School: SOET Campus: Vzm

Academic Year: 2021/25 Subject Name: DAVP Subject Code: Cutm1018

Semester: 7th Program: B.Tech Branch: ECE Specialization: ECE

Date:

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiement : create a layout for a dashboard that include a piechart showing market

Coding Phase: Pseudo Code / Flow Chart / Algorithm

→ import necessary libraries

→ load the dataset and verify the presence of required columns.

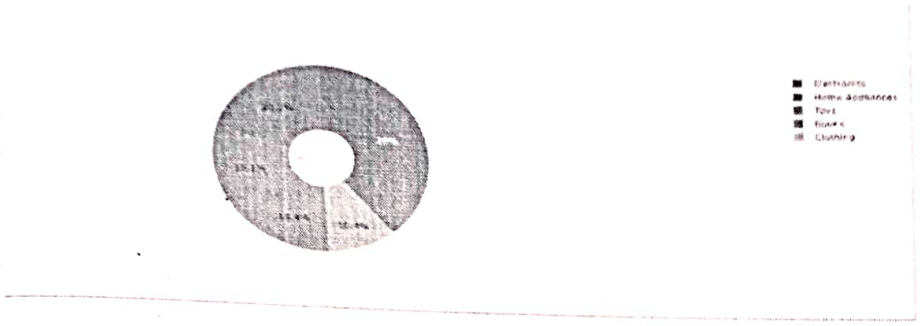
→ create a pie chart for market share, a Bar chart for sales by product, and a scatter plot for profit by product

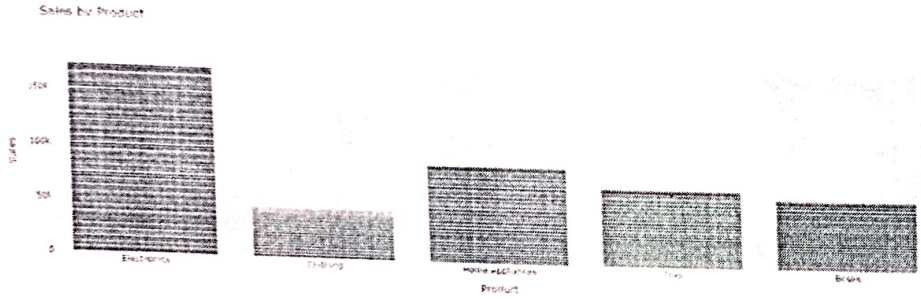
→ Define the layout of the app., placing the charts in rows for organized display.

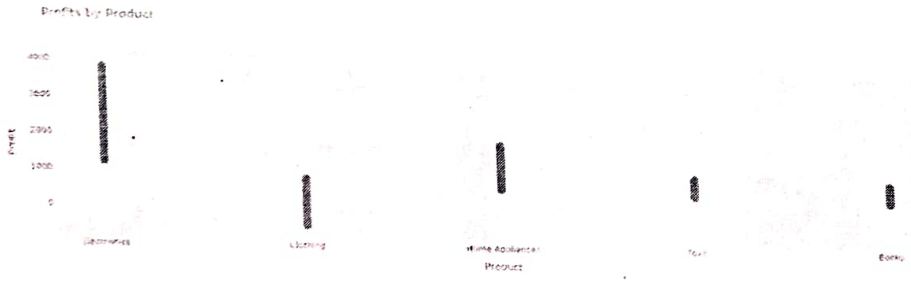
→ Run the Dash app on a specific port (8051) with 'app.run_server(debug=True, port=8051)'.

Testing Phase: Compilation of Code (error detection)

Implementation Phase: Final Output (no error)







ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	**50**		

Signature of the Student: G. Sumanth

Name : G. Sumanth

Regn. No. : 211801131001

Signature of the Faculty:

```
from jupyter_dash import JupyterDash
from dash import dcc, html, Input, Output
import pandas as pd
import plotly.express as px
file_path = "sales_data.csv"
df = pd.read_csv("sales_data.csv")
print("Dataset Columns:", df.columns)
print("Dataset Preview:", df.head())
df.rename(columns={
    'Region': 'Region',
    'product category': 'product category'
    'Date': 'Date',
    'Sales': 'Sales'
}, inplace=True)
df['Date'] = pd.to_datetime(df['Date'])
required_columns = ['Date', 'Region', 'product category', 'Sales']
missing_columns = [col for col in required_columns if col not in
                                        df.columns]
if missing_columns:
    raise ValueError(f"The dataset is missing the following
                    required columns: {missing_columns}")
app = JupyterDash(__name__)
```