

Project Proposal

SFWRTECH 4SA3: Software Architecture

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Fuel Tracker

SUMMARY:

In Canada, petrol costs are at an all-time high, and unless you drive an electric vehicle, you will undoubtedly feel the pain. Canadians spend over 4.4% of their yearly income only on filling up their automobiles, with the average price of petrol currently exceeding \$2 per litre. This is even higher than Americans who only pay about 3% overall because of subsidies.

How then can you save money if you don't currently own an electric car and aren't planning to? Our petrol consumption calculator will help you determine the approximate cost of your trip, which will at the very least enable you to manage your spending and prepare for the expense of driving.

TARGET MARKET:

- Driver
- Group (friends, family)
- Carpool
- Traveler

FUNCTIONALY:

With the use of this estimator, a user may calculate their estimated gasoline expenses based on their trip's distance to the destination, their car's fuel efficiency, and the overall cost of petrol in a variety of units. It also enables the computation of split invoices for shared group costs.

HOW TO USE:

1. Enter departure and destination
2. Select measurements type (Imperial | | Metric)
3. Enter vehicle details
4. Calculate

DESIGN PATTERNS:

1. Singleton
2. Command

TECHNOLOGY IMPLEMENTATIONS:

- Python
- MySQL for database
- API for vehicle info (ex: brand, fuel tank, fuel efficiency, etc.)
- Google map API to estimate the total distance and ETA