



# H-E-B Augmented Shopping



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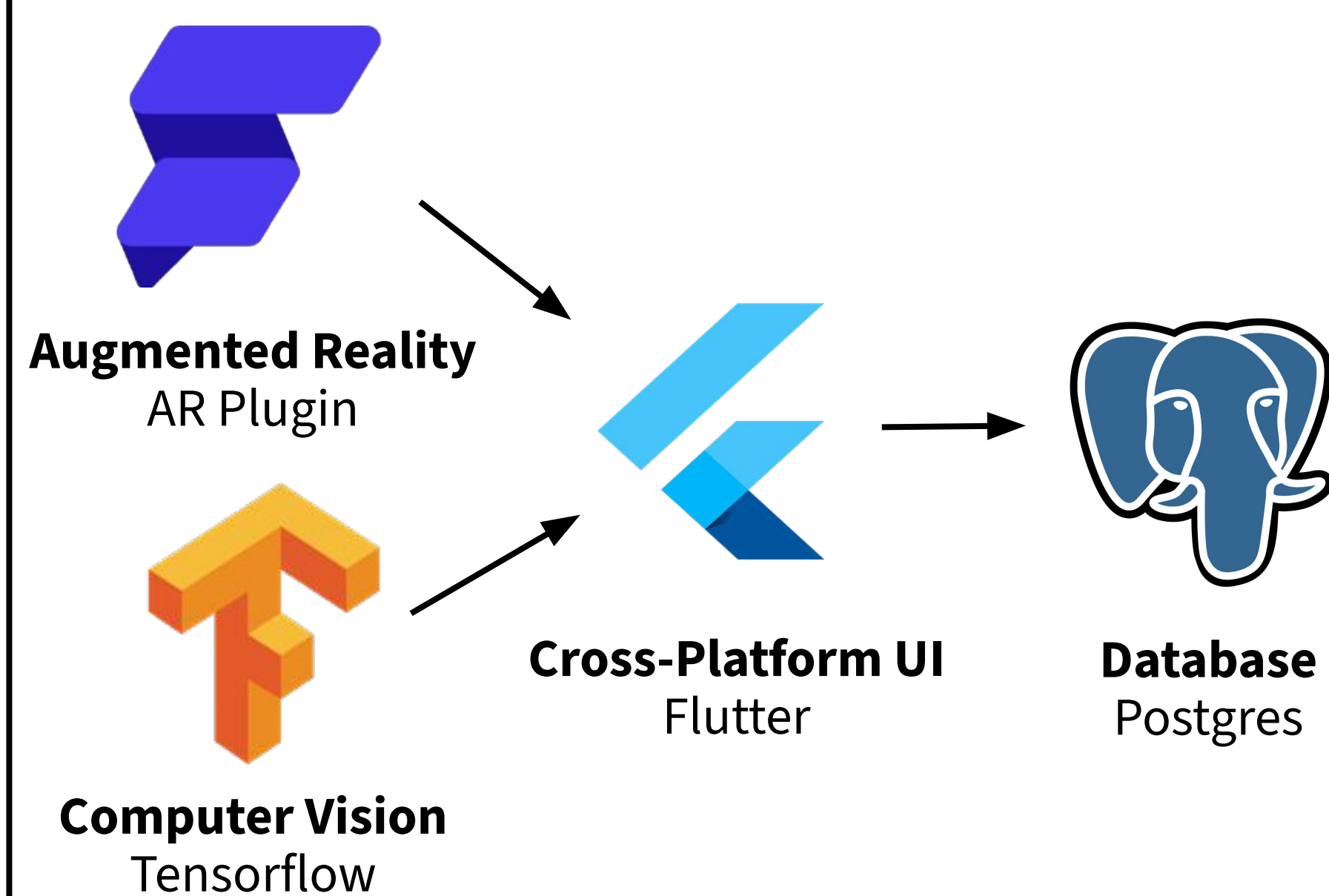
## Problem Statement

Planning meals for the week can be overwhelming, with endless grocery options and the challenge of using what you already have. This leads to **decision fatigue and food waste**, turning meal planning into a chore. It's time for a solution that reduces waste, boosts creativity, and makes meal planning enjoyable.

