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Powerwash

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Powerwash

Powerwash is a streamlined tool for cleaning and analyzing datasets. Users can upload CSVs through an intuitive interface, where Python's Pandas library takes care of data wrangling. With ready-to-use data, users can visualize insights using:

- Bar plots
- Histograms
- Scatter plots

These visualizations are powered by JavaScript's Plotly library. PowerWash also identifies key data structure elements and offers easy exporting of findings as CSVs and PNGs for convenient sharing. Our vision is to simplify data wrangling and provide foundational insights for exploratory data analysis (EDA).

TOOLS USED

VCS Repository/Project Tracker:
Github - 4.5/5

Database:
PostgreSQL - 5/5

IDE:
VIM, VSCode - 4/5

UI and Templating:
HTML, CSS and Handlebars - 5/5

Application Server:
Node.JS and Flask - 4.5/5

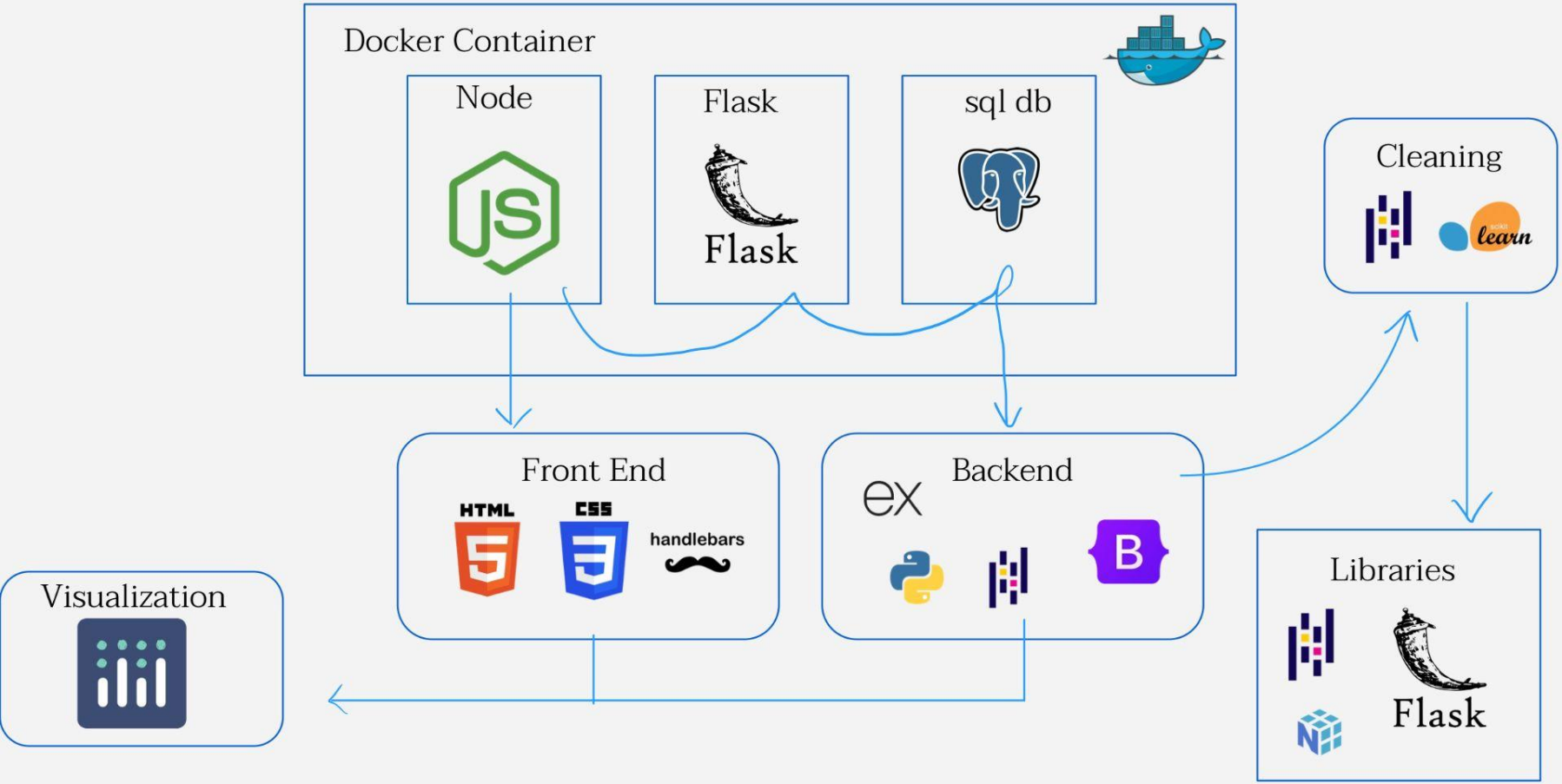
Deployment Environment:
Render - 2.5/5

Testing:
Mocha and Chai - 3/5

Framework:
Express - 5/5

Other:
Python - 5/5

Our Architecture

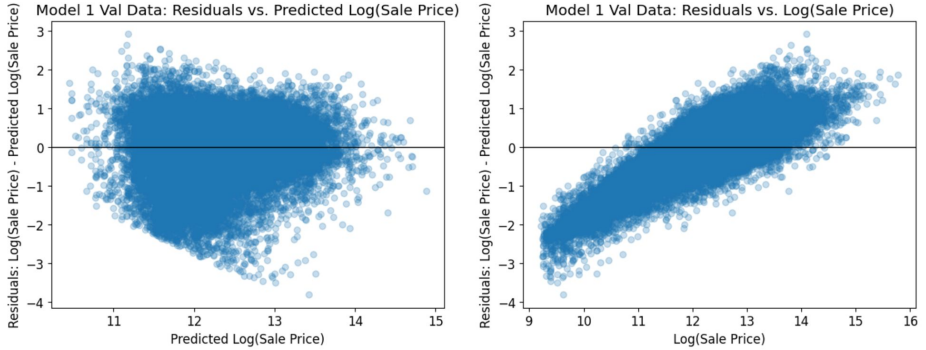


Challenges of Development

- NodeJS and connecting a group of tangible web pages
- Inexperience in working on a project of such scale as a group (github and task allocation)
- Getting flask set up and making different services communicate in order to get interactive data
- Database issues and render

Future Scope

[40]: Text(0.5, 1.0, 'Model 1 Val Data: Residuals vs. Log(Sale Price)')



Future Features:

- Data cleaning options. (more options for user customization)
- Data Interpretations (underlying trends or hidden correlations)
- Ability for users to save important graphs to profile.

Impacts:

- More website Activity
- User experience
- Data insights

DEMO!!!!!!!