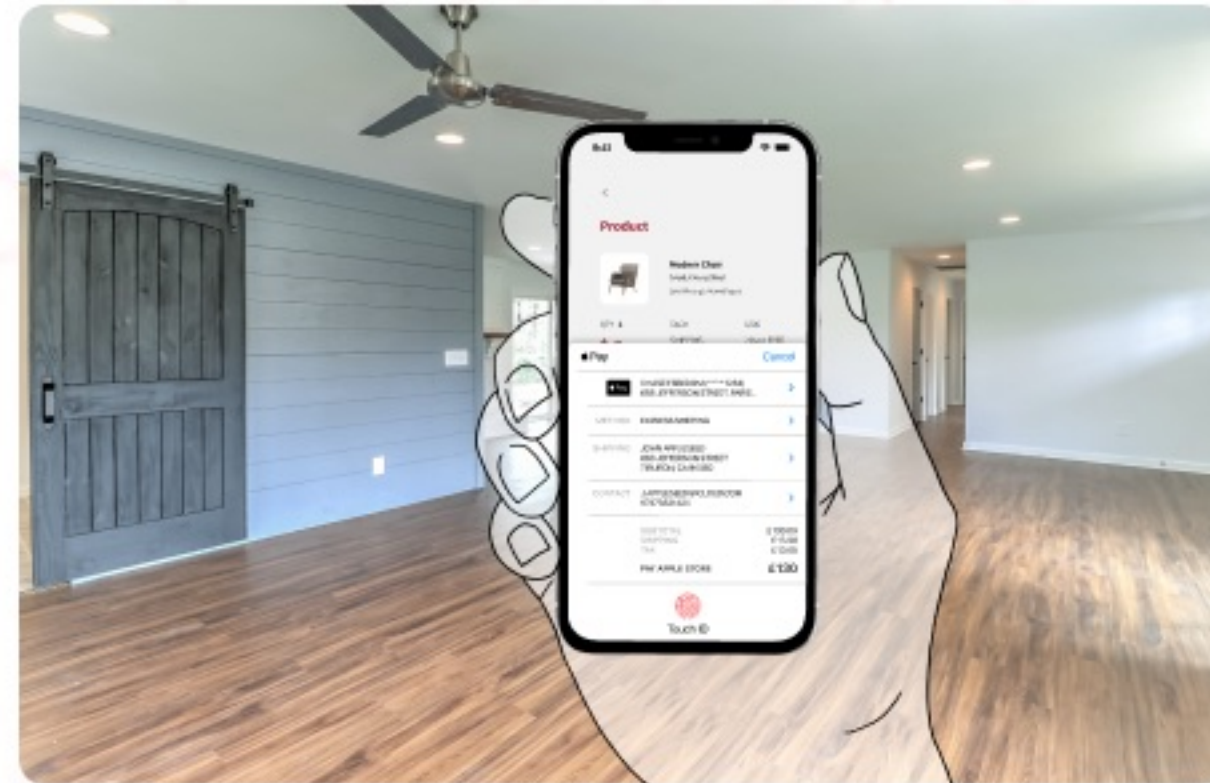
2 SCAN THE SPACE



3 AI GENERATED SUGGESTIONS



