#### MICHIGAN STATE UNIVERSITY

## Project Plan Presentation Kohl's Cash Hero

The Capstone Experience

Team Kohl's

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#### **Project Sponsor Overview**

- Founded in Brookfield, Wisconsin in 1962
- Fortune 500, 31st on Top 100 Retailers 2025
- Well known for Kohl's Cash



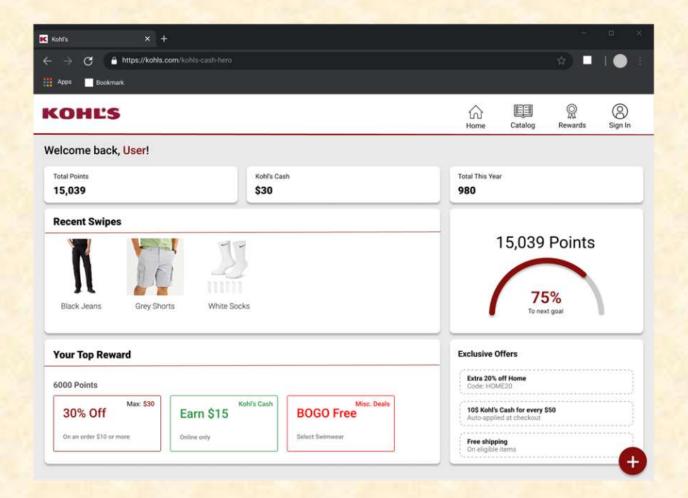
#### Project Functional Specifications

- Gamified reward system
- Target younger audience
- Drive sales and engagement
- Improve online shopping experience

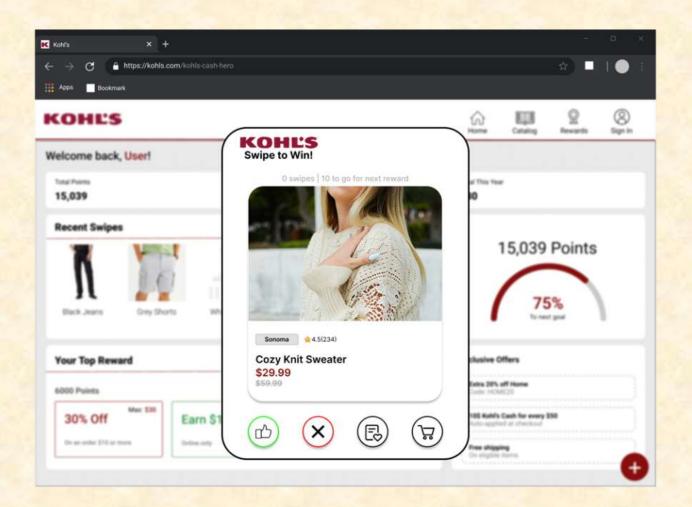
#### Project Design Specifications

- Personal dashboard
- Gamified swiping interface
- Points/Reward tracking
- Rewards page
- Personalized catalog

