Centurion UNIVERSITY

School: SOET Campus: Vzm

Academic Year: 2021/25 Subject Name: DAUP Subject Code: cutm1018

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

Date: ....

Applied and Action Learning

(Learning by Doing and Discovery)

ame of the Experiement : Develop a bubble chart to analyze the performance of students in a class

oding Phase: Pseudo Code / Flow Chart / Algorithm

→ import neccessary libraries

→ load the dataset and ensure required columns are present.

→ create a bubble chart with 'Marks' on the Axis 'Attendance' on the Y-axis, and 'particinate': as the size.

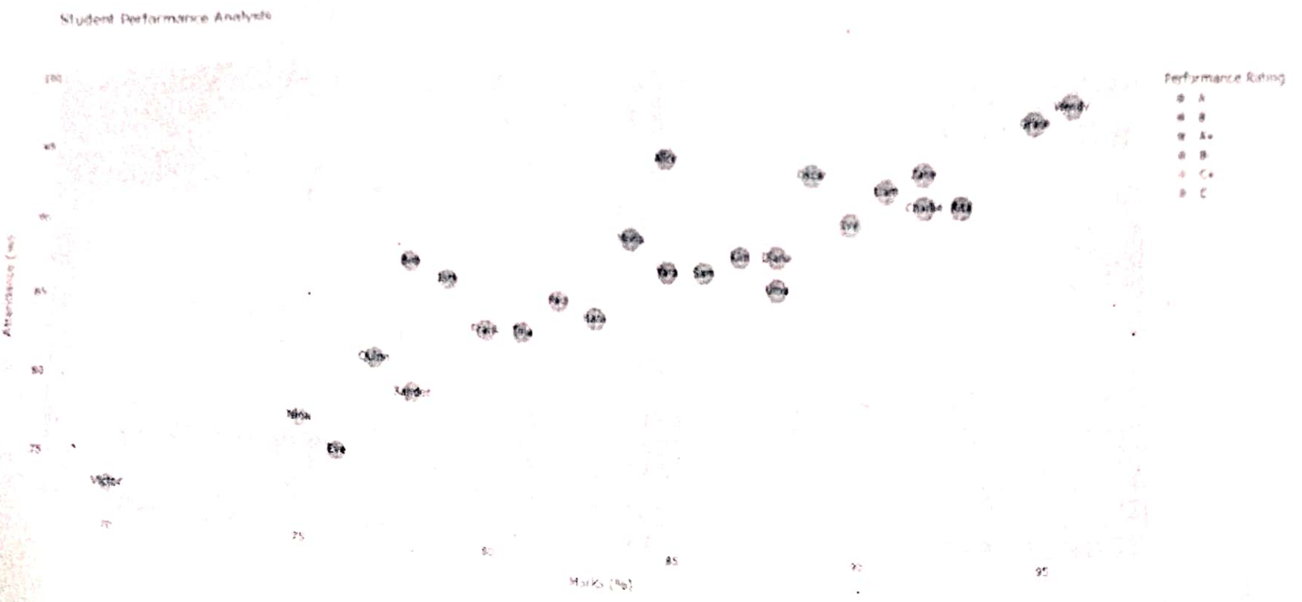
→ set 'performance Rating' as the color, with student names as hover text

→ Display the chart in the default web browser using 'fig. shown (renderer=" browser").

esting Phase: Compilation of Code (error detection)

Page No..........

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. S

Name : G. Sumanth

Regn. No. : 211801131001

Signature of the Faculty:

```
Import plotly. express as px
Import pandas as pd

df = pd. read_ csv ('students_ data. csv')
required_columns = ['Student', 'marks', 'Attendance', 'participation',
                    'Performance Rating']
missing_columns = [col for col in required_columns if col not in
                   df. columns]
if missing_columns:
raise value error [f"The dataset is missing the following
                   required columns: {missing_columns}")
fig = px. scatter (df,
        x = 'marks',
        y = 'Attendance',
        size = 'participation',
        color = 'Performance Rating',
        text = 'Student',
        title = "Student performance Analysis",
        labels = {'marks': 'marks (%)',
                  'Attendance': 'Attendance (%)',
                  'performance Rating': 'performance Rating'},
        hover_name = 'Student',
        hover_data = {"marks": True, "Attendance": True,
fig. show (renderer = "browser")
```