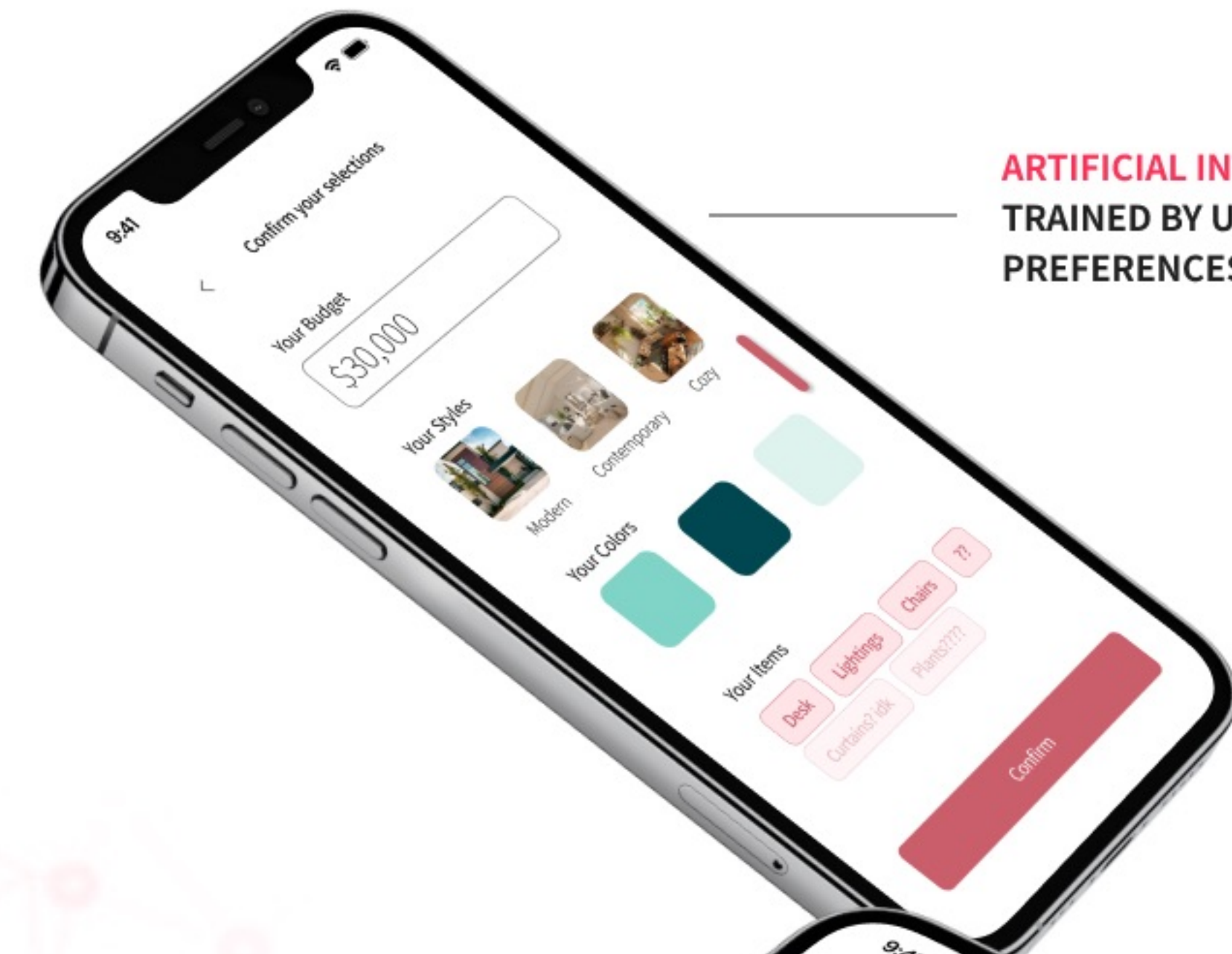
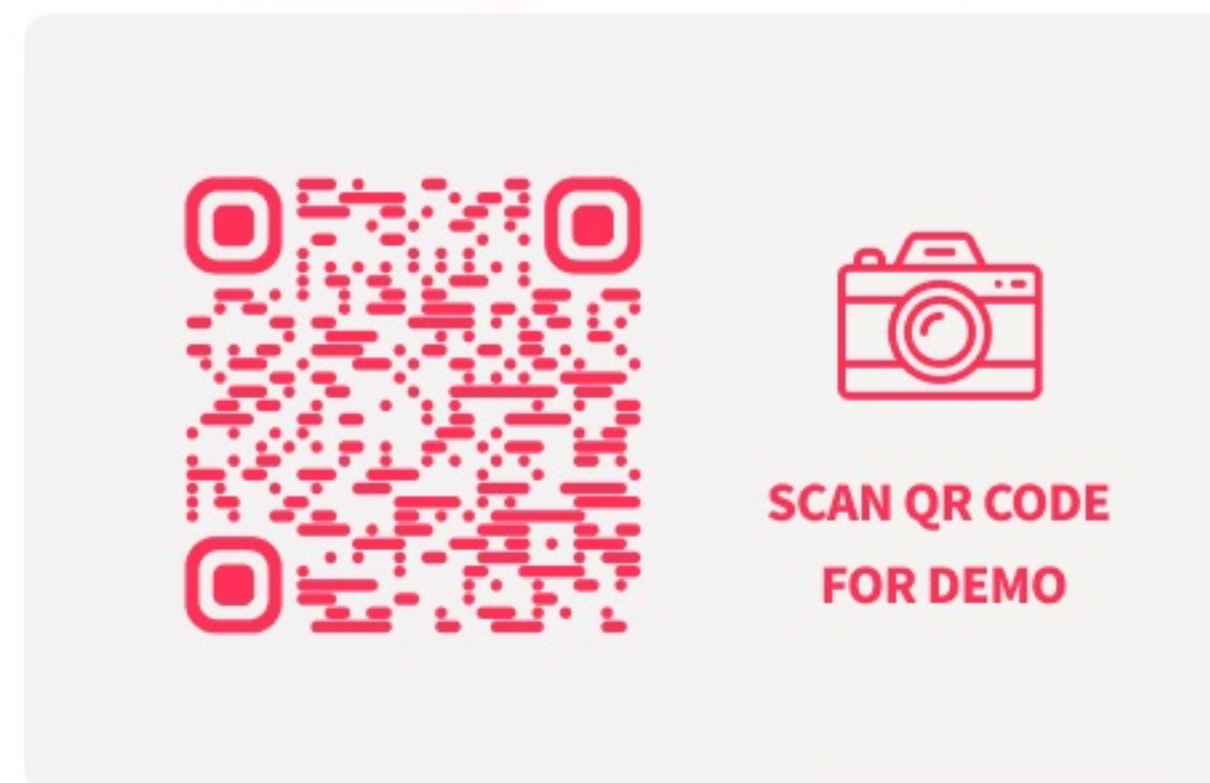
4 PURCHASE ITEMS



