Flask Dashboard

Dashboard Preparation

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Startup and Coding School

THINGS SHOULD BE PREPARED

Preparation? Is that an important thing? Of Course, Yes

Dashboard will connect some file types, such as .py, .html, .css, and .csv

Data (D:) > Achmad Kurniansyah T > Purwadhika Coding School > Buat Materi > Dashboard > new_dashboard

First thing that should be prepared is these 1 file and two folder. One file to create API, One folder for styling and data, one folder for dashboard templates

static

templates

app.py

PREPARATION 1 : API FILE

new_dashboard

app.py

API files consist code of making router to access the data and also to create chart or anything that we want to show in dashboard.

```python
# Flask : library utama untuk membuat API
# render_template : agar dapat memberikan respon file html
# request : untuk membaca data yang diterima saat request datang
from flask import Flask, render_template, request
# plotly dan plotly.graph_objs : membuat plot
import plotly
import plotly.graph_objs as go
# pandas : untuk membaca csv dan men-generate dataframe
import pandas as pd
import json
from sqlalchemy import create_engine

# untuk membuat route
app = Flask(__name__)

#####################
## CATEGORY PLOT ##
#####################

## IMPORT DATA USING pd.read_csv
# tips = pd.read_csv('./static/tips.csv')

# IMPORT DATA USING pd.read_sql
# sqlengine = create_engine('mysql+pymysql://root:do708091Mysql@127.0.0.1/flaskapp', pool_recycle=3605)
# dbConnection = sqlengine.connect()
# engine = sqlengine.raw_connection()
# cursor = engine.cursor()
# tips = pd.read_sql("select * from tips", dbConnection)

# category plot function
def category_plot(
    cat_plot = 'histplot',
    cat_x = 'sex', cat_y = 'total_bill',
    estimator = 'count', hue = 'smoker'):

    # generate dataframe tips.csv
    # tips = pd.read_csv('./static/tips.csv')
```

PREPARATION 2 : STATIC FOLDER

Second thing that should be prepared is 'Static Folder'. This folder consist of the data file (tips.csv) and styling file (bootstrap.css). Styling file will be use bootstrap in order to make dashboard more responsive.

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bootstrap.css

tips.csv

PREPARATION 3 : TEMPLATE FOLDER

This templates folder consist of every page that will be showed in every menu. There are 6 files below, means that there will 6 landing page in dashboard that created.

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category.html   index.html   pie.html   scatter.html   success.html   update.html