

# Building And Deploying Predictive Analysis

Creating Software to analyze, visualize, develop predictive model for the users data.

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## Steps

1. Upload Data Or Input URL.
  2. Display Data.
  3. Generate Different Reports.
  4. Visualize The Data.
  5. Create Classifier Model.
  6. Download The Trainned Model.
  7. Deploy The App.
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## Technologies

1. Python.
  2. Scikit-Learn & Pandas & Numpy.
  3. Streamlit.
  4. CSS.
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## Product Deployment

The Full Deployment Process

You can find the dashboard from this link

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## Run App

```
streamlit run app.py
```

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## Product Flowchart

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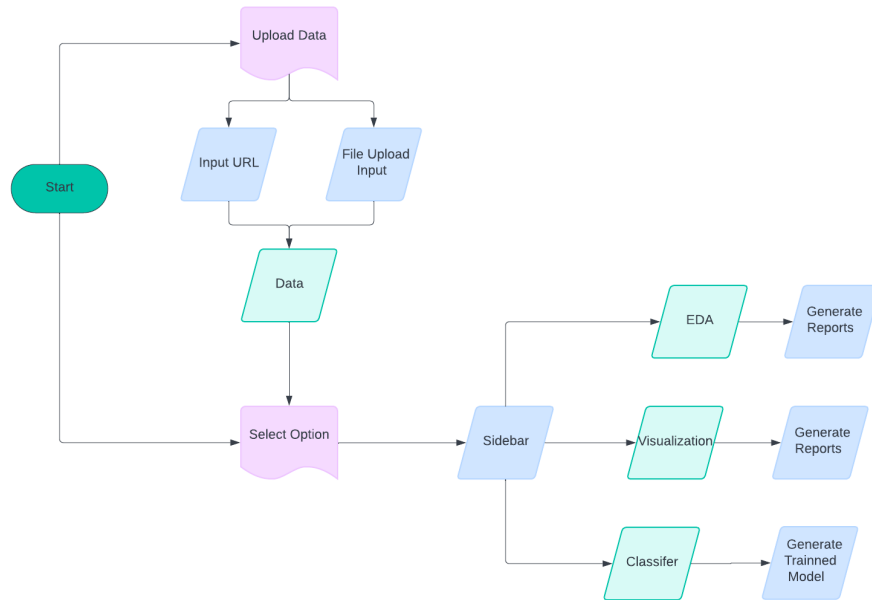