5 ENJOY!

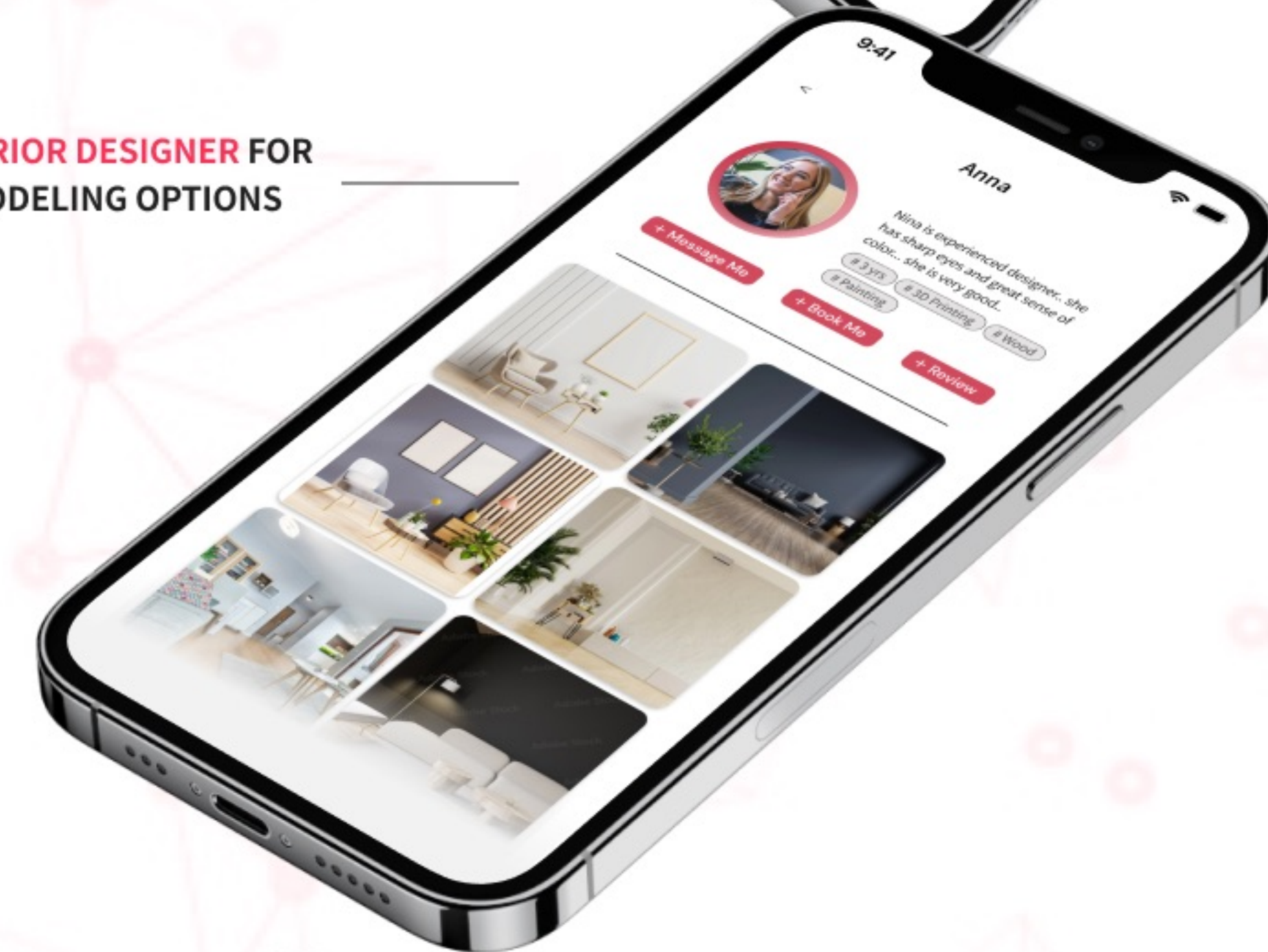


6 YOUR TURN!

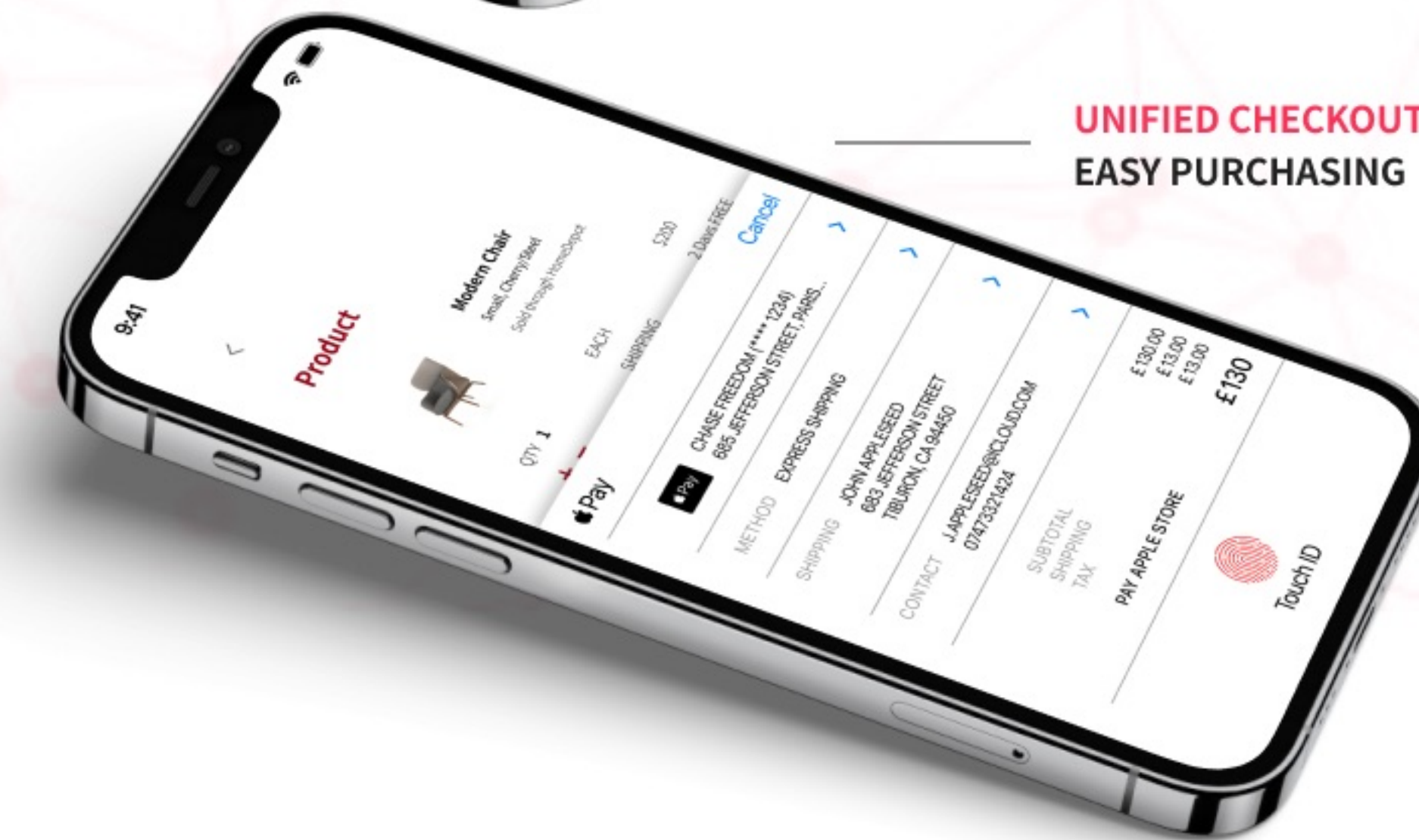


ARTIFICIAL INTELLIGENCE
TRAINED BY USER
PREFERENCES

