

Karto: Car Maintenance and Gas Finder Application

Owen Kemp, Joshua Quaintance, Joshua Wise, Blake Payne

Purpose

- Help keep track of cars.
- Keep a history of the maintenances done on each car.
- Find gas from gas stations.

MVP

- Authenticate users
- Add trusted gas stations
- Look for gas prices
- Maintain a list of cars
- Create cars
- Maintain a maintenance log on each car

Authenticate User

[Create Account](#) → [Login](#)

Login

Email

asoh@exam.com

Password

.....

Submit

Gas Prices

Find Gas For Your Car

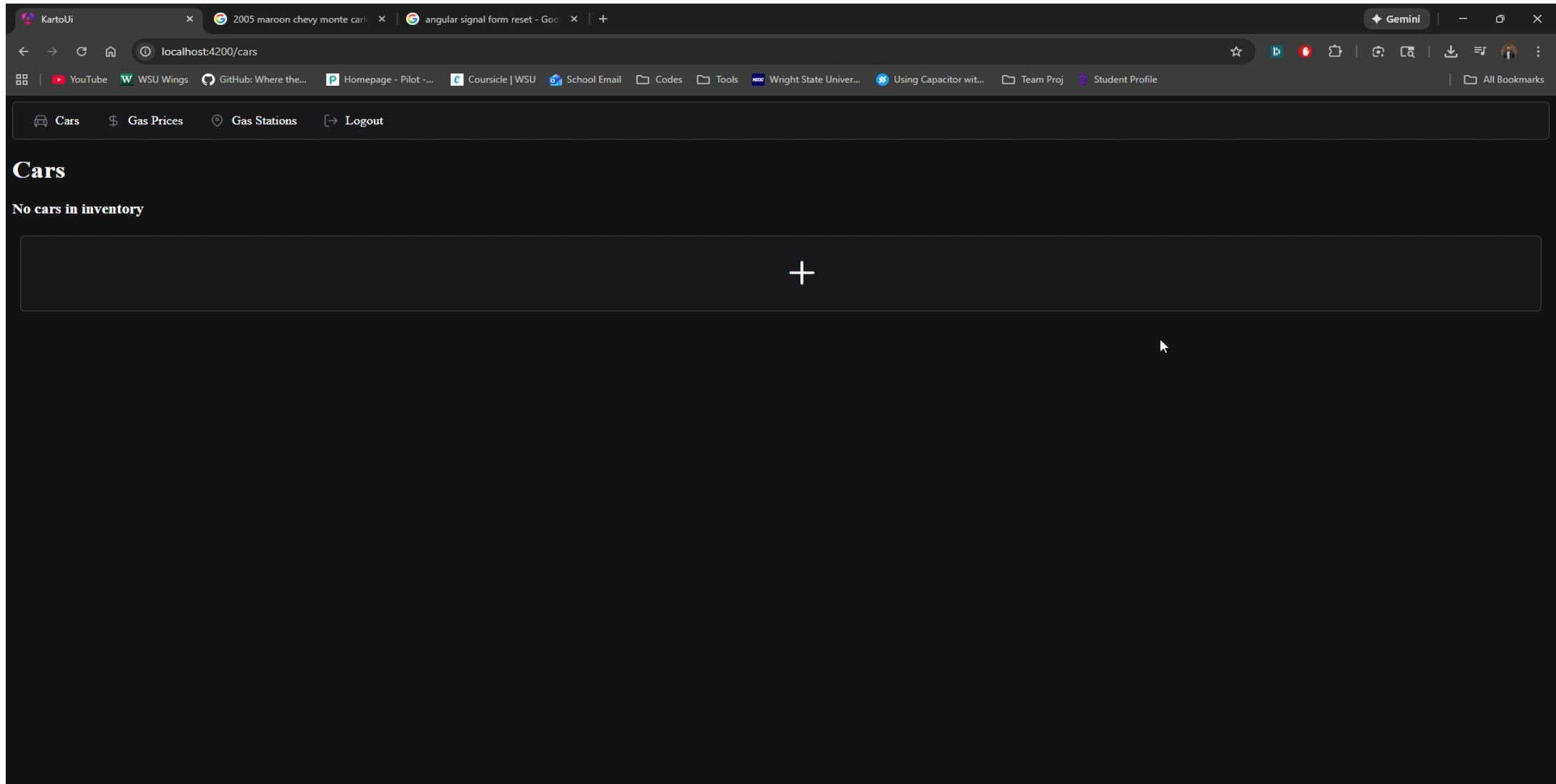
Select your car ▼

2015 Honda Accord

2025 Volkswagon Jetta

2025 Toyota Camry

Car List



Maintenance List

[Cars](#) [Gas Prices](#) [Gas Stations](#) [Logout](#)