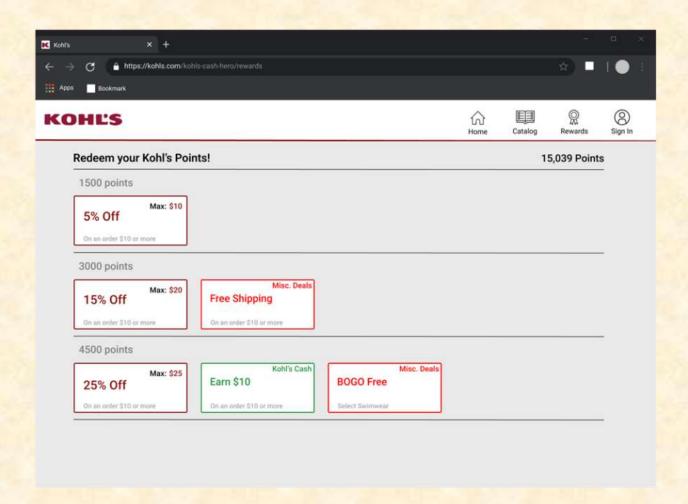
# Screen Mockup: Dashboard



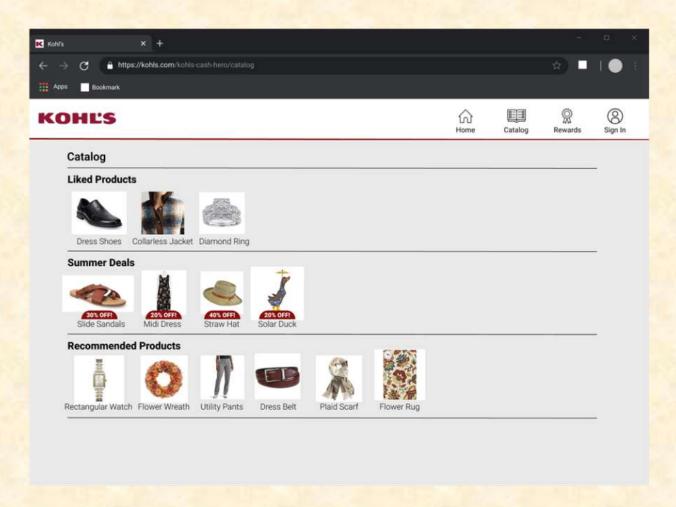
## Screen Mockup: Swiping Game



# Screen Mockup: Rewards Page



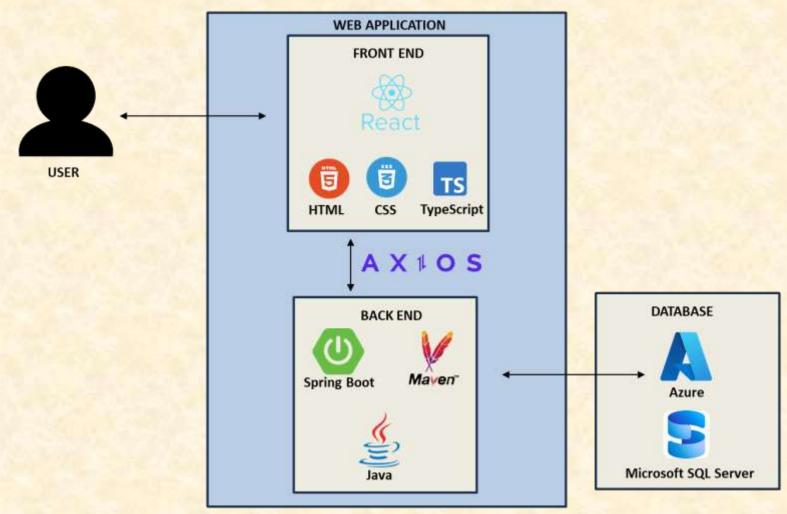
# Screen Mockup: Catalog



#### **Project Technical Specifications**

- Oracle OpenJDK 21
- Maven 3.9
- Spring boot 3.5.5
- React v19

### Project System Architecture



#### **Project System Components**

- Hardware Platforms
  - N/A
- Software Platforms / Technologies
  - Maven
  - Spring boot
  - Axios
  - MSSQL
  - Azure
  - React



#### Project Risks

- Exploit Prevention
  - Prevent users from cheating/automating/exploiting system
  - Handle logic in the back-end with a server-centric architecture
- Data Quality
  - Filter and sort out inaccurate and noisy data
  - Apply weights based on certain actions (i.e. wish list, add to cart)
- Algorithm Generalization
  - Kohl's will not provide real-world data such as user behavior data
  - Build personalized preference profile for each consumer
- Filter Bubble Effect
  - The algorithm can become too personalized and output monotonous results
  - Implement elements of randomness and output popular items to encourage exploring new items



### Questions?

