

# Team Ctrl-Alt-Del

WiCS Hackathon '25

Atharva Date  
Parth Thombre  
Manveer Saini

Revvo

A mall store finding application

No more wandering aimlessly!

ARIZONA STATE UNIVERSITY

# Problem Statement & Solution

## **Problem Statement**

Navigating large malls can be frustrating for visitors who struggle to find stores, check store hours, locate amenities, or read reviews. Traditional in-mall directories are often inconvenient, outdated, and require physical presence, making the shopping experience inefficient and time-consuming.

## **Solution**

Revvo - a mobile app that provides a seamless digital alternative, offering exact location assistance, store information, operating hours, and reviews — all at your fingertips. Users can explore mall stores by category, locate them effortlessly, and plan their visit with ease. No more wandering aimlessly — just a smarter, more convenient way to shop.

# Project Overview

- **Mall Store Listings:** The app provides a comprehensive list of all stores within a specific mall, offering essential details such as store names, opening hours, and promotions.
- **User-Friendly Interface:** Designed for mobile users, the app makes it easy to navigate and find the desired stores or promotions without the need to visit multiple websites.
- **Convenient Access:** Users can quickly access all relevant information about the mall and its stores, making it more convenient than searching through individual websites.
- **Real-Time Information:** The app ensures up-to-date details on store hours and promotional offers, helping users make better decisions while shopping.
- **One-Stop Shopping Tool:** The app consolidates store listings, timings, and promotions in one place, reducing the time and effort required to check multiple resources.

# Tech Stack

- Frontend: React Native
- Backend: Appwrite DB
- Styling: Tailwind CSS
- Mobile Application Testing:
  - Xcode (On MacOS devices)
  - Expo (On Windows devices for different mobile devices)
- Google Authentication: Google Cloud
- Code Editor: Visual Studio Code

# Resources

- AI Tools - Chat GPT & Perplexity used for the following implementations:
  - Image generation
  - Database schema generation
  - Appwrite Database setup
  - Issues/Bug fixes
  - Google Console Project setup for Authentication
- React Native documentation: <https://reactnative.dev/docs/getting-started>
- Expo documentation: <https://docs.expo.dev/>
- Tailwind CSS documentation: <https://tailwindcss.com/docs/installation/using-vite>
- Arizona Mills Mall: <https://www.simon.com/mall/arizona-mills>

# Our Contributions

- Parth Thombre:
  - Frontend (Home and Explore pages)
  - Search and Filter Features
- Manveer Saini:
  - Backend setup
  - Data seeding
  - Comment and Locations Features
- Atharva Date:
  - Integrate Backend with Frontend
  - Google Authentication
  - Frontend (Profile and Login pages)

DEMO





Downloading 86.75%



WELCOME TO REVVO

**Lets get you closer to  
Your Desired Store**

Login to Revvo with Google

 Continue with Google

Profile



**Atharva Shailesh Date**

 My Bookings >

 Payments >

 Profile >

 Notifications >

 Language >

 Help Center >

 Logout



Home



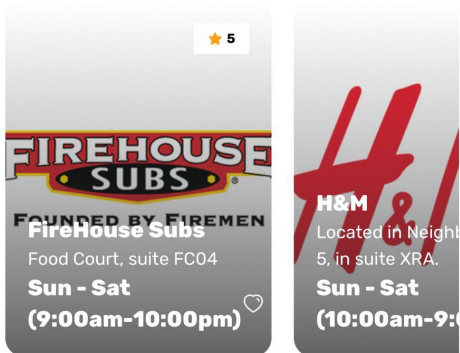
Explore



Profile

Search for brands & categories

## Top Rated

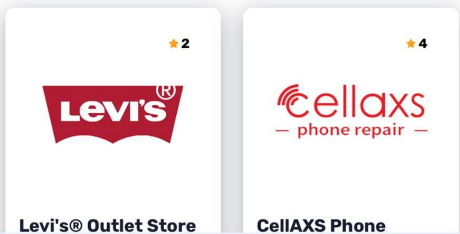
[See All](#)

All

Clothing

Entertainment

Restaurant



Home



Explore



Profile

Search for brands & categories

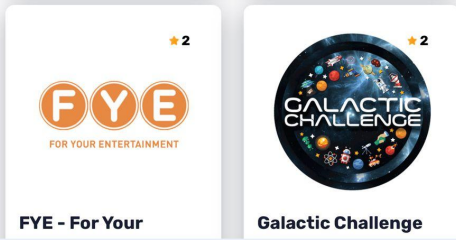
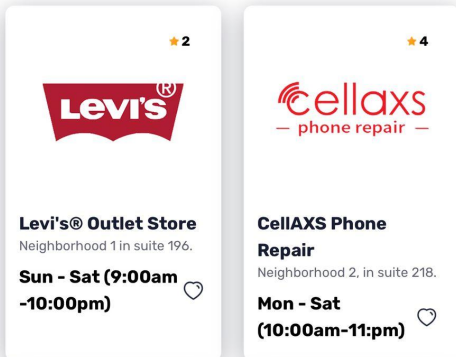
All