Create Maintenance

Cost
312.32

Date
12/03/2025 03:54 PM

Mileage
89,123

Item Details

Maintenance Type
Oil Change

Quantity
1

Comments
Test

Remove

Gas Station List

ZenFileEditViewHistoryBookmarksToolsWindowHelp

(1)27°F100%Thu Dec 4 09:38

CarsGas PricesGas StationsLogout

Gas Stations

Add Gas Station

Name

Address

City

OH

Zip

0

0

Add

Spec Marathon

ID: 1

Address: 1

City: Inglewood

State: Ohio

Zip: 1234567

Edit

Delete

Favorite

Speedway Broadway

ID: 2

Address: 2

City: El Paso

State: Ohio

Zip: 1234567

Edit

Delete

Favorite

Main Clark

ID: 3

Address: 3

City: Escondido

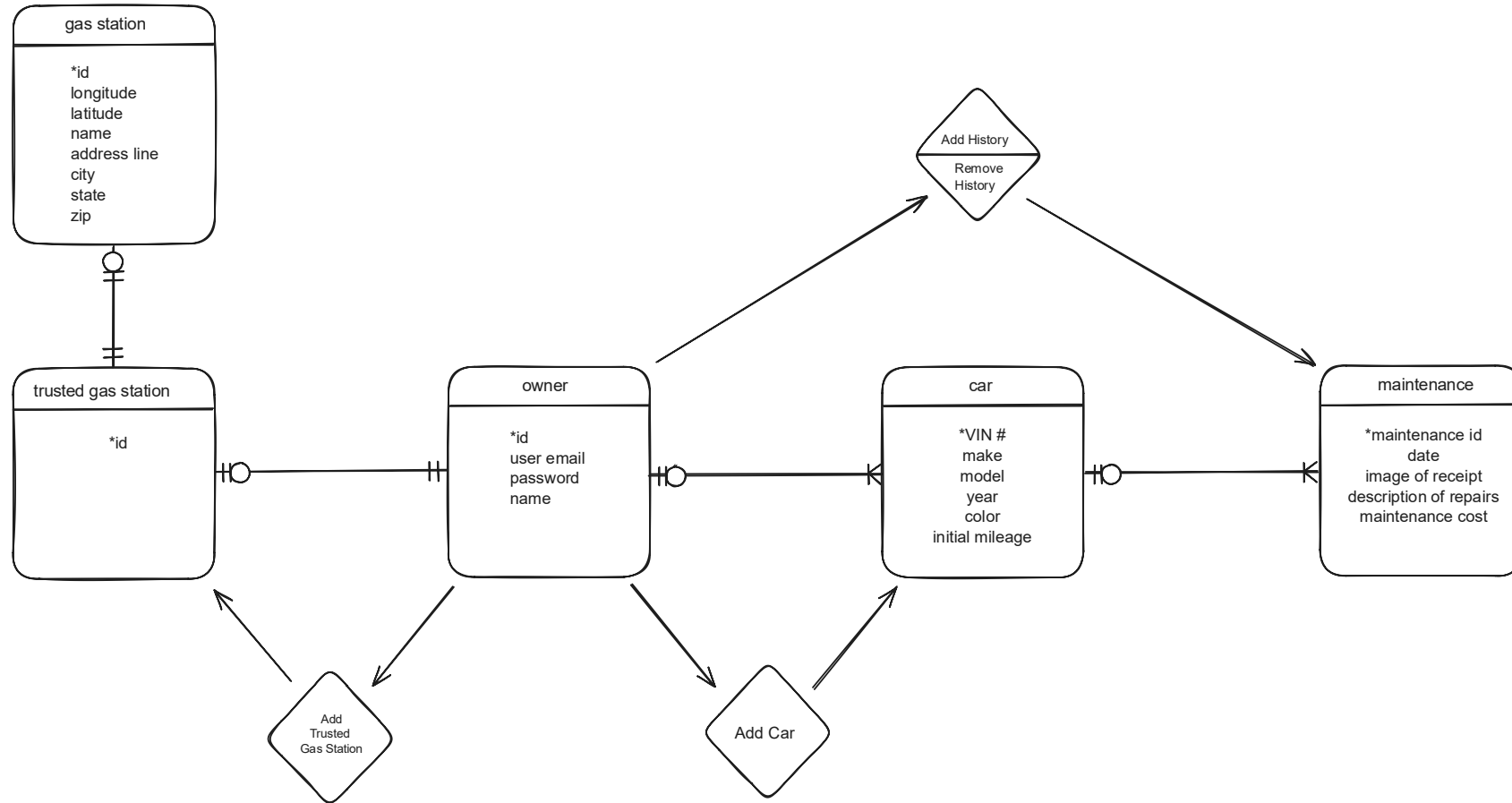
State: Ohio

Edit

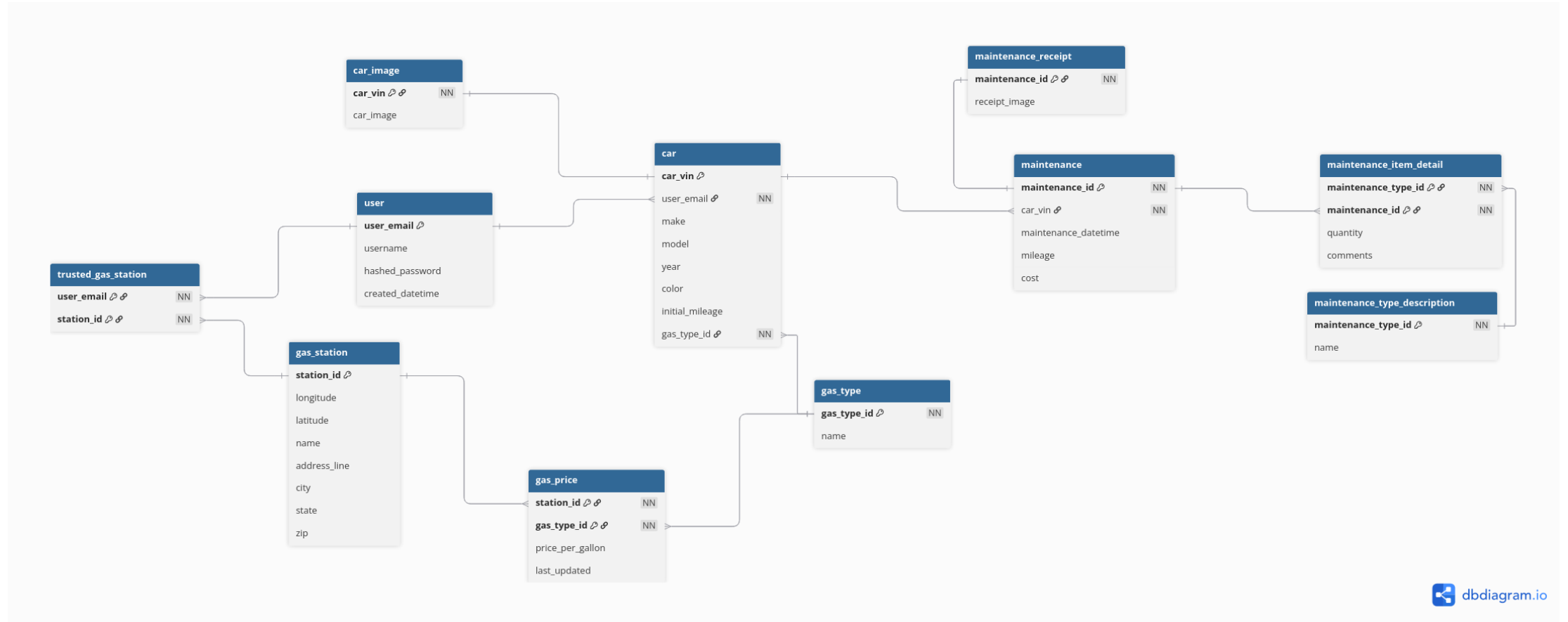
Delete

Favorite

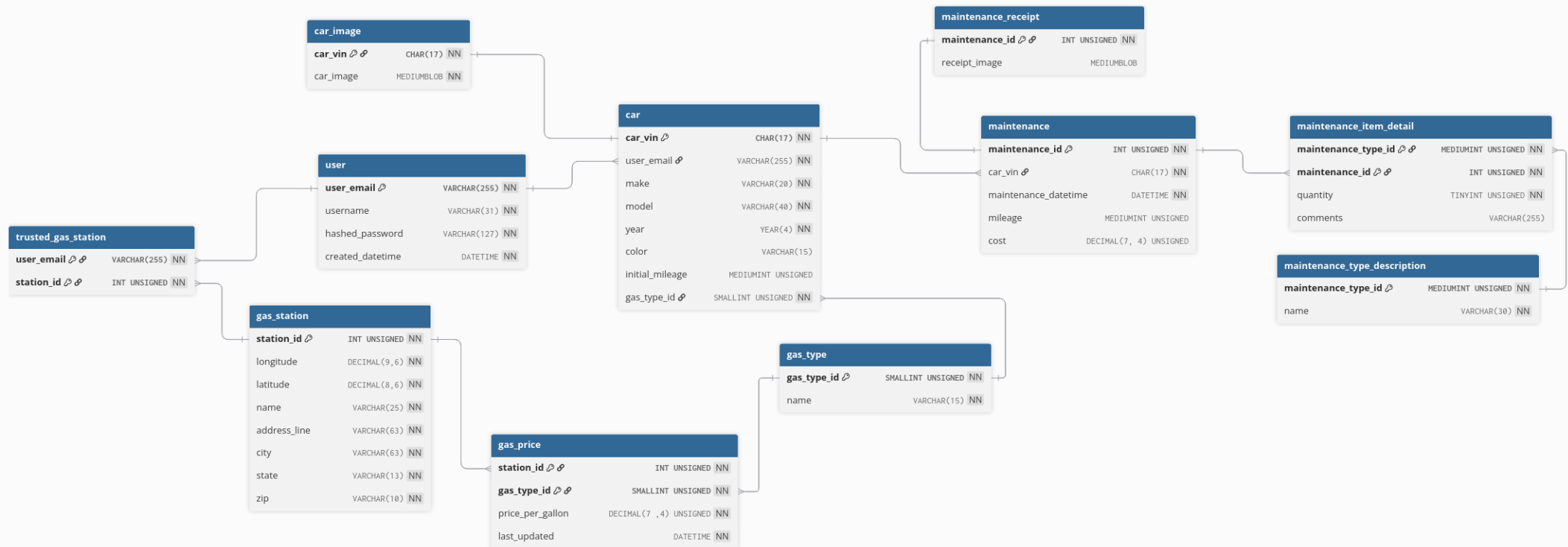
Conceptual Model



Logical Model

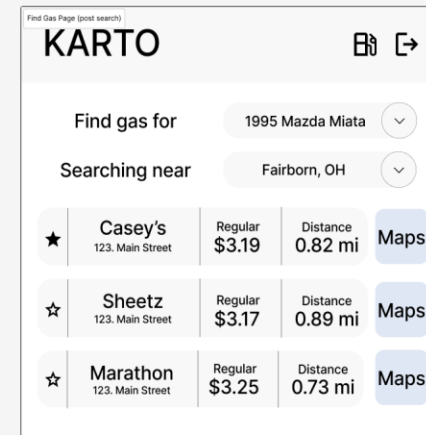
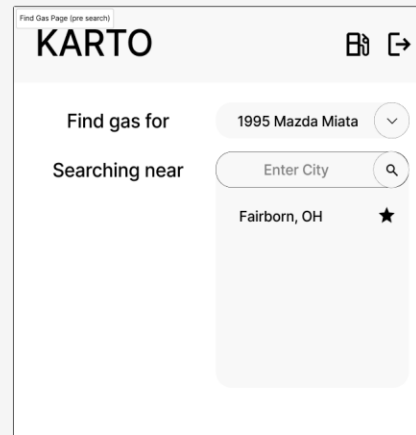
