

PROBLEM STATEMENT

Tesla is building a platform to manage **used car resales** and improve its pricing strategy for incoming trade-ins. As part of this, you are asked to build a simple application that can manage **car listings** and provide **price predictions** for new cars using **historical data**.

You are provided with a dummy dataset of past used car resales: `dummy_dataset.csv`. This dataset contains examples of Tesla vehicles that have been sold in the past, including features such as **mileage, model, year, and final selling price**.

You are expected to deliver an application that meets the following requirements:

1. **Car Lookup Interface**

Build a user interface that allows someone to **look up a car** by its ID and view all of its features.

2. **Add New Car Interface**

Extend the interface to allow a user to **add a new car** to the system by filling in the relevant features.

3. **Price Prediction Endpoint**

Implement a **POST endpoint** that receives a car with its features and returns a **predicted price** based on the historical data.

Delivery Guidelines

- You must provide all necessary code to **run your solution locally**.
 - The solution must run in a **containerized environment**.
 - Provide a `README.md` with clear instructions on how to build, run, and test the application.
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Additional Notes

You are free to decide how to design, implement, and structure your solution. Make any technical assumptions you find necessary, and document them if relevant.