INTERIOR DESIGNER FOR
REMODELING OPTIONS



UNIFIED CHECKOUT FOR
EASY PURCHASING

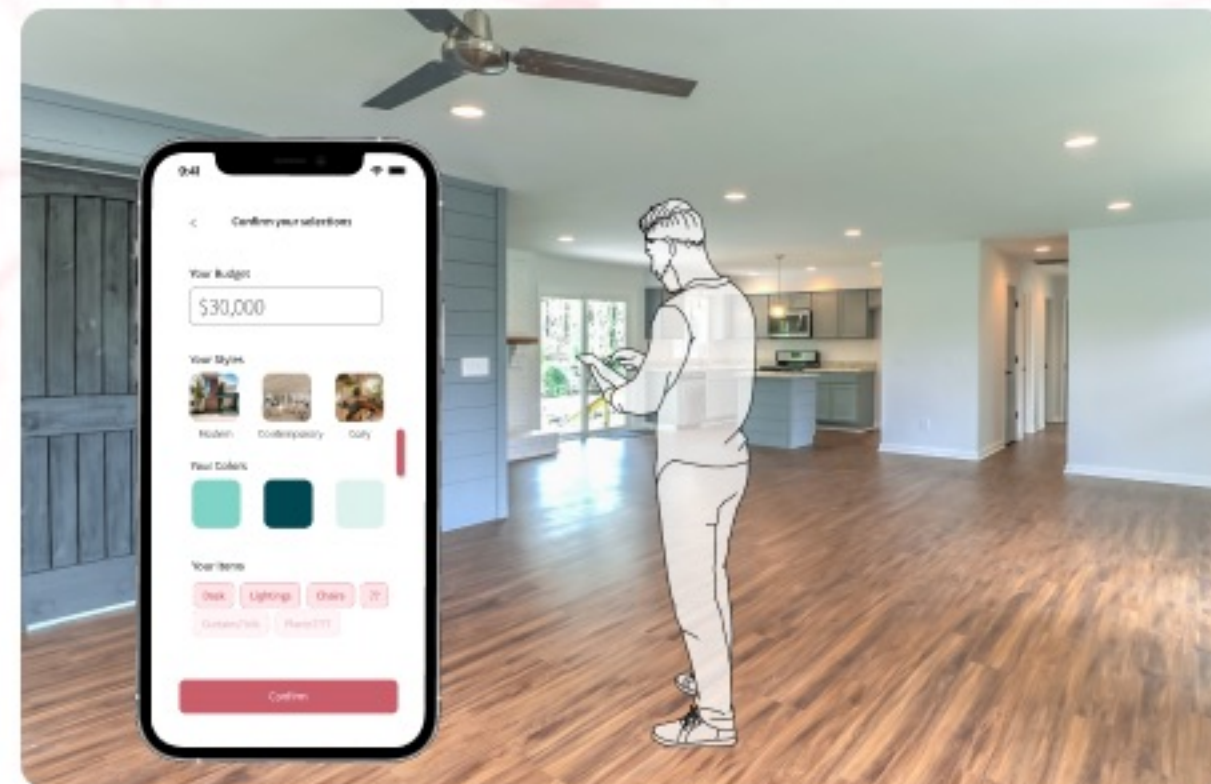




MatterHome

Move Freely. Build Easily. Live Happily.