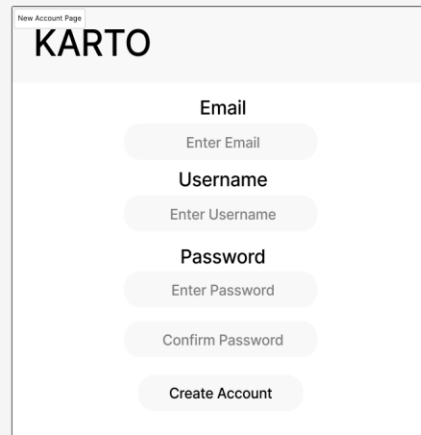
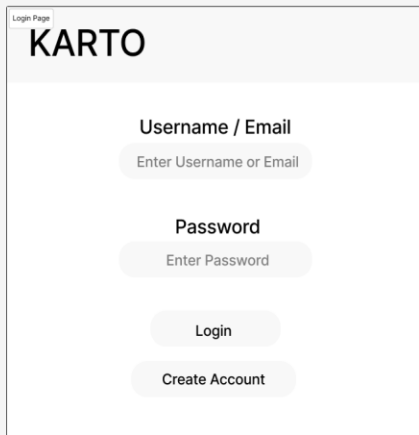
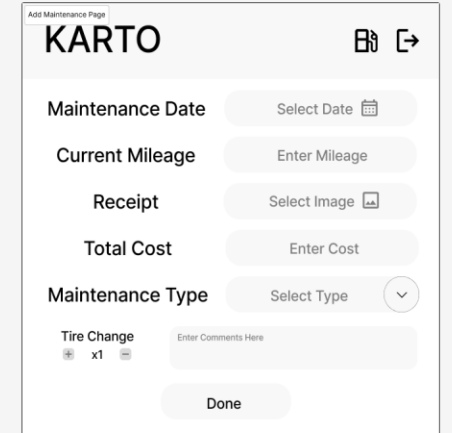
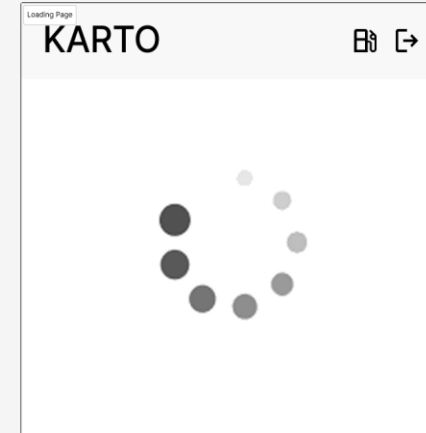
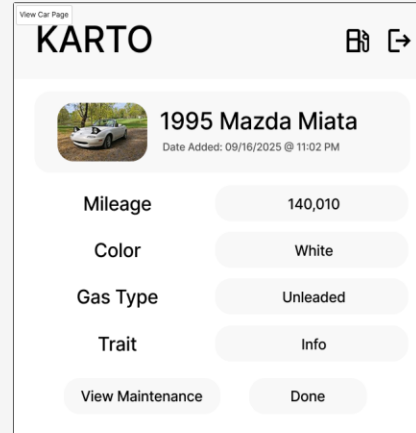
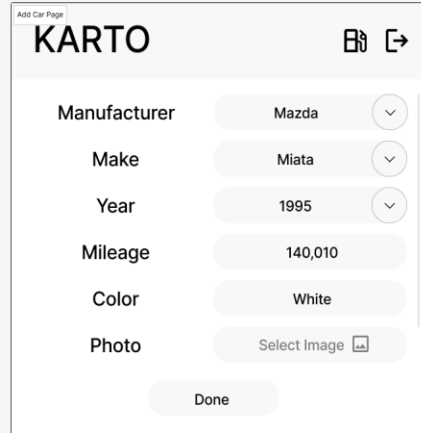
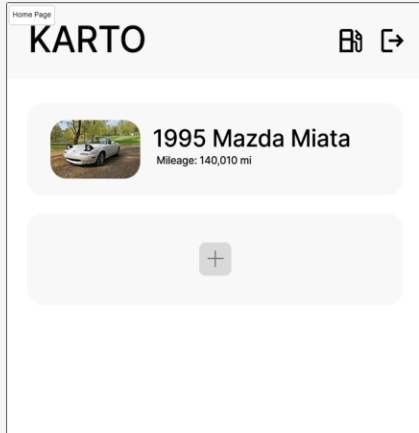


Physical Model



UI - Wireframes

Note: This page is scrollable and will give the user the option to also input the car's gas type and VIN number