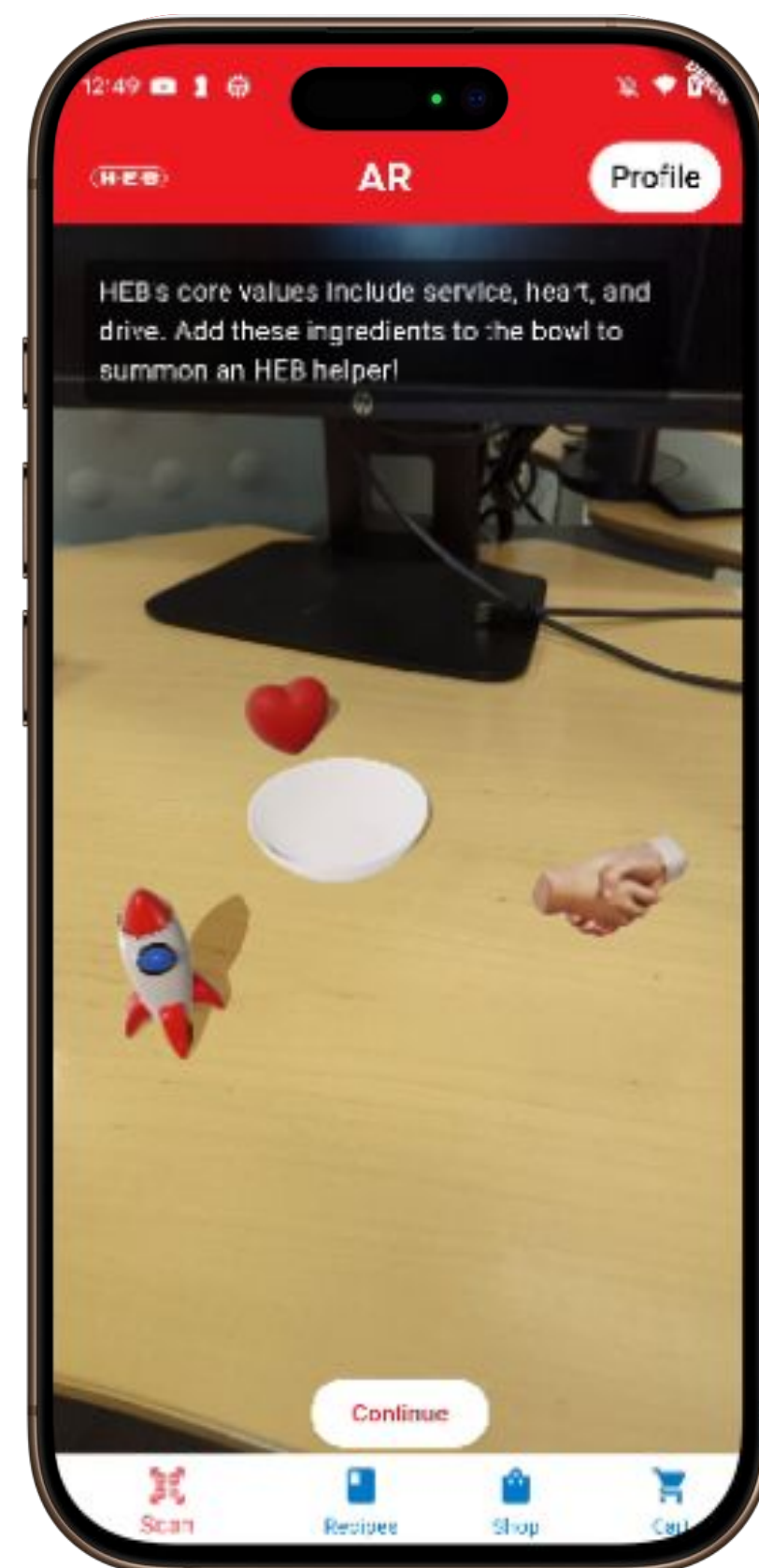
## What Success Looks Like

- Meal planning is **fun and efficient**.
- Customers receive fast, personalized **recipe recommendations**.
- Waste is reduced.
- Meals are tasty and healthy.

