

<https://www.kaggle.com/datasets/doaaalsenani/usa-cers-dataset>

<https://www.kaggle.com/datasets/mahnazarjmand/cardata>

<https://www.kaggle.com/datasets/tr1gg3rtrash/cars-2022-dataset>

[https://data.world/dataman-udit/cars-data/workspace/file?filename=Cars\\_Data](https://data.world/dataman-udit/cars-data/workspace/file?filename=Cars_Data)

<https://www.kaggle.com/datasets/lepchenkov/usedcarscatalog>

1. Describe what data is stored in the database. (Where is the data from, what attributes and information would be stored?) (Andrew)

Our database will store the following attributes about every car. Manufacturer name, model name, transmission type, color, mileage, year produced, and engine capacity. The database will be obtained from “Kaggle”, and more specifically from this website:

<https://www.kaggle.com/datasets/lepchenkov/usedcarscatalog>

2. What are the basic functions of your web application? (What can users of this website do? Which simple and complex features are there?) (Andrew)

Our web application will be able to filter cars by user-specified inputs. For the simple features, users will be able to select from drop-down menus what features they would like their car to have, and will be shown a list according to those specifications. A more complex feature we plan to implement is the ability to sort cars based on attributes NOT stored in the database such as “reliability” and “popularity”. We will add these attributes ourselves by creating our own algorithm to calculate them.

3. What would be a good creative component (function) that can improve the functionality of your application? (What is something cool that you want to include? How are you planning to achieve it?)

One creative function we will add will be adding our own attributes NOT in the dataset already by creating our own algorithm to calculate certain traits in a car such as “reliability”, “affordability”, “cost-effectiveness” and “popularity”. This will improve our application by giving the user more options to filter cars by their preferences.

4. Project Title (Om) : Used Car Price lookup

5. Project Summary: It should be a 1-2 paragraph description of what your project is. (Om)

Using a few datasets, we want to combine databases and create tables that allow for easy and fast used car lookup. The point of this database is to help lookup cars that the customer wants with car specifications that they are looking for. After they input the car specifications, The database will be able to output a car or cars that are suitable for the customer. These cars will not always be the exact car the customer is looking for, however it will be a car that is very similar to what the customer wants.

6. **Description** of an application of your choice. State as clearly as possible what you want to do. What problem do you want to solve, etc.? (Om)

Our application will make searching for used cars easier and faster especially in a world where car sales are dropping. Since new cars have become more expensive, looking for used cars has become more popular. Starting with a simple database and creating queries for this, we want to slowly build up a car lookup site that is the most user friendly and efficient.

7. **Usefulness.** Explain as clearly as possible why your chosen application is useful. Make sure to answer the following questions: Are there any similar websites/applications out there? If so, what are they, and how is yours different?

There are several similar websites on the internet that will perform similar functions to ours, such as Autolist. However, our application will display all the basic information

about the cars that users look up (model, mileage, price, etc) and will also provide some of our own unique information. Some ideas we have are cars most frequently searched for and reliability statistics.

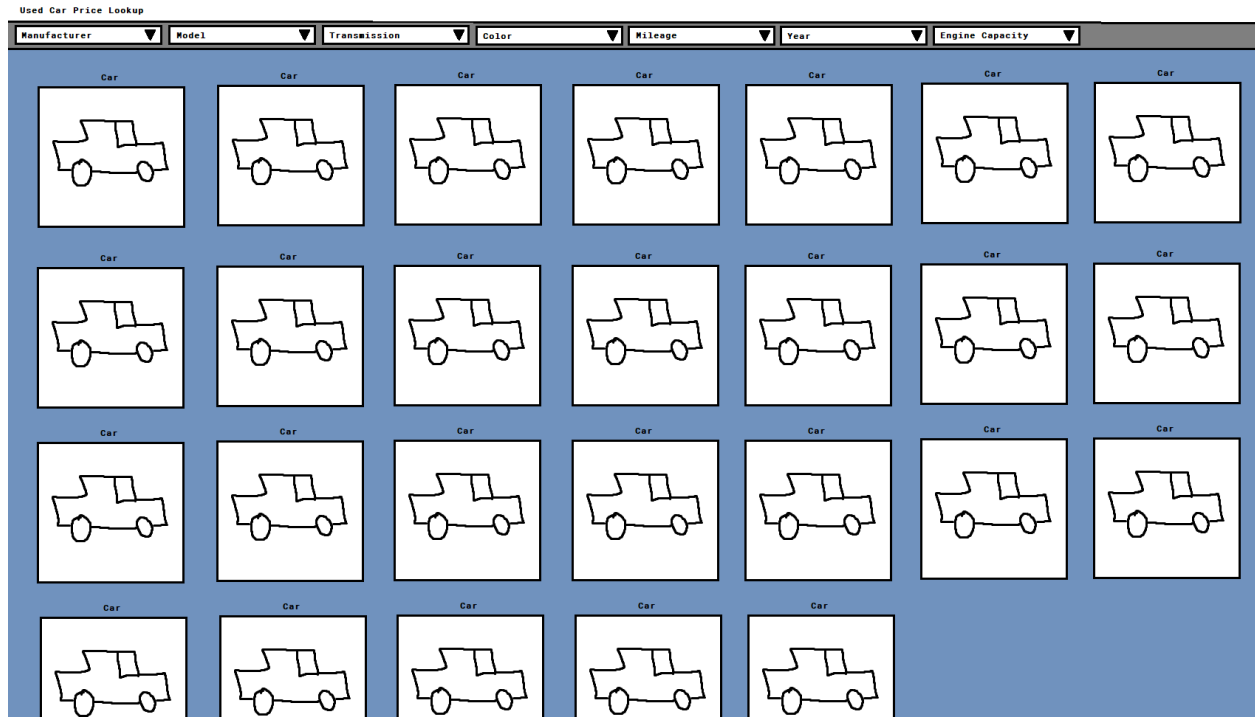
8. **Realness.** Describe what your data is and where you will get it. (Connor)

We have found multiple datasets on Kaggle containing used car data. We have multiple sets that we intend on joining because many of the sets we picked have overlapping attributes. Some attributes that we will highlight are care type, car model, price, mileage.

9. Description of the **functionality** that your website offers. This is where you talk about what the website delivers. Talk about how a user would interact with the application (i.e. things that one could create, delete, update, or search for). Read the requirements for stages 4 and 5 to see what other functionalities you want to provide to the users. You should include:

Pretty straightforward functionality, user will be able to interact with either dropdowns/lists of car features and choose which features they want. Then the website will go through the database and return and display the results of cars that fit those features to the user, in the form of a list. Additional functionality and features could be added as time allows.

10. **A low fidelity UI mockup:** What do you imagine your final application's interface might look like? A PowerPoint slide or a pencil sketch on a piece of paper works!



Very rough mockup, colors and design are subject to change

**11. Project work distribution:** Who would be responsible for each of the tasks or subtasks?

List of the person responsible for which exact functionalities in section 6. Explain how backend systems will be distributed across members. Be as specific as possible as this could be part of the final peer evaluation metrics.

opatel5: Database logistics/management, connection to frontend

andrew40: Data processing and filtering

mjzou2: UI/frontend design and implementation

connorm9: Data scraping and other needs