UI – Brand Guide

PRIMARY COLORS



Persian Orange
#CA925B



Robin Egg Blue
#5BC3C7

BLACK & GRAY



Smoky Black
#0D0A06



Licorice
#251B11



Night
#060D0D



Rich Black
#0C1919

ACCENT COLORS



Eggshell
#ECE6D1



Dutch White
#D9CDA2



Lion
#C2A172



Mint Green
#D0F7F8



Non Photo Blue
#AADADB



Celadon
#69BDBA

BUTTONS



FONTS

H1

Inter Bold, 40px

H2

Inter Bold, 32px

H3

Inter Bold, 24px

H4

Inter Bold, 20px

H5

Inter Bold, 15px

Lorem ipsum dolor sit amet
consectetur adipiscing elit. Dolor
sit amet consectetur adipiscing
elit quisque faucibus.

Inter Regular, 16px

Inline Link Example

Inter Underlined, 16px

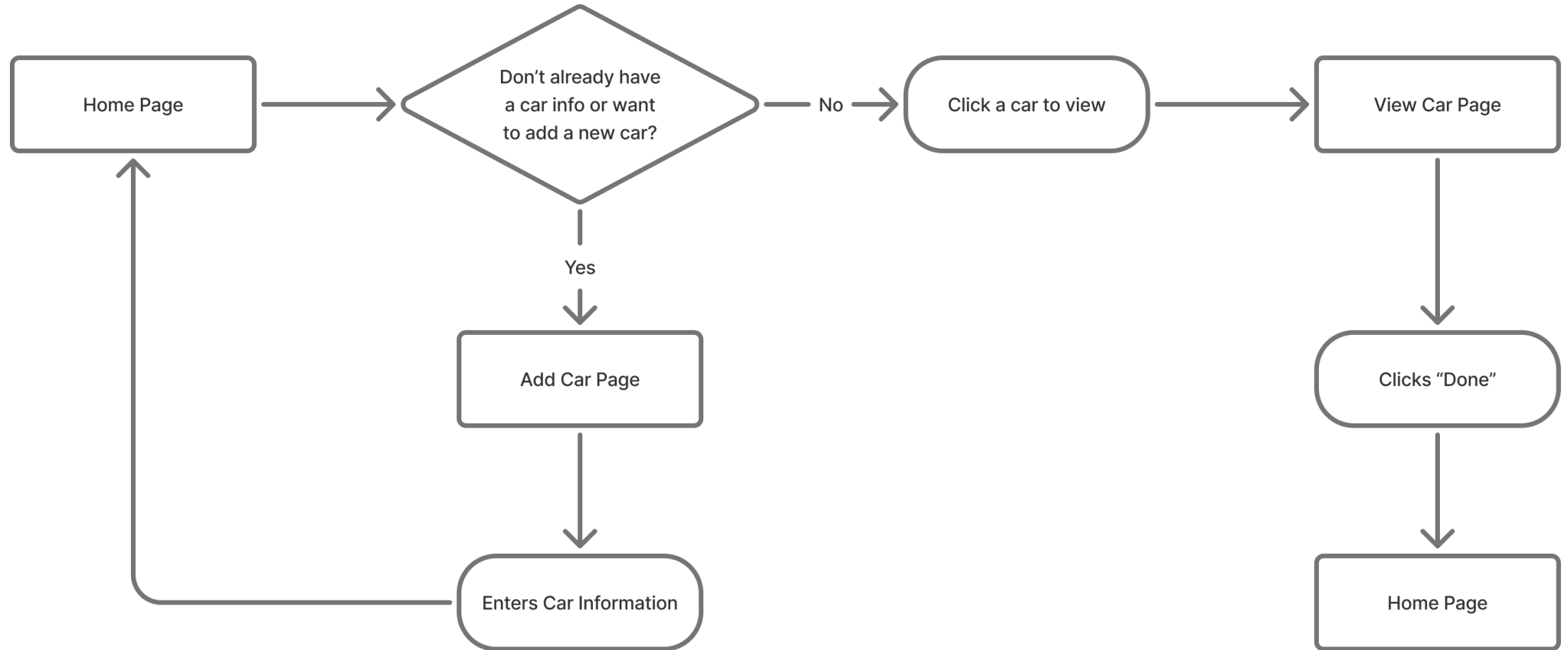
ICONOGRAPHY



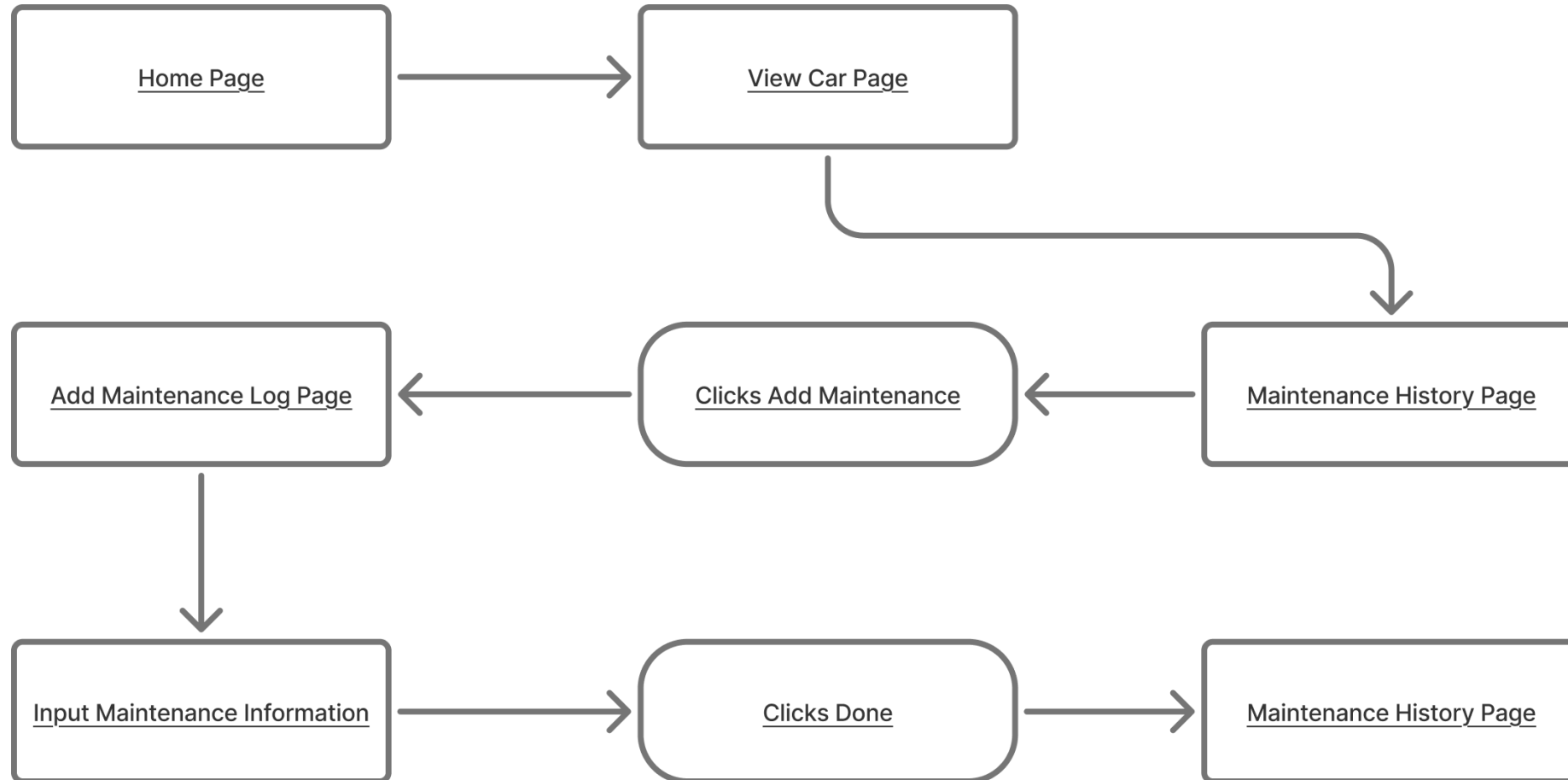
WORDMARK

KARTO

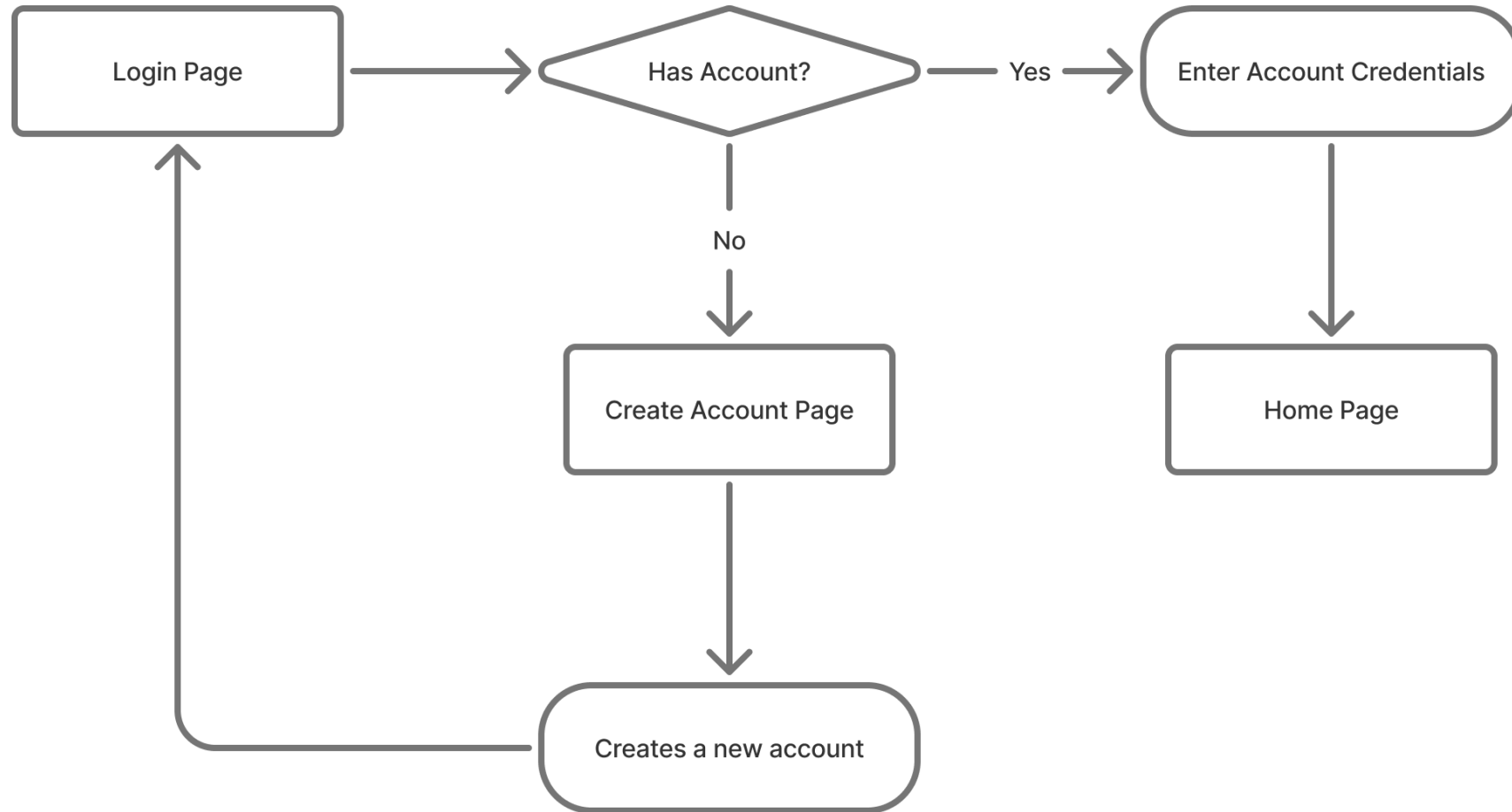
UX – Add Car



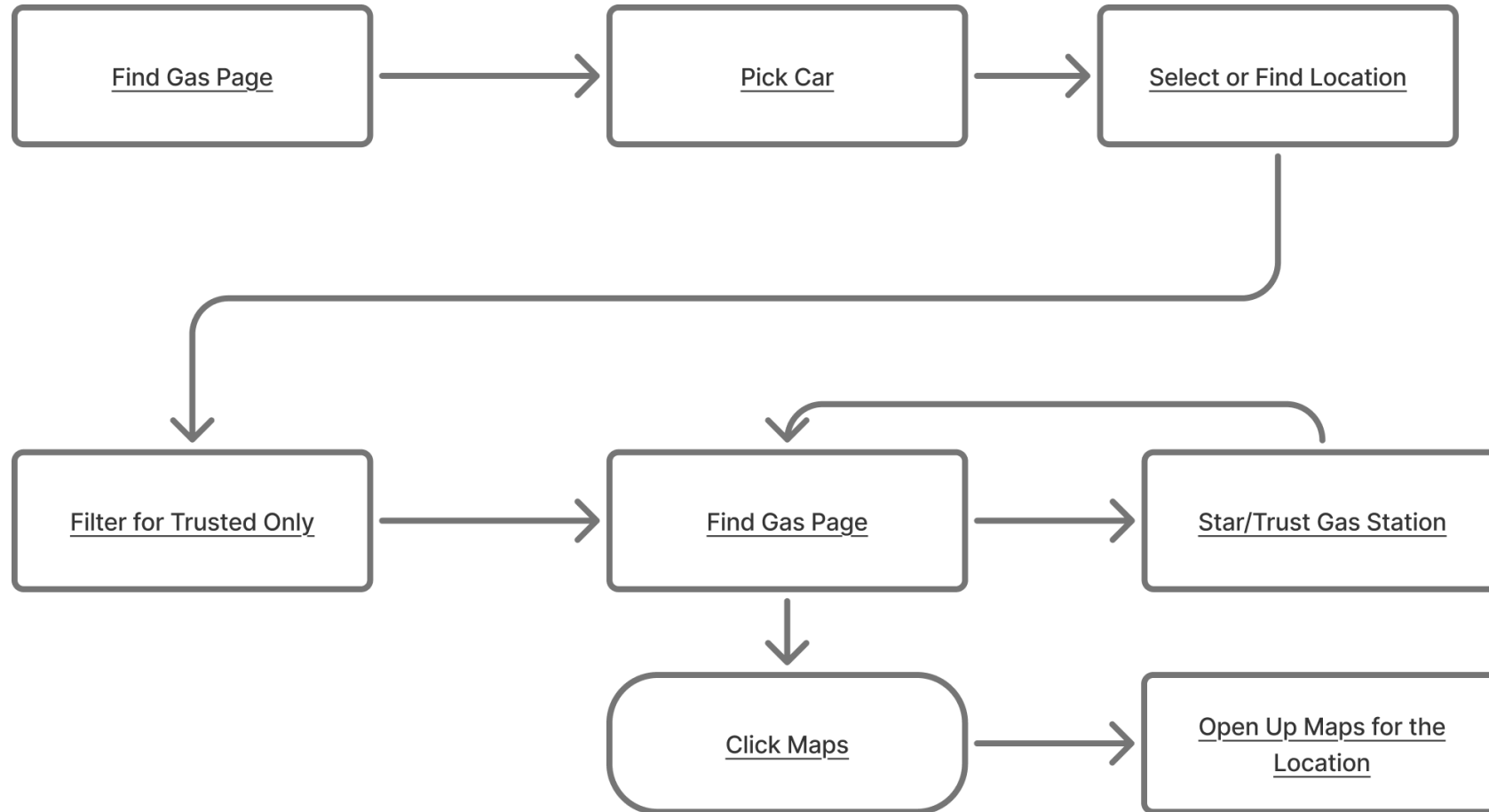
UX – Add Maintenance



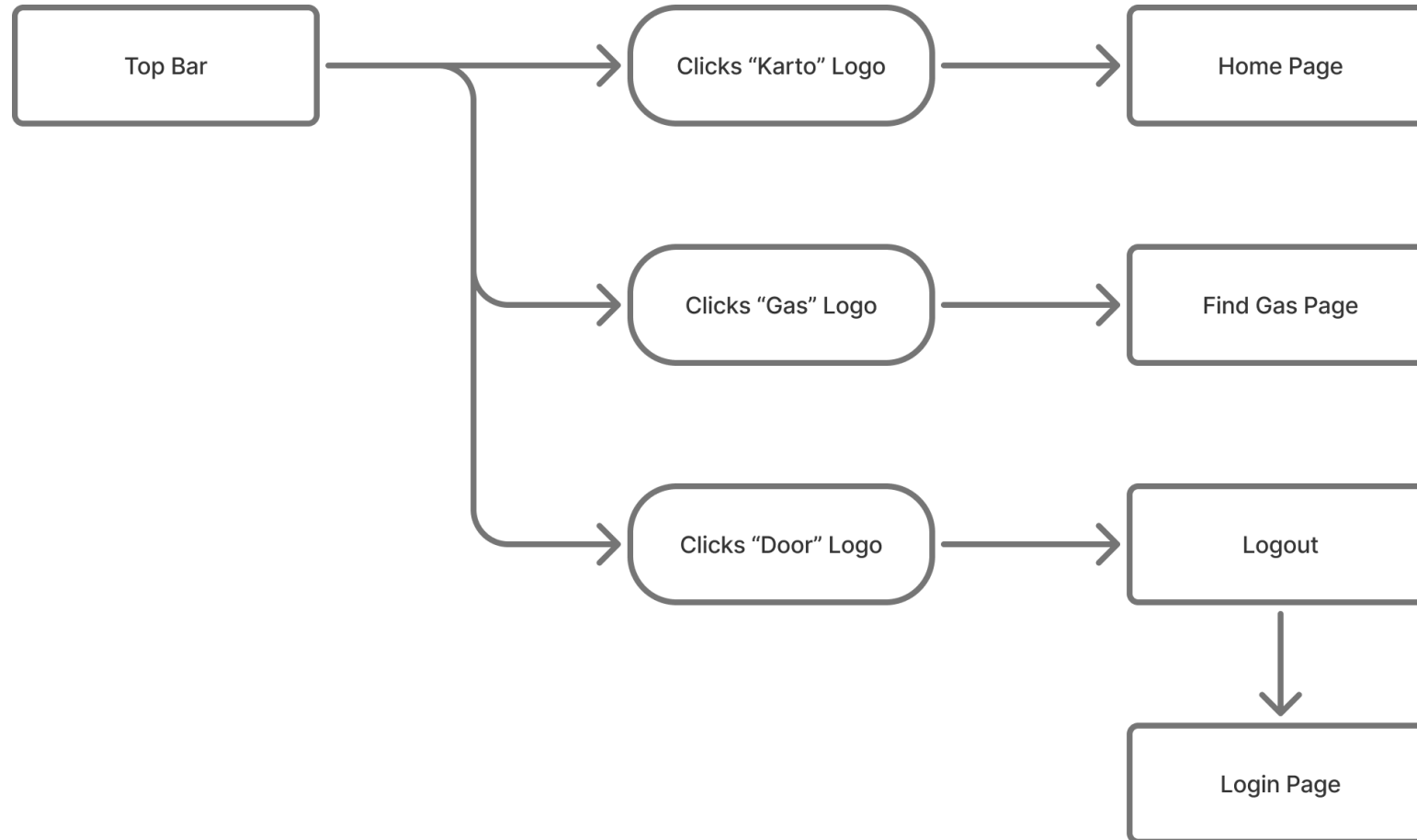
UX – Create Account



UX – Find Gas



UX – Navigation Bar



API Endpoints

Maintenance

- GET - all maintenances
- GET - all maintenances by car
- GET - maintenance by Id
- GET - all maintenance types
- GET - maintenance statistics by car
- POST - maintenance
- PUT – maintenance
- DELETE - maintenance

Car

- GET - all cars
- GET - all cars by owner email
- GET - all cars by vin
- POST - Create a new car
- PUT - Update car details

API Endpoints

Gas Type

- GET - all gas types
- GET - gas type by id
- GET - gas type by name
- POST - create new gas type
- PUT - Update gas name

User

- GET - all users
- GET - users by id
- GET - users by username
- POST - create new users
- POST - login with email and password
- PUT - update users

API Endpoints

Gas Station

- GET - all gas stations
- GET - gas station by id
- GET - gas station by name
- GET - gas station by trusted
- POST - create new gas station
- PUT - update gas station

Document: <https://github.com/WSU-kduncan/cs4900-api-karto/blob/main/API%20Definitions.md>

Live Demonstration

- Hopefully, nothing goes wrong 😊 🙏 .
- Can join the website with this URL if you are on WSU-Secure.
 - `http://10.17.140.246:4200`

Improvements

- Better UI
- Better Error Handling
- Authorization
- Update Gas Prices Automatically
- Unit and Integration Tests

Questions?