Clothing

Entertainment

Restaurant

## Results (20)



Home



Explore



Profile

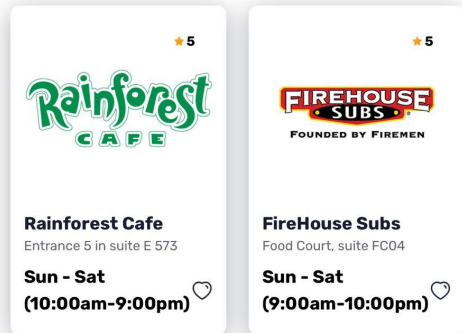
Search for brands & categories

Clothing

Entertainment

Restaurant

## Results (2)



Home



Explore



Profile

← Search for Your Ideal Home 🔔

🔍 Fye 🌐

All Clothing Entertainment Restaurant

Results (1)

★ 2

**FOR YOUR ENTERTAINMENT**

**FYE - For Your Entertainment**  
Between Entrance 5 and the Food Court in suite 612.

**Sun - Sat (10:00am-11:00pm)** ❤️

← ❤️ ↻



## Levi's® Outlet Store

Stores ★ 2 (6 reviews)

### Contact



**Elon Musk**  
musk3@yahoo.com

💬 📞

### Overview

Tailored for the Young and Hungry. Every detail has been thoughtfully trimmed and artfully tailored. So

Available  
**Sun - Sat (9:00am -10:00pm)**

### Contact



**Elon Musk**  
musk3@yahoo.com

💬 📞

### Overview

Tailored for the Young and Hungry. Every detail has been thoughtfully trimmed and artfully tailored. So lead the way ladies and gents, this is a pair of Levi's.

### Location

📍 Neighborhood 1 in suite 196.



★ 2 (6 reviews)

View All



**Manish Pandey**

This is a review by Reviewer 2.

📍 120

Sat Mar 29 2025

Available  
**Sun - Sat (9:00am -10:00pm)**

# Future Scope

- **Multi-Mall Expansion:** The app plans to expand to include multiple malls, allowing users to explore stores, timings, and promotions across different locations.
- **Comparison Features:** Users will be able to compare stores and their offerings across malls, enabling them to make informed decisions on where to shop.
- **Personalization:** Future versions could allow users to save their favorite malls or stores, receive tailored recommendations, or get notified about specific promotions.
- **Cross-Platform Availability:** The goal is to make the app available on multiple platforms, such as iOS and Android, increasing accessibility for a wider audience.
- **Enhanced Features:** Additional features, such as interactive mall maps, store reviews, or loyalty rewards, could be integrated to enhance the user experience and drive engagement.

Use of perplexity  
prompts

## Hackathon App Ideas for Social Good and Humanity

Here are some impactful app ideas tailored to your hackathon theme of "Hack for Humanity" and social good, including your idea for a **mall store finder app**:

### 1. Mall Store Finder App (Your Idea)

**Concept:** An app to help users navigate malls, locate stores, and find amenities with ease. This addresses the common frustration of navigating large shopping centers, while also improving accessibility.

#### Core Features:

- **Interactive Mall Map:** Displays all stores, restrooms, ATMs, parking areas, and other amenities.
- **Store Directory:** Searchable database of stores categorized by type or brand name.
- **Geolocation and Navigation:** Indoor positioning to show users their exact location and guide them to their destination.
- **Parking Assistance:** Helps users find available parking spots and remember where they parked.
- **Push Notifications:** Alerts users about sales, events, or promotions happening in the mall.

mall management.

This app aligns with social good by improving accessibility for people with mobility challenges or those unfamiliar with a mall layout. It can also reduce wasted time and stress for shoppers.

## **2. Mental Health Support App**

**Concept:** A platform offering accessible mental health resources to underserved communities.

**Features:**

- AI-based mental health check-ins.
- Guided mindfulness exercises.
- Peer support groups and teletherapy options.

This app fosters well-being by addressing mental health challenges in an inclusive way.

## **3. Accessibility Navigator**

**Concept:** An app that evaluates public spaces (e.g., malls, parks) for accessibility features like wheelchair ramps, elevators, or braille signage.

- Real-time alerts about closures or maintenance affecting accessibility.
- Integration with your mall store finder app to highlight accessible routes within malls.

This app empowers people with disabilities by providing them with vital information about public spaces.