## Tech Stack



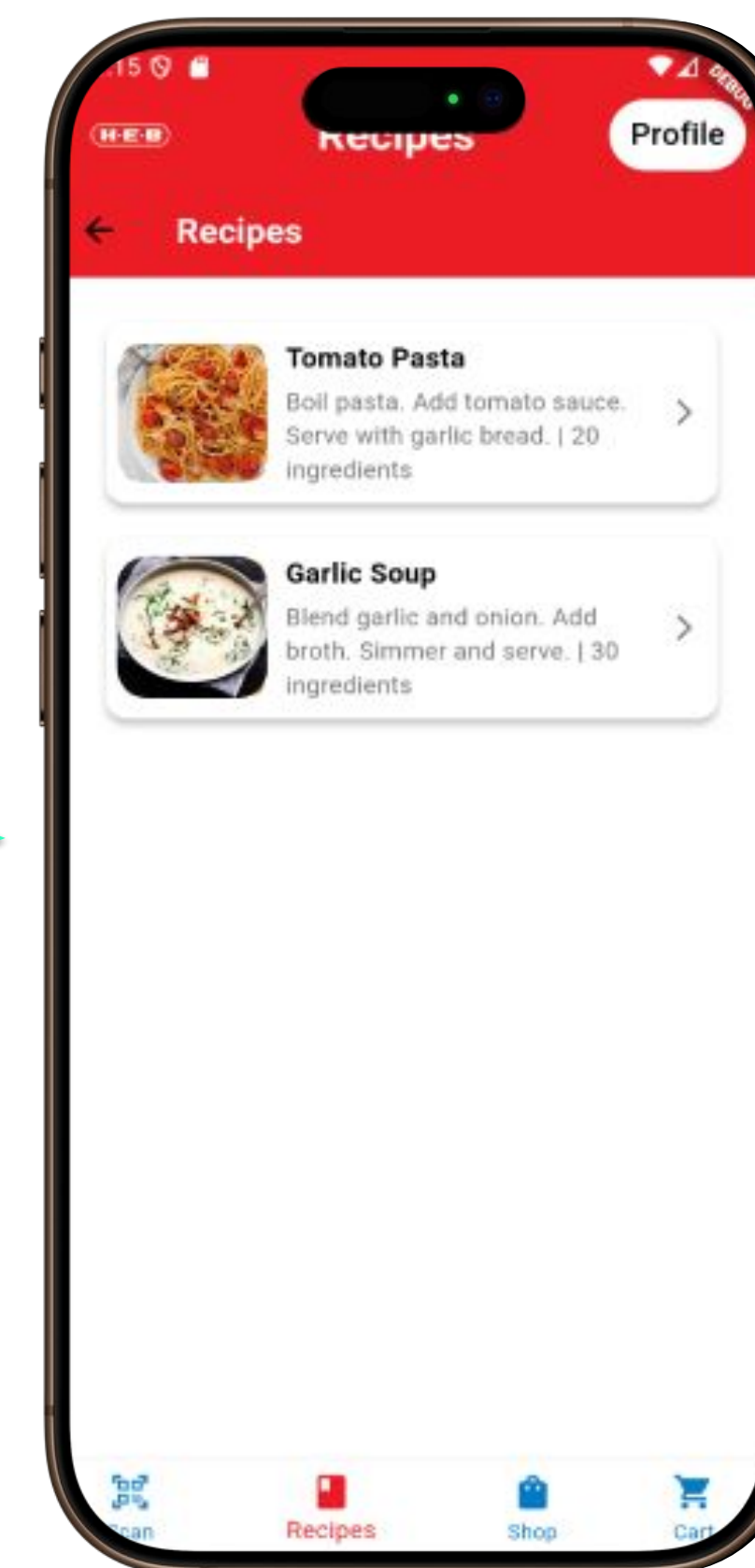
## Solution Design & Features



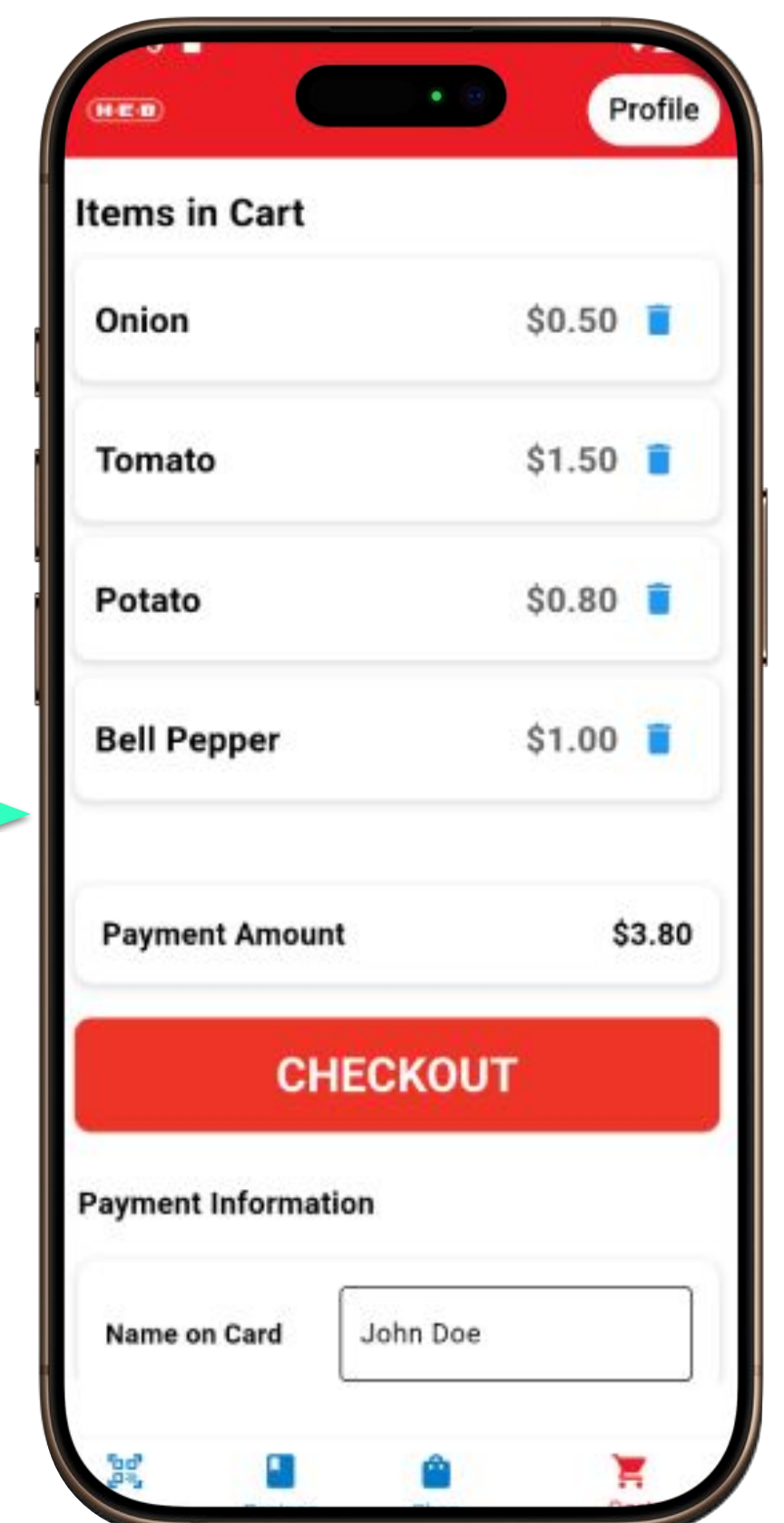
Scan what you have.



Find meals from your ingredients.



Let the cart build itself.



H-E-B shops for you.