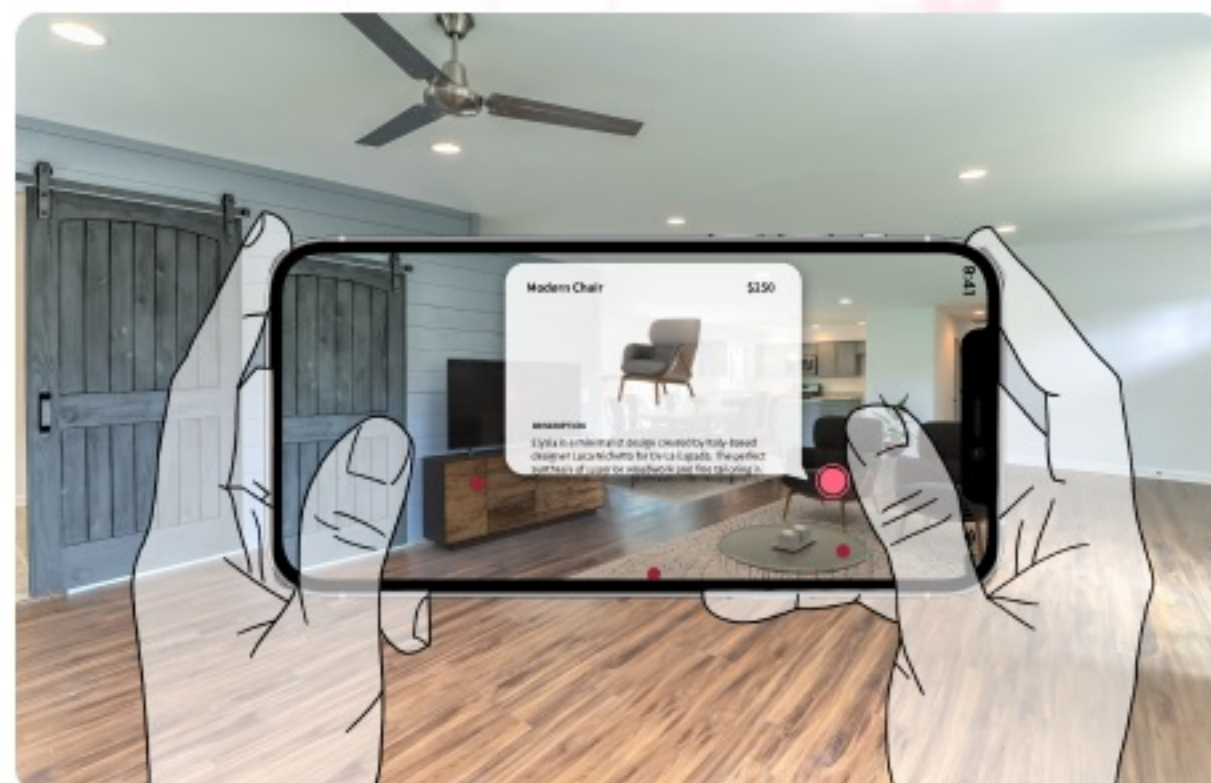
1 SELECT DESIGN PREFERENCES



