Final Project

Spartan Nav

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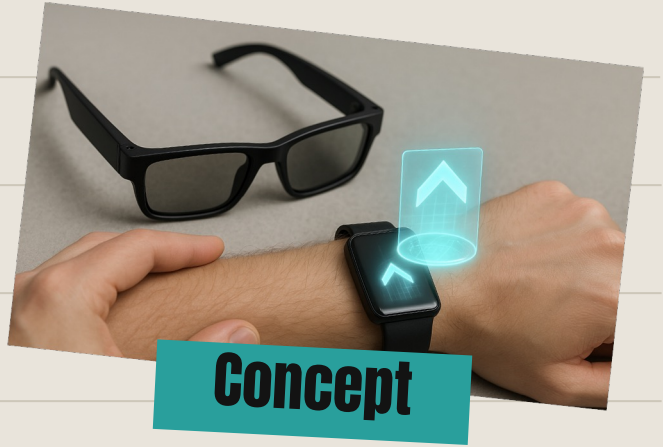
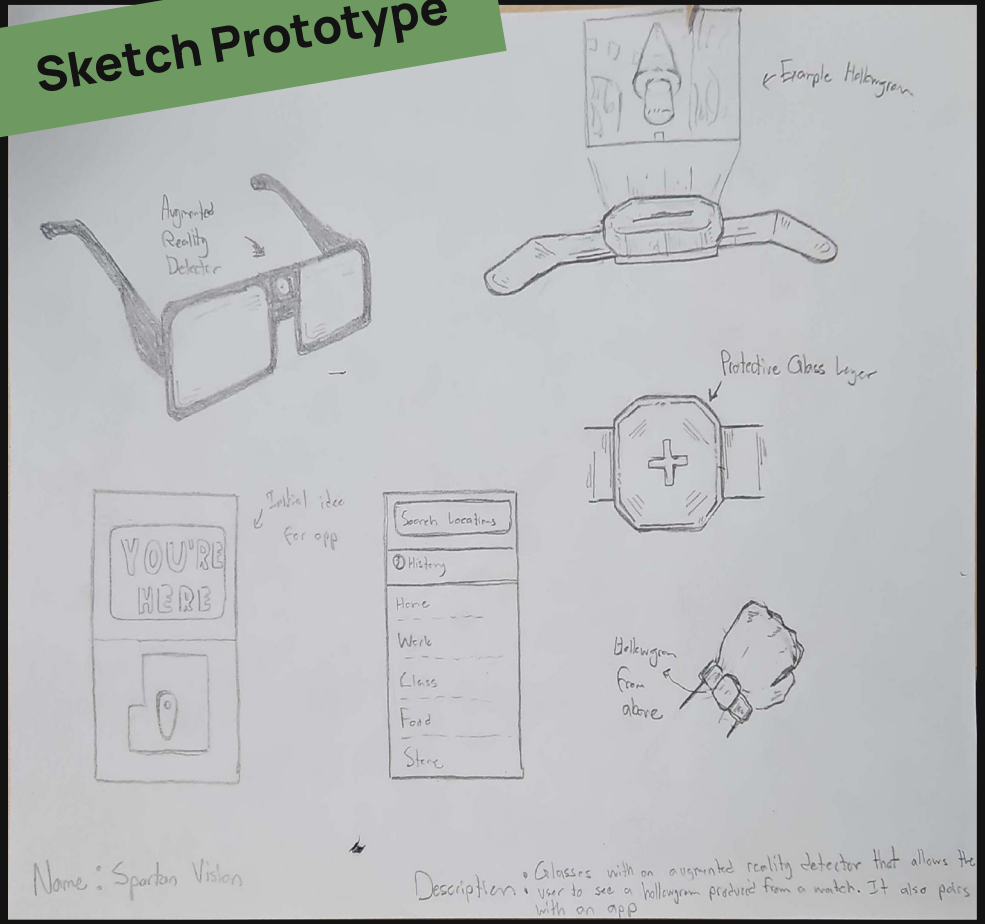
Problem and Concept

Problem: How can we make the Michigan State University campus easier for students to navigate?

Design Concept: A navigation system that uses smart glasses and a hologram watch to guide users across campus. Users will be able to enter their destination into the Spartan Nav app and it will project direction cues into their field of view using the smart glasses.



