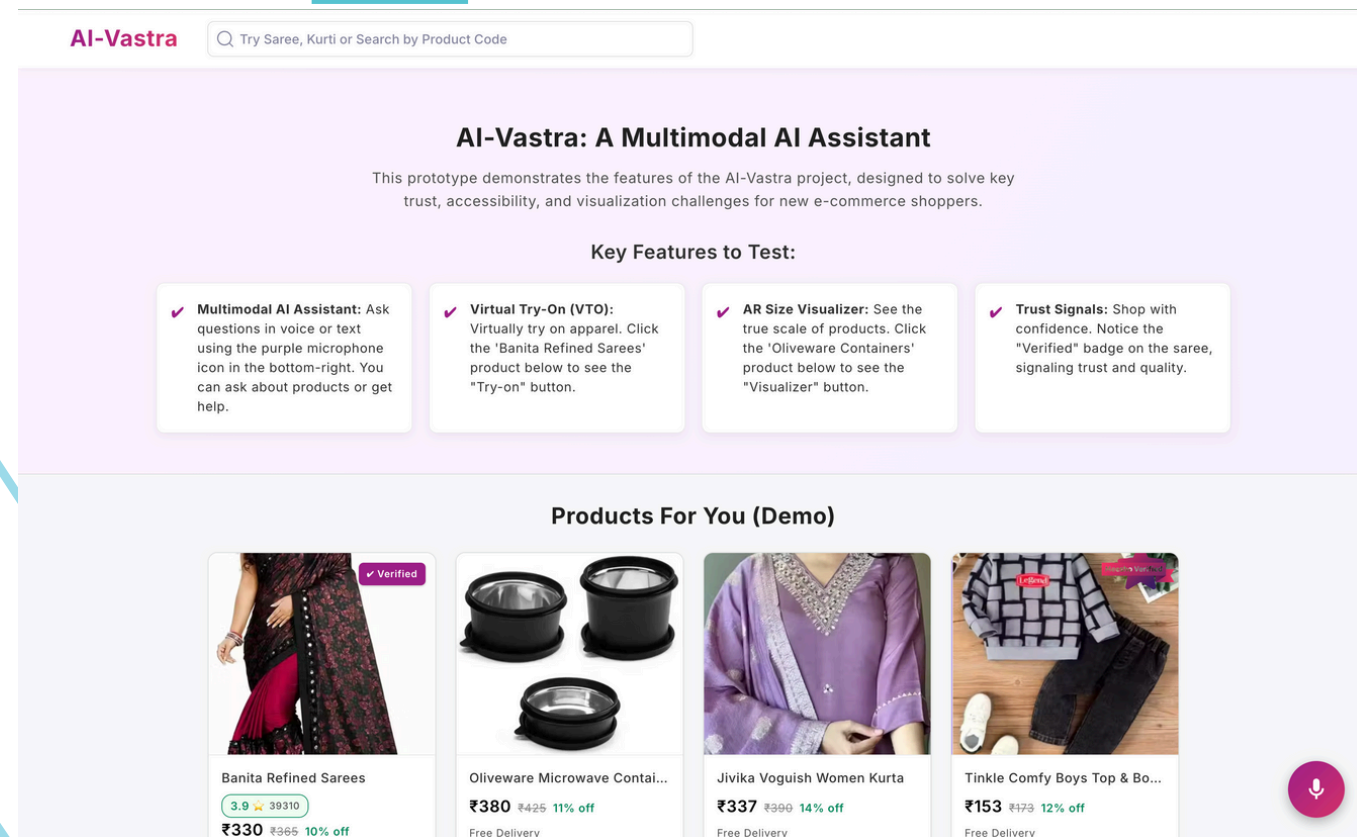# PROJECT PRESENTATION

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INTRODUCTION

- AI-Vastra is a multimodal AI assistant designed for e-commerce shoppers.
- It integrates speech, language, and vision technologies to improve trust, accessibility, and visualization during online shopping.
- Users can interact with products through voice or text, and visualize fit or scale through AI-powered tools.
- The prototype demonstrates how existing AI APIs can be combined into a cohesive user experience.

BACKGROUND

GENERAL OVERVIEW

- Many new online shoppers struggle with trust issues and product visualization before purchase.
- Accessibility barriers exist for users with low literacy or language limitations.
- Current e-commerce platforms lack integrated multimodal support (speech, vision, and text).
- Emerging AI technologies (LLMs, AR, and speech services) provide opportunities to reimagine user experience in digital retail.

