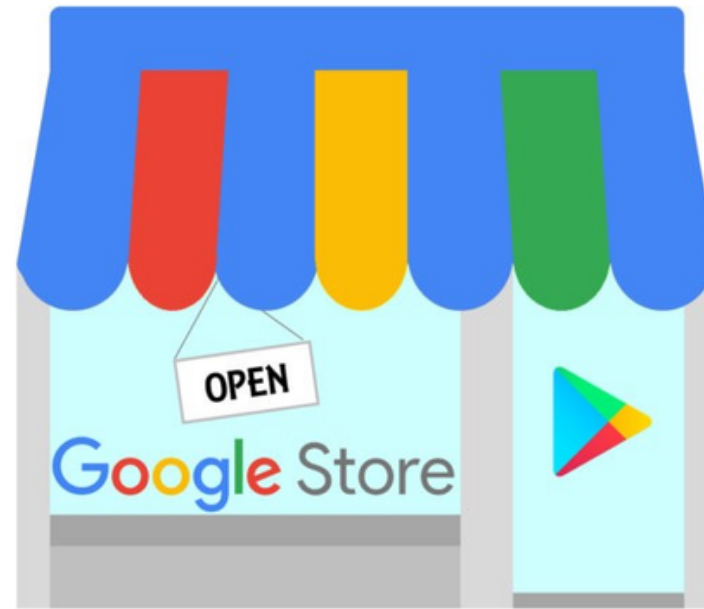


Google Analytics Customer Revenue Prediction



Objectives

Develop a predictive model using G-Store dataset to predict the total revenue for the customer that helps in better user of marketing budget and also interpret the most impacting element on the total revenue prediction using different model. Google Analytics automatically enriches your data by bringing Google machine-learning expertise to bear on your dataset to predict the future behavior of your users. With predictive metrics, you learn more about your customers just by collecting structured event data.

Source of Data

Datasets:

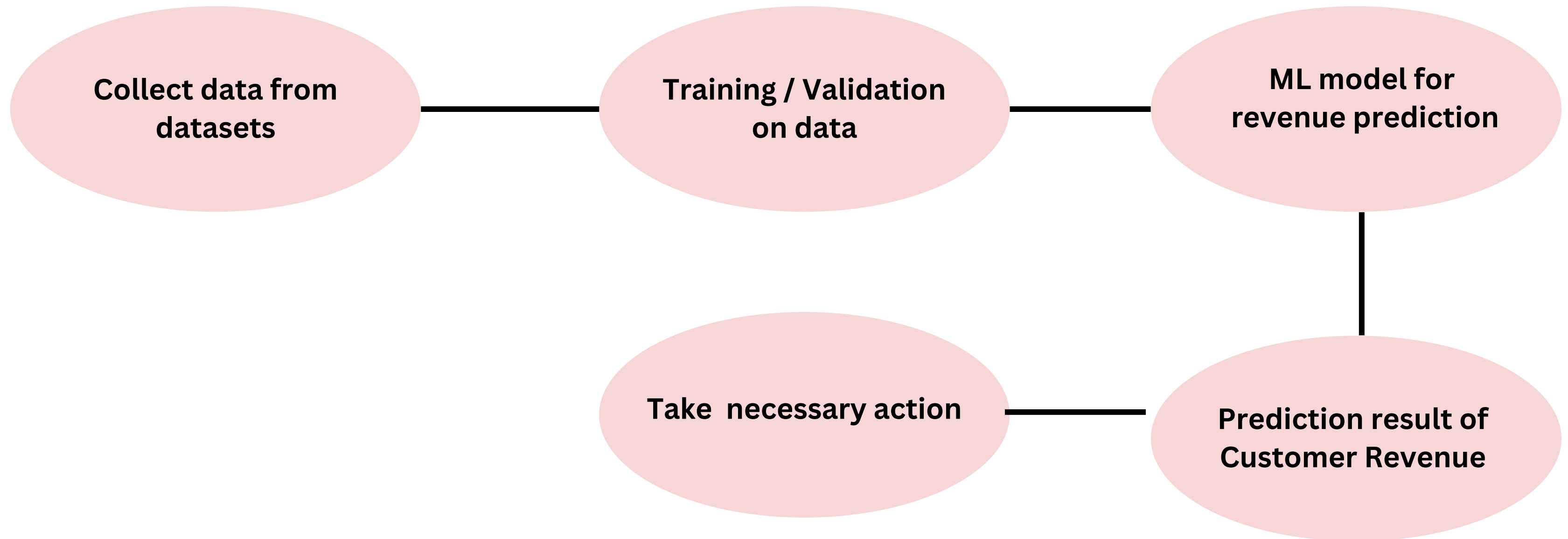
- train.csv
- test.csv
- sample_submission
- sample_submission_v2
- test
- train

Tools used

- Python programming language and frameworks such as NumPy, Pandas, Scikit-learn, Matplotlib are used to build the whole model.
- Visual Studio Code is used as IDE.
- For visualization of the plots, Matplotlib and Seaborn are used.
- GitHub is used as version control system.

