

Team 6 CRC

Project Title: Tesla: Saving Hard-earned Cash or Not?

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ElectricUsage Class

Responsibilities (methods)

1. Create 4 getter methods to return month, day, electrical usage and electrical cost

Interact with

1. ElectricUsageReader Class

ICEUsage Class

Responsibilities (methods)

1. Create 6 getter methods to return vehicle model, city, regular gas price, premium gas price, city MPG and Hwy MPG

Interact with

1. ICEUsageReader Class
2. Runner Class

ElectricUsageReader Class

Responsibilities (methods)

1. Read data from electrical usage csv files.
2. Store data into one HashMap
3. Get data from HashMap and add into 4 arraylists
(month, day, usage, and cost)
4. Group monthly data together to output monthly usage
and monthly total cost

Interact with

1. RateCalculator Class
2. ElectricUsage Class

ICEUsageReader Class

Responsibilities (methods)

1. Read data from ICE information csv files.
2. Store data into one HashMap
3. Get data from HashMap and return 6 parameters
(Model, City, Regular Gas, Premium Gas, City MPG, Hwy MPG)
4. Assign values to Lexus and Mercedes for both City and Hwy MPG
5. Assign values to all Charlotte, NY, and Miami for both Regular and Premium Gas

Interact with

1. RateCalculator Class
2. ICEUsage Class

RateCalculator Class

Responsibilities (methods)

1. Calculate using data from Electricity Info Class and ICE Info Class.
2. Compare results from above calculations and with national average data
3. Output results in .txt file

Interact with

1. ElectricUsageReader Class
2. ICEUsageReader Class
3. Runner Class

Runner Class

Responsibilities (methods)

1. Take user input and output the comparison between EV and ICE in 3 different cities.
2. Check all answers with JUnit Test.

Interact with

1. ElectricUsageReader Class
2. ICEUsageReader
3. RateCalculator Class
4. Plot Class

Plot Class

Responsibilities (methods)

1. Plot graphs using data given from another class

Interact with

1. Runner Class
2. ElectricUsageReader Class

FormattedOutput Class

Responsibilities (methods)

1. Format the output results and write to an txt file

Interact with

1. Runner Class