

## WEEKLY PROGRESS REPORT- 5

This week was more about finding a common ground between I and my teammate. We developed individual html pages and we had a discussion to find a common ground about the layout, design and the project as a whole. I merged the individual works and there is a little fine tuning that is necessary for the front end to be entirely ready while we are designing the backend.

The screenshot shows a dark-themed web page with a navigation bar at the top containing links for HOME, ABOUT, FACTORS, CUSTOMIZED REPORT, LOGIN, and SIGN UP. Below the navigation bar is a section titled "ABOUT US". Underneath "ABOUT US" is a section titled "OUR PROJECT". A sub-section titled "We aim to provide a solution to the question revolving around since the advent of electric vehicles - To EV or NOT?" is present. The main content area features two side-by-side boxes. The left box is titled "Benefits of using Electric Vehicle" and lists four points: Tax Benefits, Fuel Costs, Maintenance, and Performance. The right box is titled "Disadvantages of using an electric vehicle" and lists three points: Expensive, Time Consuming, and Range.

**Benefits of using Electric Vehicle**

- Tax Benefits:** The federal government offers tax credit ranging anywhere between 2500\$ - 7500\$ when you purchase or lease an electric car. The credit depends on the battery capacity of the car.
- Fuel Costs:** The price of charging your electric vehicle is estimated to be half the price of gasoline.
- Maintenance:** Technologies like regenerative braking prevent brake pads from wearing out quickly. Less moving parts mean that the lifespan of the parts are long which help reduce maintenance costs.
- Performance:** Electric cars can help produce better torque from standstill unlike gasoline vehicles and the performance of the car is maximized with optimal weight distribution.

**Disadvantages of using an electric vehicle**

- Expensive:** If one is looking for an efficient electric car with good range, it would be an expensive buy compared to a gasoline vehicle.
- Time Consuming:** If it is not feasible for one to install a charger at home, it would be a time consuming affair to charge their vehicle. This could be a concern for working professionals who do not have much time on hand to charge their vehicles.
- Range:** The range on the electric cars, although impressive, could be a concern for many and it is not feasible if one prefers to go on long drives or live at a particular location where the infrastructure to charge electric vehicles is not great.

The screenshot shows a dark-themed web page with a navigation bar at the top containing links for HOME, ABOUT, FACTORS, CUSTOMIZED REPORT, LOGIN, and SIGN UP. Below the navigation bar is a section titled "ABOUT US". Underneath "ABOUT US" is a section titled "OUR PROJECT". A sub-section titled "We aim to provide a solution to the question revolving around since the advent of electric vehicles - To EV or NOT?" is present. The main content area features two side-by-side boxes. The left box is titled "Benefits of using Electric Vehicle" and lists five points: Tax Benefits, Fuel Costs, Maintenance, Performance, and Environment Friendly. The right box is titled "Disadvantages of using an electric vehicle" and lists five points: Expensive, Time Consuming, Range, Battery Maintenance, and Fewer Choices.

**Benefits of using Electric Vehicle**

- Tax Benefits:** The federal government offers tax credit ranging anywhere between 2500\$ - 7500\$ when you purchase or lease an electric car. The credit depends on the battery capacity of the car.
- Fuel Costs:** The price of charging your electric vehicle is estimated to be half the price of gasoline.
- Maintenance:** Technologies like regenerative braking prevent brake pads from wearing out quickly. Less moving parts mean that the lifespan of the parts are long which help reduce maintenance costs.
- Performance:** Electric cars can help produce better torque from standstill unlike gasoline vehicles and the performance of the car is maximized with optimal weight distribution.
- Environment Friendly:** Electric vehicles are better on the environment since they do not have tailpipe emissions and drastically lowers the impact on the environment.

**Disadvantages of using an electric vehicle**

- Expensive:** If one is looking for an efficient electric car with good range, it would be an expensive buy compared to a gasoline vehicle.
- Time Consuming:** If it is not feasible for one to install a charger at home, it would be a time consuming affair to charge their vehicle. This could be a concern for working professionals who do not have much time on hand to charge their vehicles.
- Range:** The range on the electric cars, although impressive, could be a concern for many and it is not feasible if one prefers to go on long drives or live at a particular location where the infrastructure to charge electric vehicles is not great.
- Battery Maintenance:** The heart of an electric vehicle - The Battery is prone to worn out and replacing them can get exceptionally expensive.
- Fewer Choices:** If one is a car fanatic and likes customizing the cars to their liking, it would be difficult for them to customize the vehicles considering the limited number of choices available. There are fewer choices for one to pick from.

HOME ABOUT FACTORS CUSTOMIZED REPORT LOGIN SIGN UP

Hello {{USERNAME}}, welcome to the customised report section of our tool. Please answer a quick questionnaire below and our tool will help you decide if buying an electric vehicle is the right option for you or not.

What is your primary purpose of owning a car?

General daily use in the city

Is the electric vehicle going to be your primary or only car?

YES

Average Miles Driven Per Week

< 50

How much are you willing to spend on the car?

< 50k\$

What is your location?

Metropolitan City

Submit

HOME ABOUT FACTORS CUSTOMIZED REPORT LOGIN SIGN UP

**Availability and Time Spent**

This is a very important factor that would help identify the effectiveness and ease of use of an electric vehicle. This factor would also include sub-factors like below

**Location:** The location you are located at and the availability of electric charging stations around your location.

**Time Spent to refuel:** We consider the human time factor. Some people are super busy and must use their car multiple times a day (Food/Groceries Delivery Professionals) or do not have enough time to wait for their car to get charged.

**In Home Charging Station:** Calculate the power consumption per one full charge of the vehicle.

**Mileage**

We determine the cost to mileage ratio of operating a gasoline vehicle versus using an electric vehicle. This would help understand the benefits of using one over the other in longer run.

This would also help understand how frequently you would have to make a run to the charging station.

**Primary Usecase**

Determine if you want to get from point A to point B or to get a car that one would drive long distances. This will also include sub-factors like below

**Primary car:** Is this going to be your primary car? This factor is essential to determine if EV is a good option.

**Long Drives:** How often do you go on a road trip? - Studies show that consumers do not buy a EV vehicle because of the well known troubles of EV supporting a limited miles in range and hence we consider this factor to know how frequently do one go on a long drive