Created By: Alistair Vermaak

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Title: Concrete Data Analysis

Data Source: Data World

Data Type: CSV

Purpose: Concrete Analysis, Visualizations

Languages Used: Python & SQL

**CONCRETE DATA ANALYSIS**

**Analysis of concrete ingredients. The goal was to learn about the relationship of all the ingredients related to concrete strength and durability, as well as comparing their addition and removal to the overall composition of the concrete.**

**I wanted to take a boring topic, (like concrete), and give some visual representation of what concrete is, how it’s put together and how each component of the mix affects the overall composition of the end product.**

**I looked at each ingredient, ran comparisons of the effects on the concrete against other ingredients and plotted graphs and ran calculations to make sense of the data I had.**

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**About The Project**



The data is in the form of a CSV. I imported the CSV into my local SQLite Database and ran SQL Queries against the Data.

I created 3 new columns to host some calculations and classification data. All of the column explanations are commented within the Jupyter Notebook.

**Built With**

* Jupyter Notebook
* Python
* SQLite
* Presentation in MS Powerpoint (To be converted to Video and hosted on YouTube)

**Getting Started**

To get a local copy or to clone the repository up and running follow these simple steps.

<https://docs.github.com/en/repositories/creating-and-managing-repositories/cloning-a-repository>

**Prerequisites**

To use the Data from this dataset, you will need the following:

Jupyter

Python

I used a number of libraries within Python to create my visualizations. Follow the code and import the libraries as needed to run the project on your local Jupyter installation.

**Installation**

To install the package on your local device, simply clone the repo and follow the steps in this guide:

<https://docs.github.com/en/repositories/creating-and-managing-repositories/cloning-a-repository>

**Usage**

There’s nothing special about this code. Simply get your copy if you want to use it and run the notebook.

You are free to do whatever you like with the content.

**Contributing**

Contributions are what make the open source community such an amazing place to be learn, inspire, and create. Any contributions you make are **greatly appreciated**.

1. Fork the Project
2. Create your Feature Branch (git checkout -b feature/AmazingFeature)
3. Commit your Changes (git commit -m 'Add some AmazingFeature')
4. Push to the Branch (git push origin feature/AmazingFeature)
5. Open a Pull Request

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**Contact**

Alistair Vermaak - [@](https://twitter.com/twitter_handle)alistairvermaak

Email: [al@alistairvermaak.com](mailto:al@alistairvermaak.com)

Project Link: [https://](https://github.com/github_username/repo/)alistairvermaak.com/concrete-data-analysis