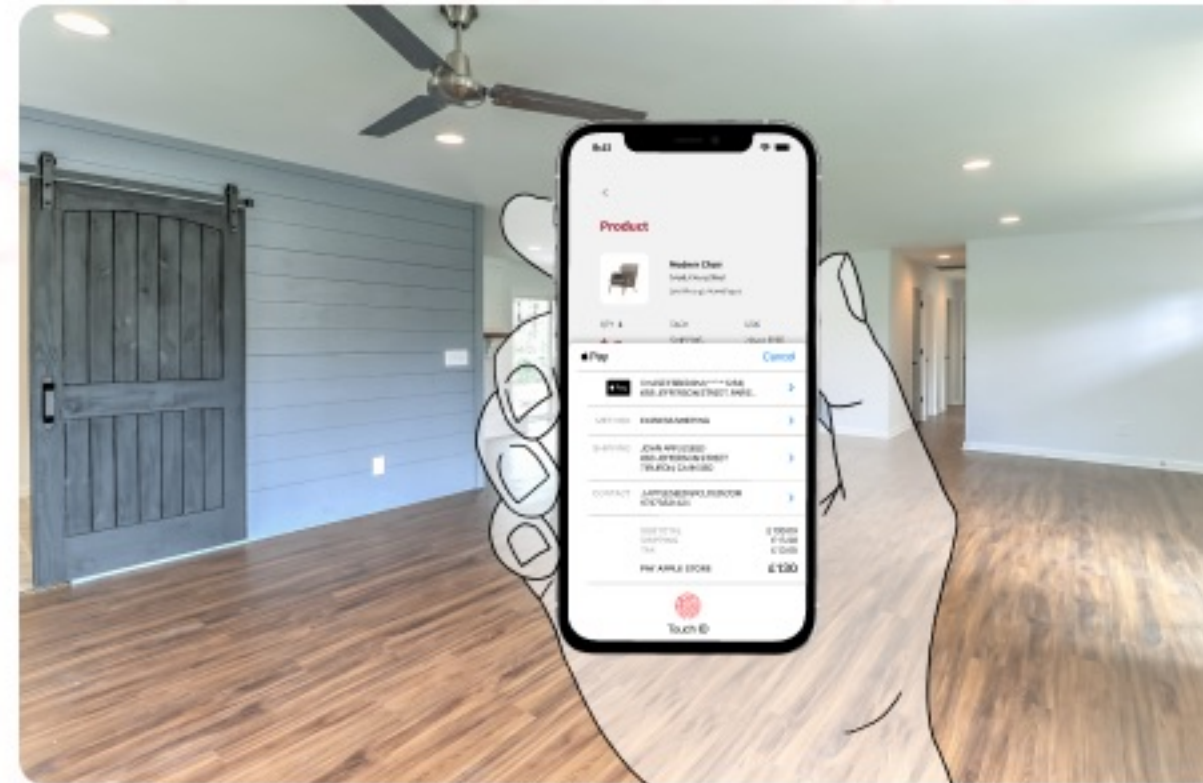
2 SCAN THE SPACE



3 AI GENERATED SUGGESTIONS



