Frontend Take-Home Challenge

📋 Overview

Your task is to build a frontend application that allows users to:

1. **Search** for available vehicles based on ZIP code
2. **Filter** results based on vehicle properties
3. **Sort** results based on vehicle properties

The application should deliver an **intuitive and responsive user experience**.

Use flexcar.com/inventory as design inspiration.

☑ Requirements

1. ZIP Code Search

- Create a UI input where users can enter a ZIP code.
- On submit, display a list of vehicles available in the provided ZIP code.
    - **Note**: The vehicle list will be **hardcoded** in the starter code. No API or network calls are required.

2. Vehicle Details

Each vehicle card must show the following:

- Make
- Model
- Trim
- Year
- Color
- Mileage
- Price
- Image

3. Filtering Functionality

Allow users to filter results by:

- **Make**
- **Color**

Filtering by model is not required.

4. Sorting Functionality

Allow sorting by:

- **Price high**
- **Price Low**
- **Year**

5. User Interface

- Ensure the UI is **responsive** and works across device sizes.
- Theme: #A28089
- Filters: To appear on the top

6. Error Handling

Show clear error messages for:

- Invalid or missing ZIP codes
- Empty search results

💻 Code Requirements

- Use **TypeScript** (mandatory)
- Include **unit testing**
- Follow **best practices** for code structure and clarity
- You may install and use additional packages as needed

Submission Guidelines

- Submit a **clean project** with:
  - No **errors**
  - No **warnings**
  - No **console debug logs**
- Push the source code in your own public git repository and share the url with us
- Include a well-structured **README** file that covers:
  - Project setup and installation instructions
  - How to run the application and tests
  - Any design decisions or assumptions
- Please attach this take-home assignment file in the root directory of the application