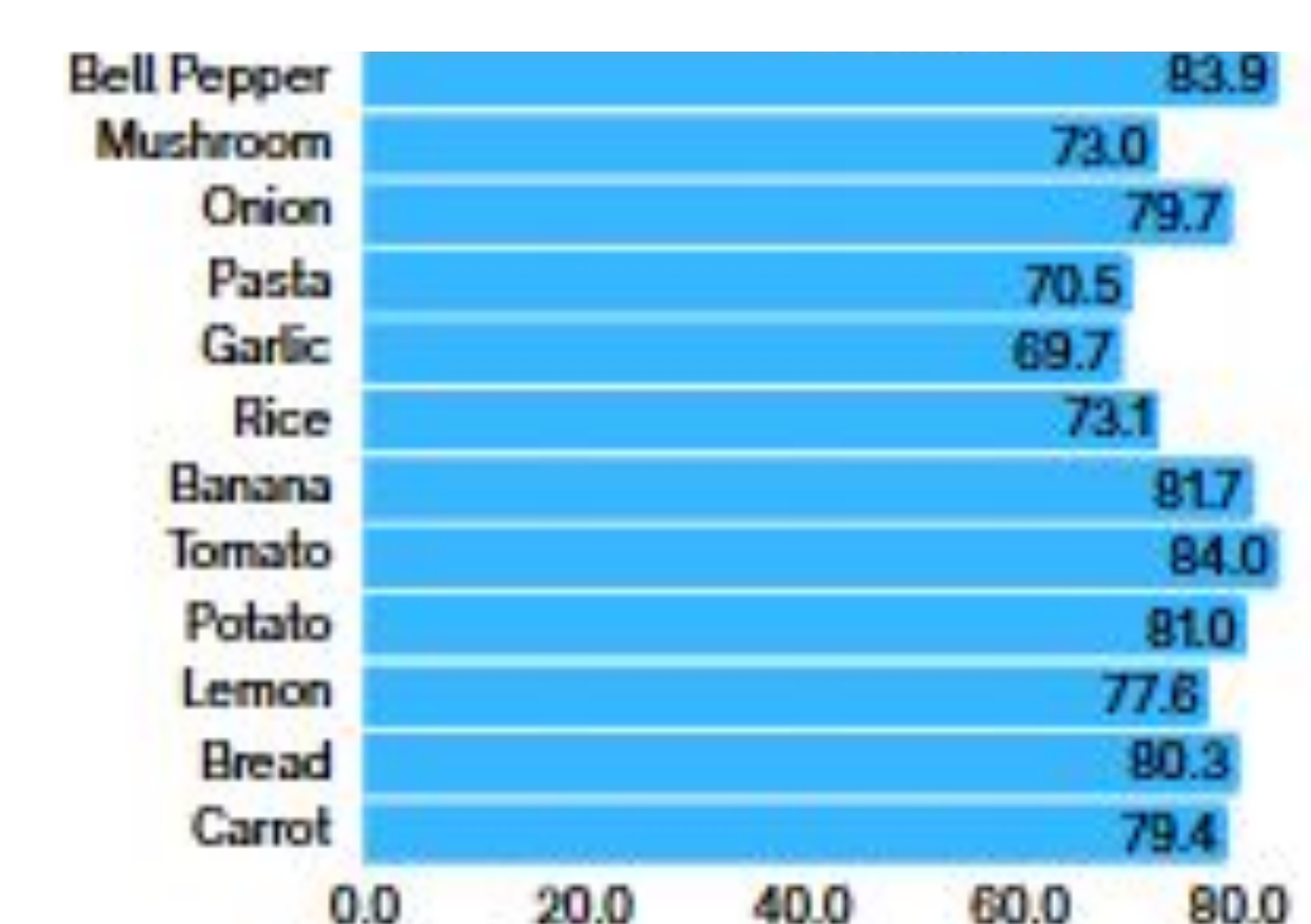
## Augmented Reality

- H-E-Buddy shows **how to use the app** with a fun and immersive onboarding experience.
- **Identified items** are shown to users for real-time feedback.
- Built with **cross-platform** ML and AR technology.