GOALS

GOAL 01

- Implement Multimodal Interaction: Enable speech-to-speech and text-based communication for hands-free, accessible shopping.
- AI-Powered Product Q&A: Use LLMs (e.g., Gemini/Perplexity) to generate intelligent answers from reviews.

GOAL 02

- Visualization Suite: Provide a Virtual Try-On (VTO) for apparel and an AR Size Visualizer for real-world scale.
- Cohesive Integration: Merge all features into a multilingual, user-friendly prototype.

PROBLEMS

- Trust Deficit: Users hesitate to buy due to fake or unclear product information.
- Lack of Visualization: Inability to estimate size or fit before purchase.
- Accessibility Barriers: Language and literacy gaps restrict participation.
- Fragmented Interfaces: Current AI tools exist separately, lacking unified design.

KEY FEATURES 1

- 🎙️
- Multimodal AI Assistant
- Interact using voice or text through a friendly interface.
- Tap the purple microphone icon (bottom-right) to ask questions or request product help.
- Provides AI-generated summaries and intelligent answers from reviews and descriptions.

KEY FEATURES 2

- 👗
- Virtual Try-On (VTO)
- Allows users to virtually try on apparel before purchase.
- Example: Click "Banita Refined Sarees" to see the "Try-On" button in action.
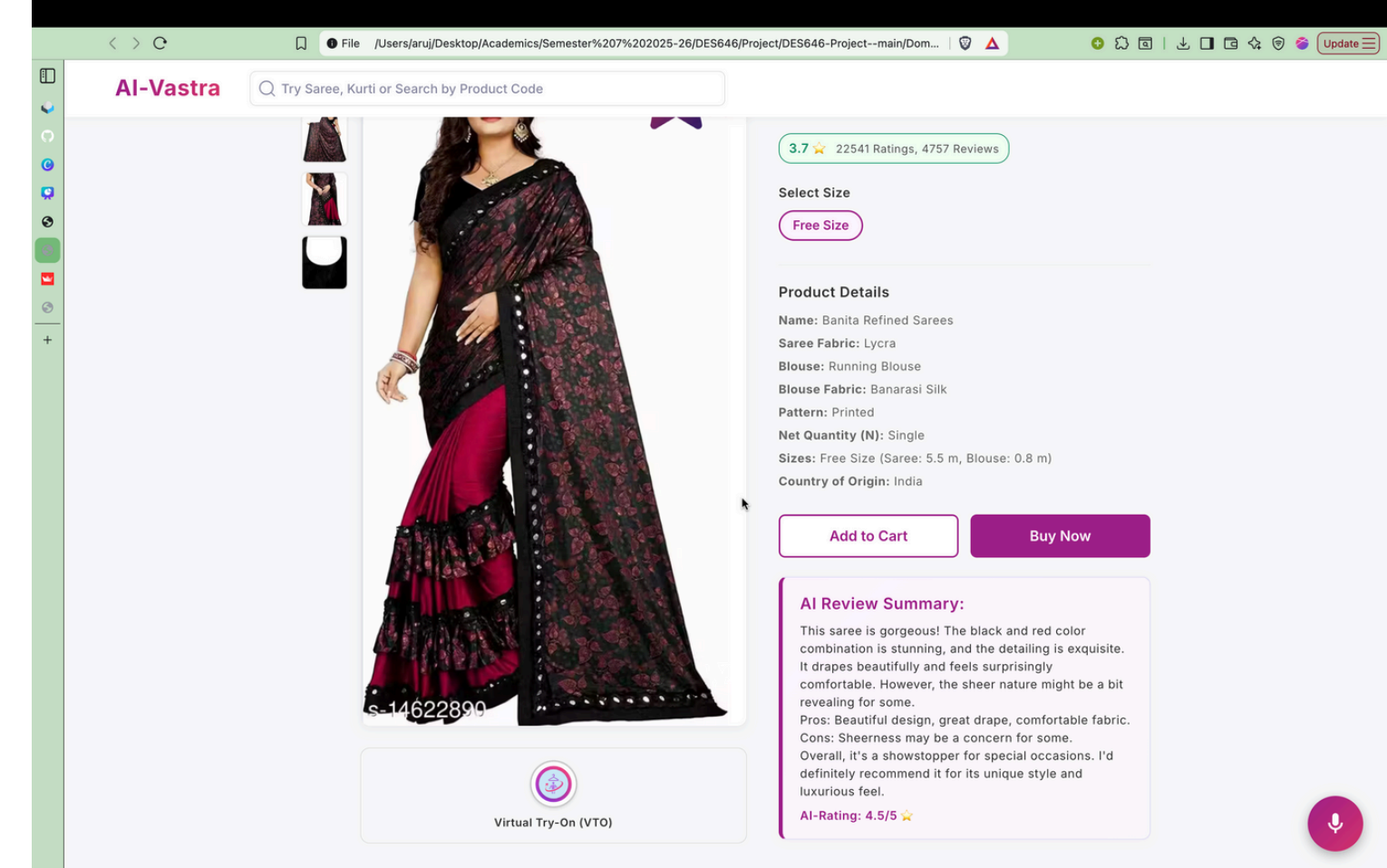
KEY FEATURES 3

