

# CAR DEX

COLLECT. TRADE. COMPETE.



**Group 7**  
ELEVATOR PITCH



CAR  
DEX

# WHAT IS THE APP?

Our project is a digital car trading platform where users can collect, showcase and trade car cards across mobile and web. Users can log in and collect daily packs and currency, buy packs to obtain cards, and trade cards with other users for currency or cards.

It's a fun, accessible way for collectors to build their garage, compare collections and trade securely online.



CAR  
DEX

# WHY USE OUR APPLICATION?

## THE BACKGROUND

Collectibles are popular, such as Pokemon, NFTs, and Sports cards, and the digital age of collecting them has begun. This is done using a digital platform to collect, trade, and showcase your collections.

## THE PROBLEM

There is no collectible app for car enthusiasts, and thus we aim to give car lovers a digital trading card platform, with a competitive twist. Users collect virtual car cards, trade and showcase their garages, and battle in themed challenges (e.g., Muscle vs. JDM, horsepower face-offs, rarity battles) to build and prove the ultimate collection.

Our platform allows car lovers to be creative and continue to pursue their love for cars.



# KEY FEATURES

- Complete Card Trades
- Build and Manage Collections
- Pack Openings
- Spec Battles (Game Mode)
- Showcase Garages
- Global Leaderboards



# TECH STACK

**WEB FRONT-END** → React

**MOBILE FRONT-END** → Flutter

**API** → ASP .Net Core / Fastify

**API Docs** → Swagger

**Database** → PostgreSQL



# TECH RATIONALE

## REACT (WEB)

Great for building rich, responsive websites. It lets us show off high-resolution car cards and makes comparing collections on desktop smooth and fast.

## FLUTTER (MOBILE)

One codebase for iOS and Android with near-native speed. Perfect for the swipe, flip, and trading animations that make the mobile garage feel alive.

## PostgreSQL + Prisma

A rock-solid database with room to grow. It stores every car card, user garage, and trade history safely while Prisma makes it easy and reliable to work with.

## ASP.NET Core / Fastify (API)

Both give us a secure, high-performance backend. This is what keeps trades instant, updates collections in real time, and scales as more collectors join.

## SWAGGER / OPENAPI

Creates live, interactive API docs so our web and mobile teams can stay in sync and test trading features without guesswork.



CAR  
DEX

# ARCHITECTURE DIAGRAM