Figure 1: Full-Auto-Data

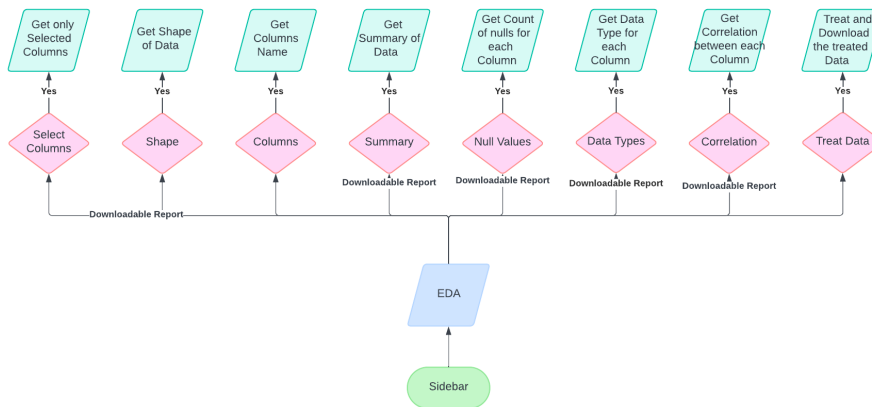


Figure 2: EDA

## EDA Flowchart

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## Visualization Flowchart

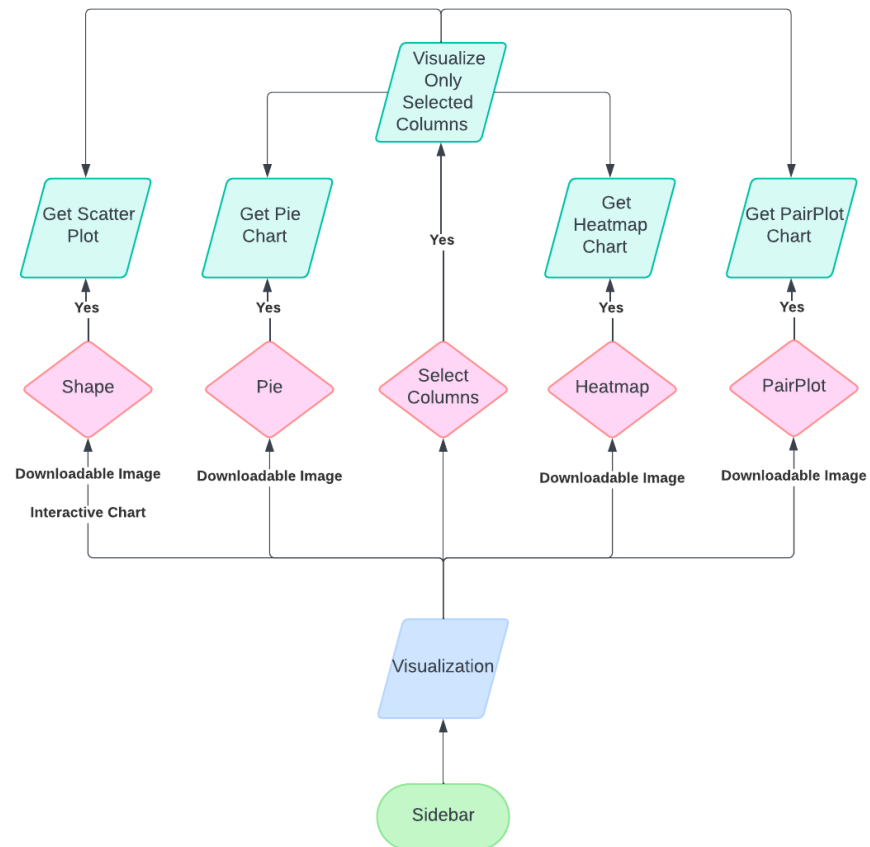


Figure 3: Visualization

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## Classifier Model Flowchart

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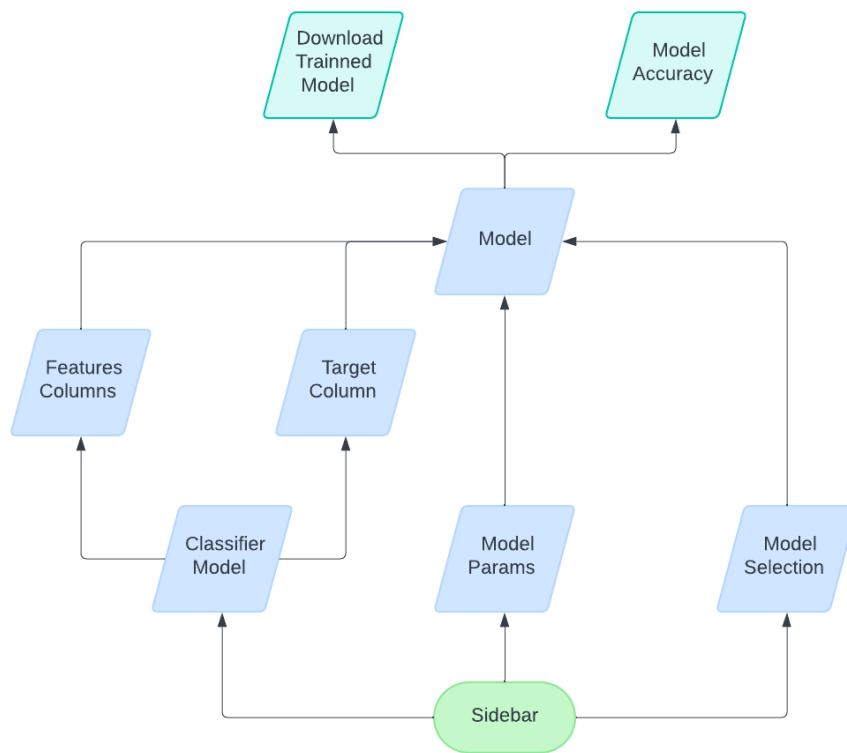


Figure 4: Model

## Product security

### Authentication

You must authenticate through GitHub to deploy or administer an app. Authentication through Google or single-use emailed links are required to view a private app when you don't have push or admin permissions on the associated GitHub repository. The single-use emailed links are valid for 15 minutes once requested.

### Permissions

Streamlit Community Cloud inherits the permissions you have assigned in GitHub. Users with write access to a GitHub repository for a given app will be able to make changes in the Streamlit administrative console. However, only users with admin access to a repository are able to deploy and delete apps.

Network and application security

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## Product Integration

1. Flask: To make User Authentication and save user Data and its Reports.
  2. MySQL or MongoDB: For scale the Product Database.
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## Download Reports And Trained Model

1. You can download each report as a csv file.
  2. you can download the treated data as csv
  3. you can download the trained model as pickle file.
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## Running Tests

To run tests, run the following command

```
nose2 -v
```