Sketch Prototype



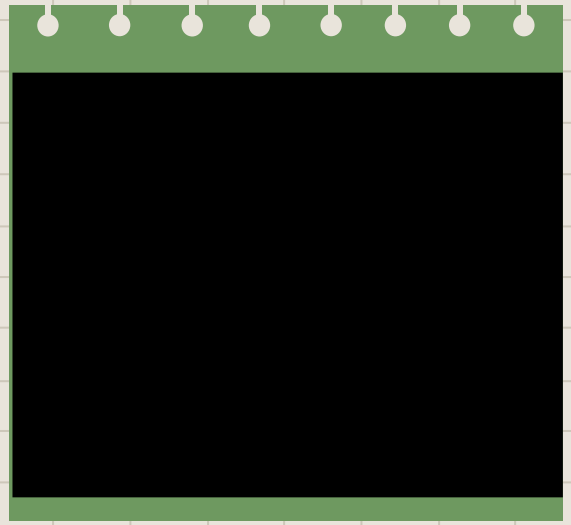
Sketching and Brainstorming

- Came up with 35 ideas, each sketched three different ones
- Explored smart glasses + hologram watch for campus navigation
- Identified key app features for entering destinations easily
- Discussed how directions should appear in the user's view
- Planned prototypes: sketches, Figma screens, interactive video, concept video.

Prototypes

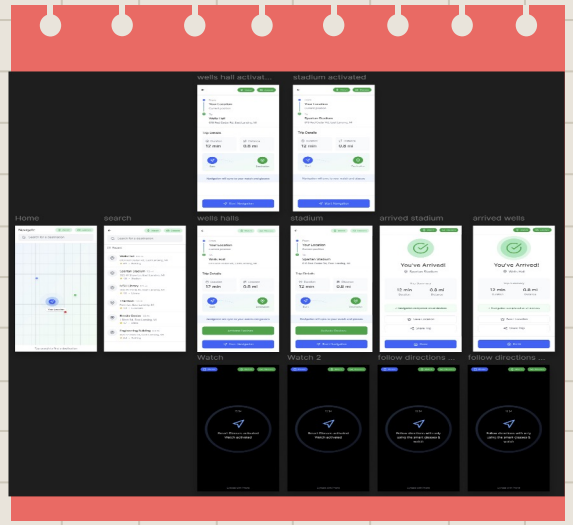
- Initial prototype showed how smart glasses and a hologram watch could give students clear, hands-free navigation.
- We chose this idea to solve the challenge of navigating MSU's large campus more efficiently.
- Created initial prototype using sketches, Figma mockups, video an concept video prototype.

Smart Glasses/Hologram Watch



Prototype Video

Concept Video



Figma

Key Insights from Evaluation

Visuals + Clarity

Users liked the buttons and overall layout, but mentioned the app could use more color to feel more polished. By enhancing visuals without overwhelming the interface we could improve clarity and user engagement.

User Behavior Observed

Some users tried to activate devices before choosing a destination, suggesting the sequence should be reordered or clarified. Buttons like “Start Navigation” not doing anything also caused confusion, showing the flow needs clearer feedback and guidance.

Design + Familiarity

Some users consistently compared the prototype to Google Maps, saying it felt recognizable and easy to use. This familiarity helped build confidence and suggest we should lean into more established map UI patterns rather than reinvent them.

General Feedback

Multiple testers said the system needs more landmarks and that the activation screens move too fast, leaving them unsure where to go. This showed us that users rely heavily on map context and need more time to read key instructions.

Future Work

Figma Experience

- Developing interfaces in Figma includes key skills for the modern UI/UX field
- Knowing FIgma helps us understand how users interact with mobile apps

Communication and Accessibility

- Solving human-centered design issues teaches us how to understand the needs of people
- Different people have different needs, and we have to know how to account for those differences

The Design Process

- Design is Iterative, and this group project taught us how to use “Blue Sky” thinking to our creative advantage
- Voicing your designs can come in many different forms like paper, videos and simulations

Group Workflow

- Everyone has their own independent ideas that can provide unique perspective towards design
- While working independent may feel more efficient, and our prototype wouldn’t have been the same without multiple sources of input

Conclusion

Our prototype demonstrates a new, hands-free wayfinding system that can make navigating MSU's campus easier for students. Our work shows the potential of combining wearable tech, simple interfaces, and clear direction cues to improve everyday student experiences.

Thank You!