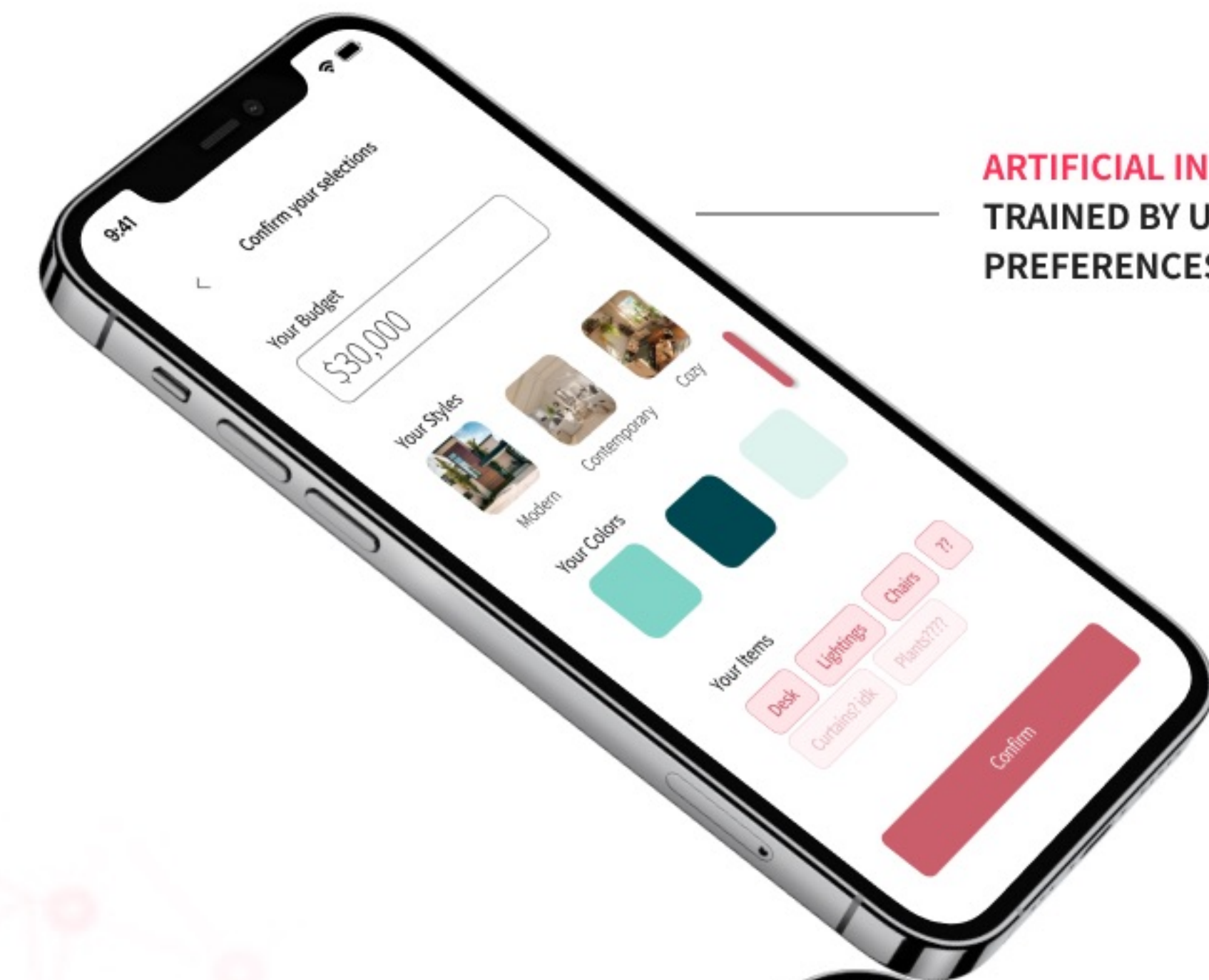
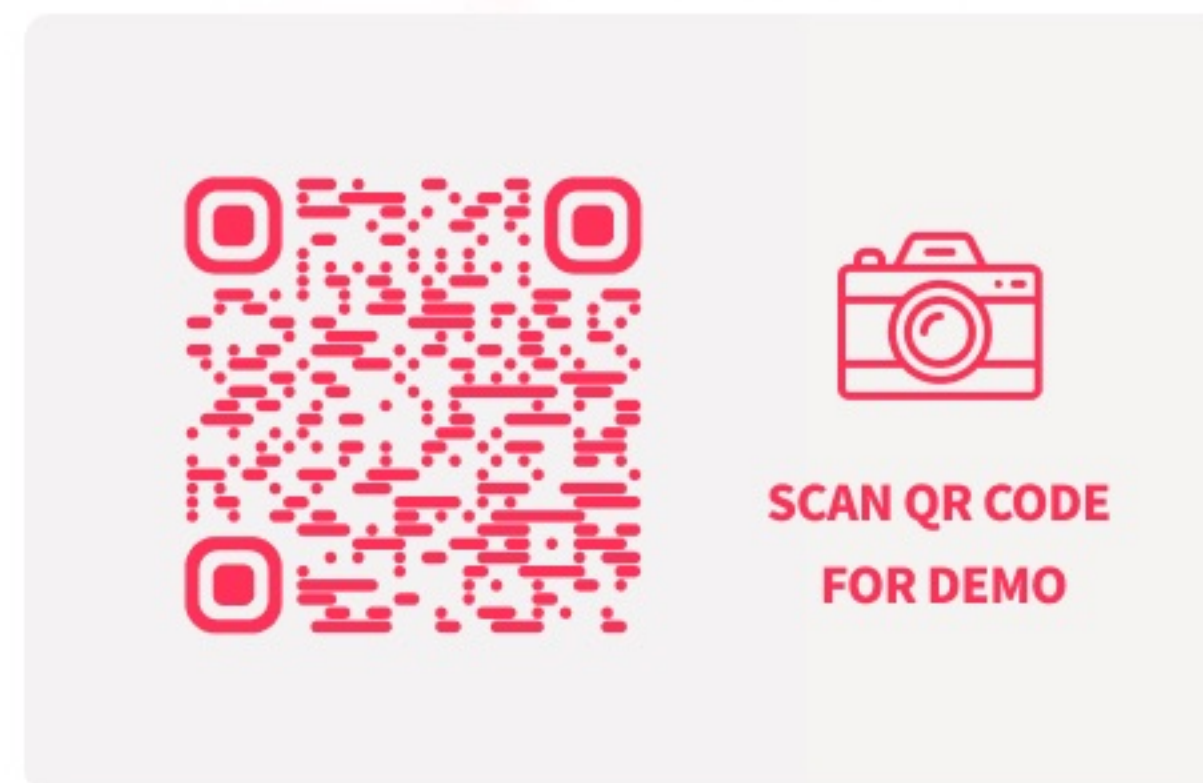
4 PURCHASE ITEMS



