Byte Squad: Energy Consumption Analysis

Nithish Reddy
Srujith Rao Ambati

Team Name: Byte Squad

Current Leader: Srujith Rao Ambati

Next Leader: Nithish Reddy Agumamidi

Team Members: Srujith Rao, Nithish Reddy

Energy Consumption Analysis

- Limited awareness of personal energy consumption habits.
- Difficulty in predicting and managing household energy needs efficiently.
- Challenges in reducing electricity bills due to unclear consumption patterns.
- Inability to identify opportunities for energy-saving practices.
- Lack of tools to optimize energy usage and promote sustainability at home.

Sample bill

Name	SUCHANDRANATH BAJJURI						
Address	190 RYLAND ST 5317, SAN JOSE CA 95110-2290						
Account Number	5363224308						
Service	5364208241						
TYPE	DATE	START TIME	END TIME	USAGE	UNITS	COST	NOTES
Electric usage	2024-01-01	00:00	00:14	0.35	kWh	$0.09	
Electric usage	2024-01-01	00:15	00:29	0.35	kWh	$0.09	
Electric usage	2024-01-01	00:30	00:44	0.35	kWh	$0.09	
Electric usage	2024-01-01	00:45	00:59	0.35	kWh	$0.09	
Electric usage	2024-01-01	01:00	01:14	0.02	kWh	$0.01	
Electric usage	2024-01-01	01:15	01:29	0.02	kWh	$0.01	
Electric usage	2024-01-01	01:30	01:44	0.02	kWh	$0.01	
Electric usage	2024-01-01	01:45	01:59	0.02	kWh	$0.01	
Electric usage	2024-01-01	02:00	02:14	0.09	kWh	$0.02	
Electric usage	2024-01-01	02:15	02:29	0.09	kWh	$0.02	
Electric usage	2024-01-01	02:30	02:44	0.09	kWh	$0.02	

Job assignments per individual

Nithish Reddy: Frontend development, Backend development and Database management.

Srujith Rao Ambati: Frontend development, Backend development and deployment..

Milestones With deadlines

Project Planning and Design - Deadline: February 28, 2024

Frontend Development Completion - Deadline: March 10, 2024

Backend Development Completion - Deadline: March 25, 2024

Testing and Debugging - Deadline: April 5, 2024

Documentation and User Guides - Deadline: April 15, 2024

Deployment and Launch - Deadline: April 20, 2024

Technologies Used:

Frontend: React.js

Backend: Node.js with Express.js

Database: MySQL

Algorithms/AI Schemes

The core engine primarily relies on generating the information from the user input, which is the PG&E bill (.csv), by generating text and formatting it so that it could be sent as prompts to the OpenAi api by fine-tuning it. The data returned from api is used for providing insights to the user through a chatbot.

Market Space and Selling Points:

- Energy Management Sector
- Technology Enthusiasts
- Environmentally Conscious Consumers
- Utility Providers

Selling Points:

- Comprehensive Energy Management
- User-Friendly Interface
- AI-Powered Chatbot
- Customized Analytics
- Convenient Bill Management
- Cost-savings

Feedback

Thank You