#### **4. Smart Recycling Assistant**

**Concept:** An app that uses AI to identify recyclable materials and provide disposal instructions.

**Features:**

- Image recognition to classify items (e.g., plastic vs. glass).
- Nearby recycling center locator.
- Gamification to encourage recycling habits (e.g., rewards for recycling milestones).

This app promotes environmental sustainability and community engagement.

#### **5. Volunteer Matching Platform**

**Concept:** A platform connecting volunteers with local causes based on their skills and interests.



- Event calendar for community service projects.
- Impact tracker showing hours contributed and lives impacted.

This app strengthens communities by fostering a culture of giving back.

## **6. Telehealth for Underserved Areas**

**Concept:** A telemedicine platform connecting rural or underserved populations with healthcare providers.

### **Features:**

- Video consultations with doctors.
- Symptom checker powered by AI.
- Integration with pharmacies for prescription delivery.

This app makes healthcare more accessible to those in need.

## **7. Carbon Footprint Tracker**

**Concept:** An app that calculates users' daily carbon footprints and suggests eco-

## Features:

- Activity-based carbon tracking (e.g., commuting, energy usage).
- Tips for reducing emissions (e.g., carpooling options).
- Community challenges to encourage collective action.

This app raises awareness about environmental impact while encouraging sustainable behaviors.

## Tips for Execution

1. Focus on building an MVP with essential features during the hackathon.
2. Assign roles based on team members' strengths (e.g., coding, UI/UX design).
3. Use tools like Figma for design mockups and Firebase for backend development.
4. Prepare a compelling pitch highlighting the problem your app solves and its potential impact.

By including your mall store finder idea alongside other socially impactful concepts, you can create a meaningful project that stands out at the hackathon!

development of this app:

## App Concept: Mall Store Finder

The app will help users locate stores, services, and amenities within a mall using interactive maps and real-time information. Future integrations could include features like product availability, promotions, and event notifications.

### Core Features for the MVP

#### 1. Interactive Mall Map:

- A detailed map showing all stores, restrooms, ATMs, parking areas, and other amenities.
- Include turn-by-turn navigation to guide users from their current location to their desired store 6 9 .

#### 2. Store Directory:

- A searchable directory of stores categorized by type (e.g., fashion, electronics) or brand name.

closures, or new openings <sup>1</sup> <sup>11</sup> .

#### 4. Geolocation and Wayfinding:

- Use GPS or Bluetooth for indoor positioning to show users their exact location within the mall.
- Enable blue-dot navigation for seamless movement between stores or amenities <sup>6</sup> <sup>12</sup> .

#### 5. Parking Assistance:

- Help users locate available parking spots and remember where they parked their vehicle <sup>7</sup> <sup>10</sup> .

#### 6. Push Notifications:

- Notify users about sales, events, or promotions happening in the mall <sup>10</sup> <sup>12</sup> .

### Future Integrations

#### 1. Product Search:

- Allow users to search for specific products and see which stores have them in stock <sup>2</sup> <sup>3</sup>

made at participating stores <sup>10</sup> .

### 3. Event Management:

- Add a calendar feature showcasing upcoming events, workshops, or pop-ups in the mall.

### 4. Food Court Navigation:

- Include menus and reviews for restaurants in the food court.

### 5. Augmented Reality (AR) Navigation:

- Use AR to overlay directions on the user's camera feed for an immersive experience.

### 6. Analytics Dashboard for Mall Management:

- Provide insights into foot traffic patterns and popular areas within the mall to help management optimize layouts and promotions <sup>9</sup> .

## Technical Considerations

### 1. Mapping Technology:

### **3. Cross-Platform Development:**

- Build the app using frameworks like Flutter or React Native to ensure compatibility with iOS and Android devices.

### **4. Scalability:**

- Design the app to support multiple malls in the future by allowing easy addition of new locations.

## **Monetization Opportunities**

### **1. Advertising Platform:**

- Allow retailers to promote deals or events through in-app ads.

### **2. Premium Features:**

- Offer a subscription model for advanced features like parking reservations or exclusive deals.

### **3. Data Insights for Retailers:**

## 2. Premium Features:

- Offer a subscription model for advanced features like parking reservations or exclusive deals.

## 3. Data Insights for Retailers:

- Provide anonymized foot traffic data to retailers for a fee.

## Why This Idea is Timely

As malls evolve into community hubs offering experiences beyond shopping, apps like this can enhance customer satisfaction by simplifying navigation and improving accessibility <sup>5</sup>.

Additionally, integrating advanced features like AR or loyalty programs can make your app stand out from existing solutions like Simon Malls or FastMall <sup>3</sup> <sup>7</sup>.

This project aligns perfectly with your hackathon's theme of creating impactful apps while addressing a common pain point for shoppers!

THANK YOU