5 ENJOY!

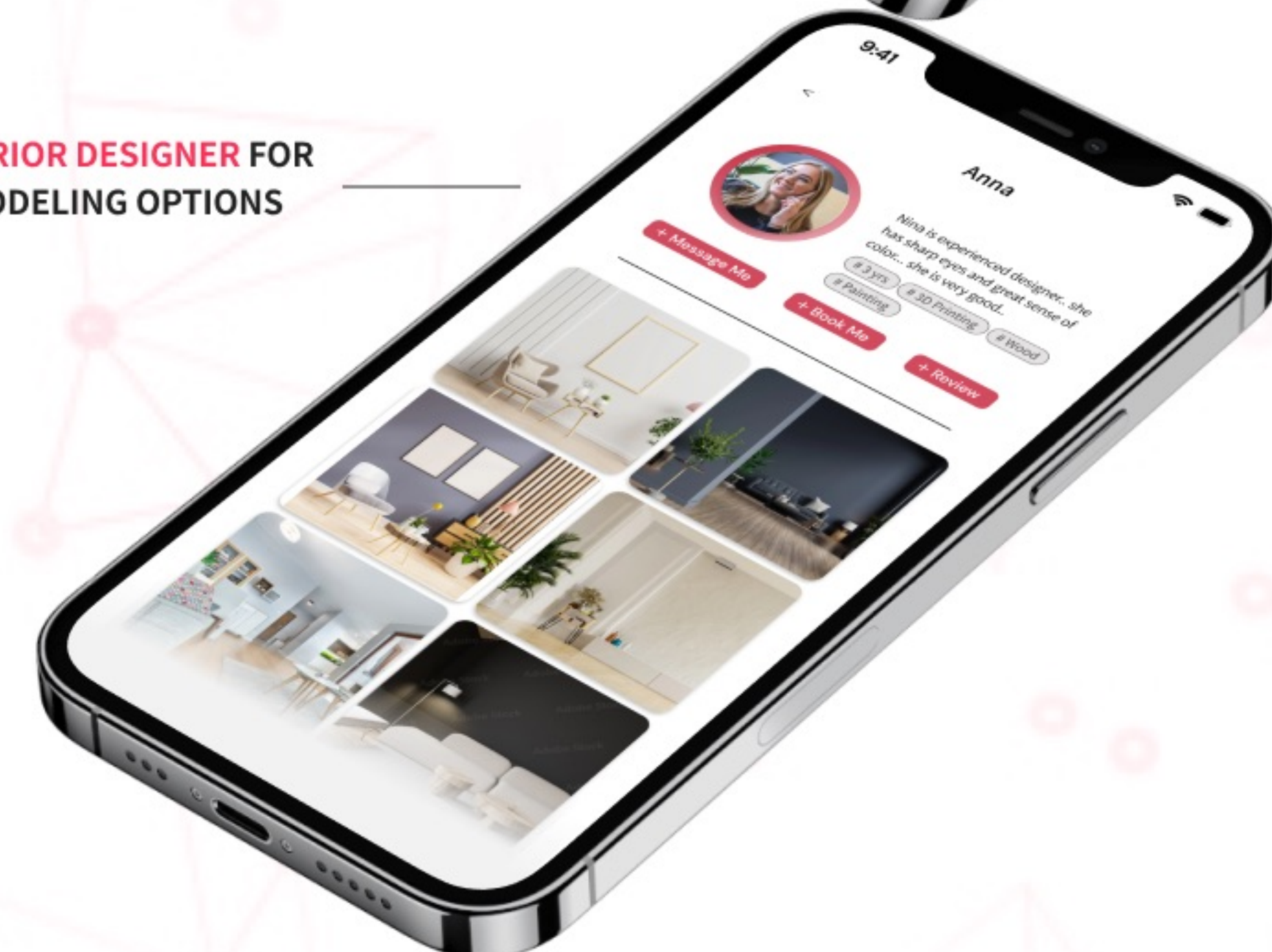


6 YOUR TURN!



ARTIFICIAL INTELLIGENCE
TRAINED BY USER
PREFERENCES

INTERIOR DESIGNER FOR
REMODELING OPTIONS



UNIFIED CHECKOUT FOR
EASY PURCHASING