- 📏
- AR Size Visualizer
- Displays the true physical scale of non-apparel products.
- Example: Click "Oliveware Containers" to open the "Visualizer" and view product scale beside a human hand.
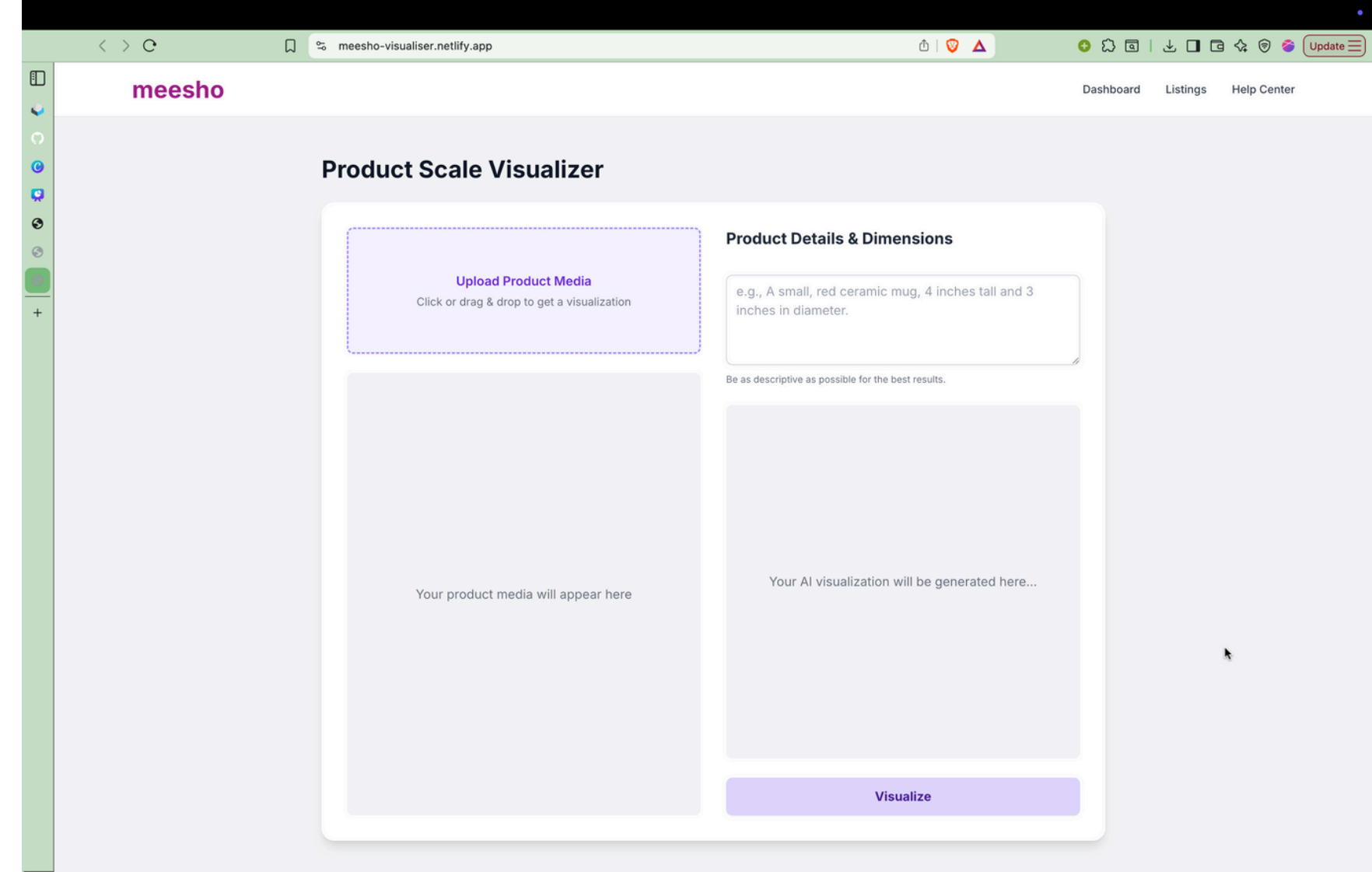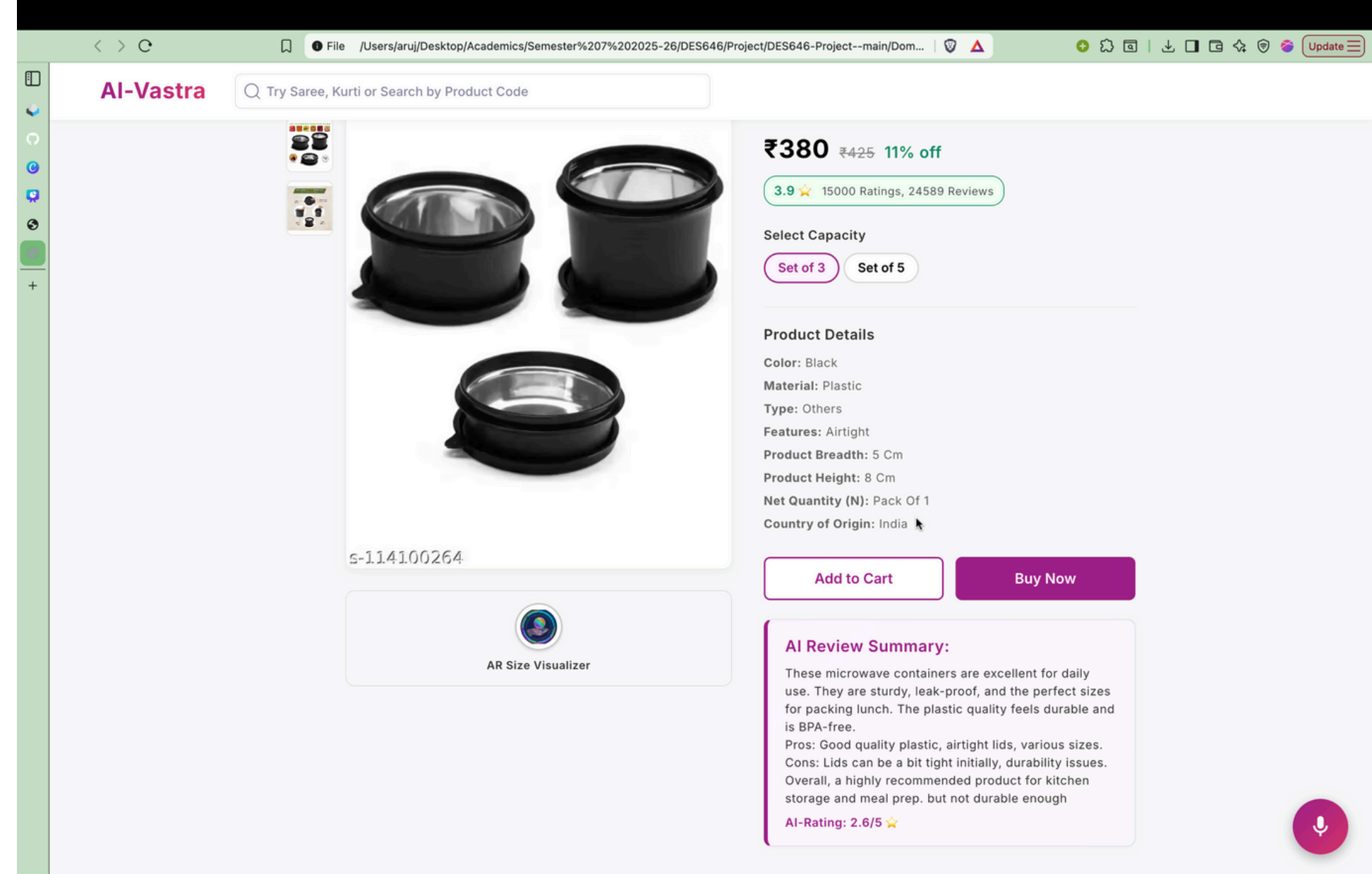
KEY FEATURES 4

- ✅
- Trust Signals

- Products display a "Verified" badge as a trust and quality marker.
- Helps users make confident purchase decisions, especially in new or low-literacy markets.

CONCLUSION

- AI-Vastra showcases how multimodal AI can enhance trust, inclusivity, and engagement in e-commerce.

- The project emphasizes integration over invention — creatively combining existing APIs for user benefit.

- Potential next steps include user testing, scaling, and academic dissemination in HCI or design research venues.

- Represents a step toward ethical, accessible, and AI-enhanced shopping for diverse audiences.

THANK YOU