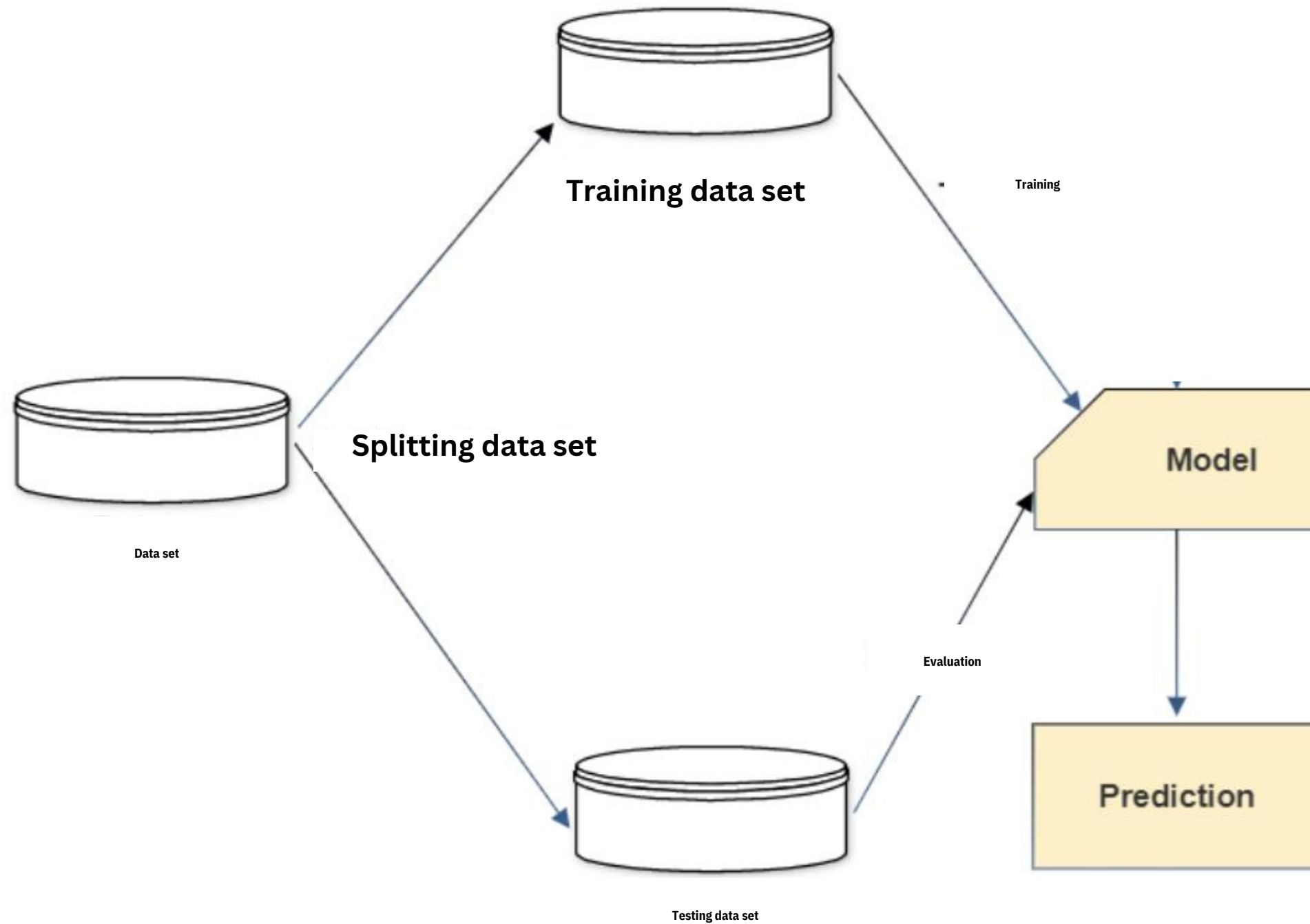
Architecture

Process Workflow :



