Energy Audit For Households Team AppyFuzz



Team Size: 4



Amrita Das

- Ideation
- Machine Learning Model
- Prepared submission documents



Raunak Sharma

- Full Stack Dev
- Made the PPT



Shreyasis Roy

- Ideation
- Machine Learning Model

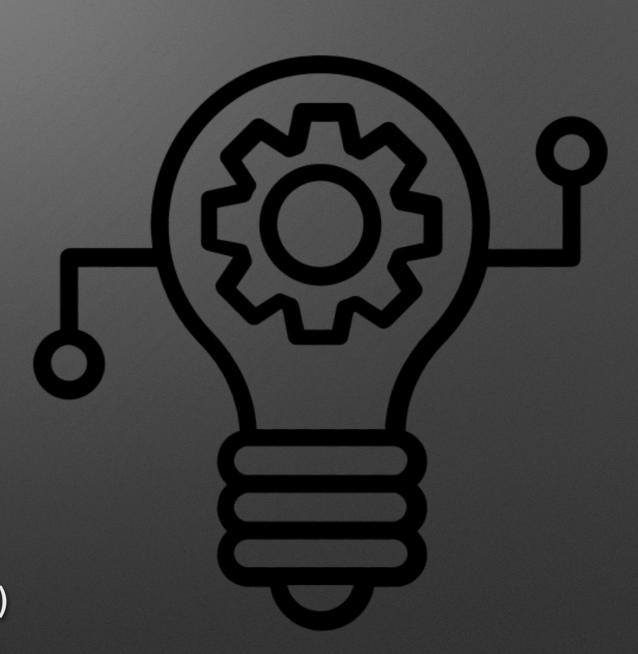


Subhrangshu Pandey

Ideation and Data Search

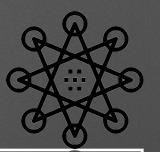
Technologies Used

- Python 3 (ML Model)
- numpy
- pandas
- matplotlib
- xgboost
- sklearn
- Data: http://redd.csail.mit.edu
- Angular 6 (Front-end)
- NodeJS (Back-end)
- MongoDB (Database)
- Google Fonts (for font for front-end)
- Bootstrap 4 (for responsive web design)

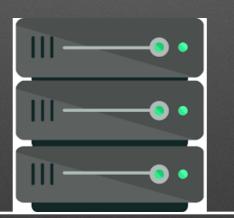


Architecture Diagram





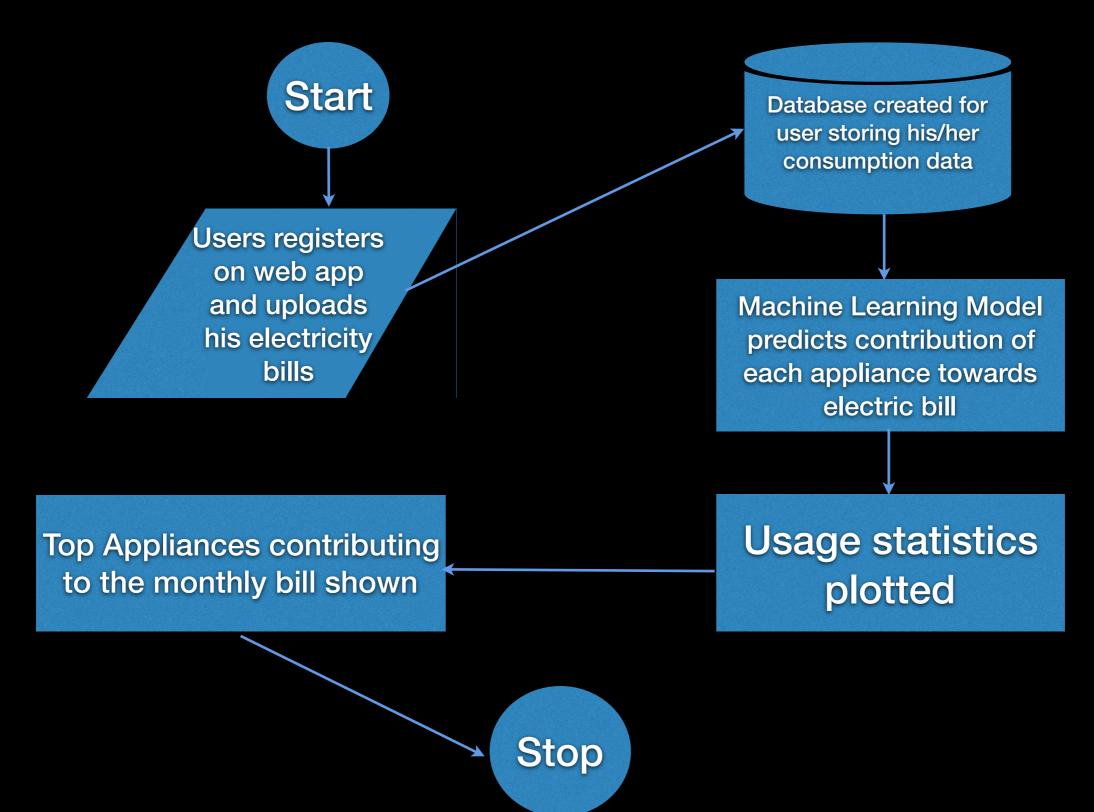
Front-end for client interaction.
(To be built on Angular)



Machine Learning Model to extract knowledge and retrun outputs.
(Built on Python)

Back-end for building required API and firing the ML Model.
(To be built on NodeJS)

Data Flow Diagram



Frameworks/Tools Used

We have used Python 3 (ML Model) and it's libraries such as numpy, pandas, matplotlib, xgboost, sklearn, etc. to implement the machine learning model. To train our model, we have used data from Redd MIT (http://redd.csail.mit.edu).

Moreover, we intend to build a web-app using Angular 6.0.8 with Google Material UI for the look and feel and bootstrap 4 with flexbox for making our web app responsive at the frontend once we attain a satisfactory accuracy in our ML model. Also, we intend to build the back-end using NodeJS for creating all the APIs and firing the ML model written in Python as a child process every time we have to.

Thank you.