## Computer Vision

Average **detection success** using our model:



## Evaluation & User Studies

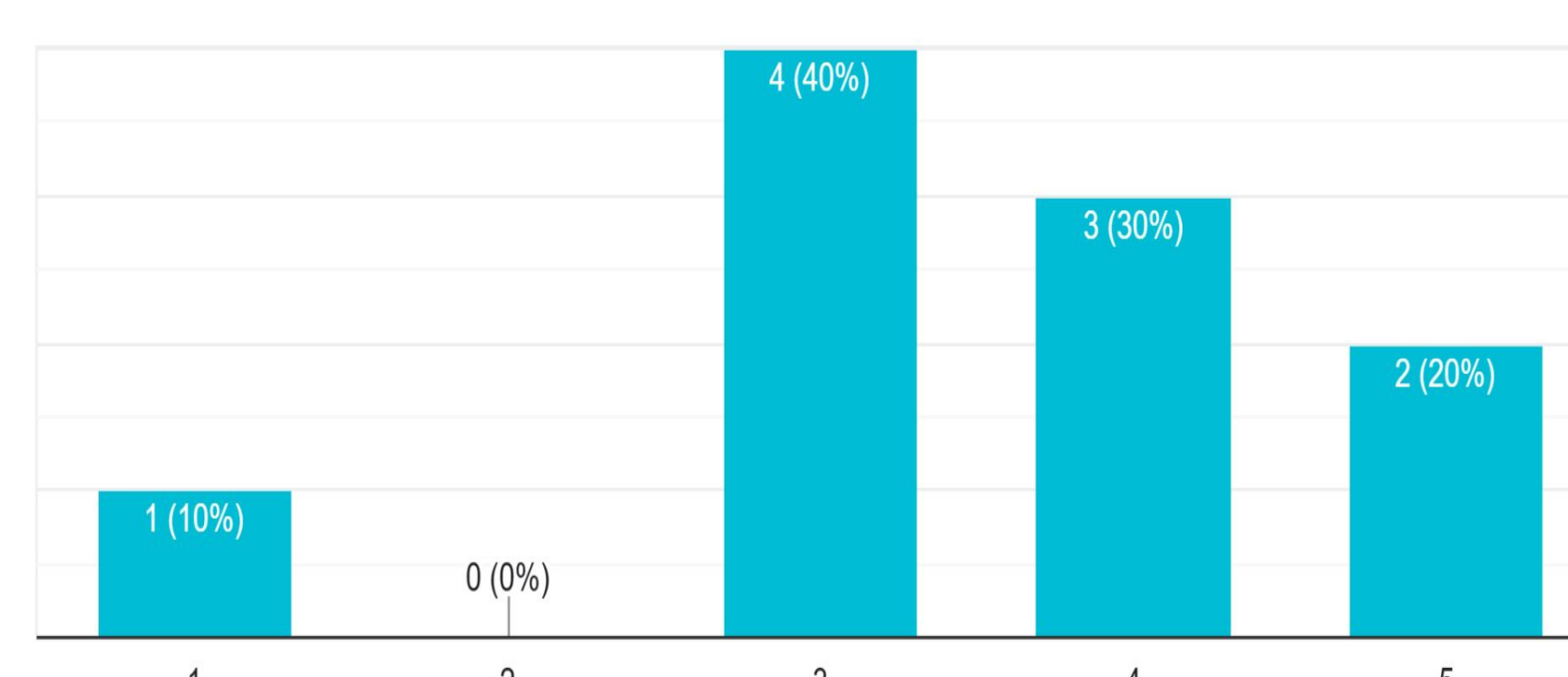
We conducted user studies and observed the following:

- Users agreed our app could **decrease the time spent** grocery shopping.
- Majority of users saw themselves using this app in the future.

Users also suggested improvements:

- Added **security** when creating an account
- More **feedback** for users to verify input

This application would save me time in grocery shopping.



## Related Work

- SuperCook (Expert, 2023)
- PHARA: AR Grocery Store Assistant (Gutiérrez et al., 2018)
- Increased Online Grocery Shopping (Capital One Shopping, 2024)

## Future Work

Our user studies and evaluation also identified key features we hope to improve in the future, such as:

1. Integrating **nutrition preferences**
2. **Enhanced computer vision** model
3. **Machine learning and AI** for more accurate and personalized recipe recommendations
4. **In-store navigation** with payment integration