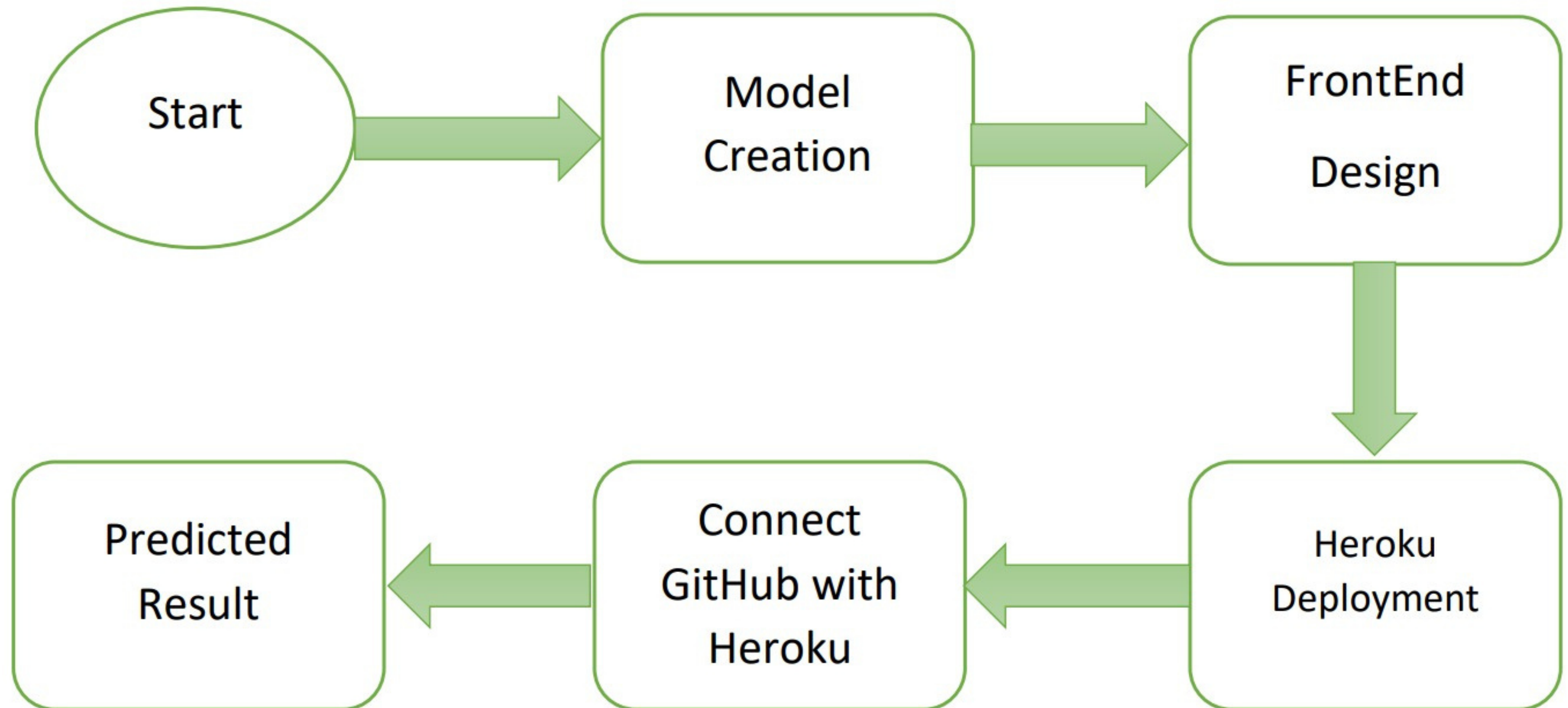
Architecture

Model Training And Evaluation :



Architecture

Deployment Process :



Steps

- In the first step, we collect history of customer data from the merchandise store. We store all the collected data in the datasets.
- In the second step, we try to predict the customer revenue from the collected datasets. So objective of this project is to create a model that predict Customer Revenue.
- In the third step, we will derive the final prediction the will be depicted in the form of graphs, and the graphs are knowns as Bar charts.

Pros

- Predict the revenue of customers.
- Provides insights in the form of bar charts.
- Predicts the relation based on customer history
- Analytics helps you get a more complete understanding of how your customers engage with your business so you can deliver better experiences.

Cons

- Accuracy. For many reasons, Google cannot track everything that happens on a web site so any numbers shown on reports should be treated as approximations.
- Unwanted information
- Approximation
- Some tracking needs setting up.

Workflow



Collecting history of customer data from the merchandise store



predicting customer revenue from the datasets



Final Prediction

Frequent Q&A

Q) What is the source of the data?

- Data was collected from Kaggle, but city specific data can be collected from Central Board of Pollution website.

Q) What is the complete flow of your project?

- Refer to slide no 11 for better understanding.

Q) What techniques were you using for data pre-processing?

- In data pre processing, we analyzed the data, found the important features, and based on the domain knowledge, we eliminated the unnecessary columns. We also tried to fill Missing Values.

Frequent Q&A

Q)Is Google Analytics revenue accurate?

- Without a doubt, Google Analytics is one of the best analytics tool out there. But, like most analytics tools, it isn't 100% accurate. One of the biggest limitations within Google Analytics is a lack of information about where your visitors are coming from

Q) What are the different stages of deployment?

- Collecting history of customer data from the merchandise store
- predicting customer revenue from the datasets
- Final Prediction