School: SOET Campus: VZM

Academic Year: 2021/25 Subject Name: DAVP Subject Code: CSTA1018

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

Date:

Applied and Action Learning

(Learning by Doing and Discovery)

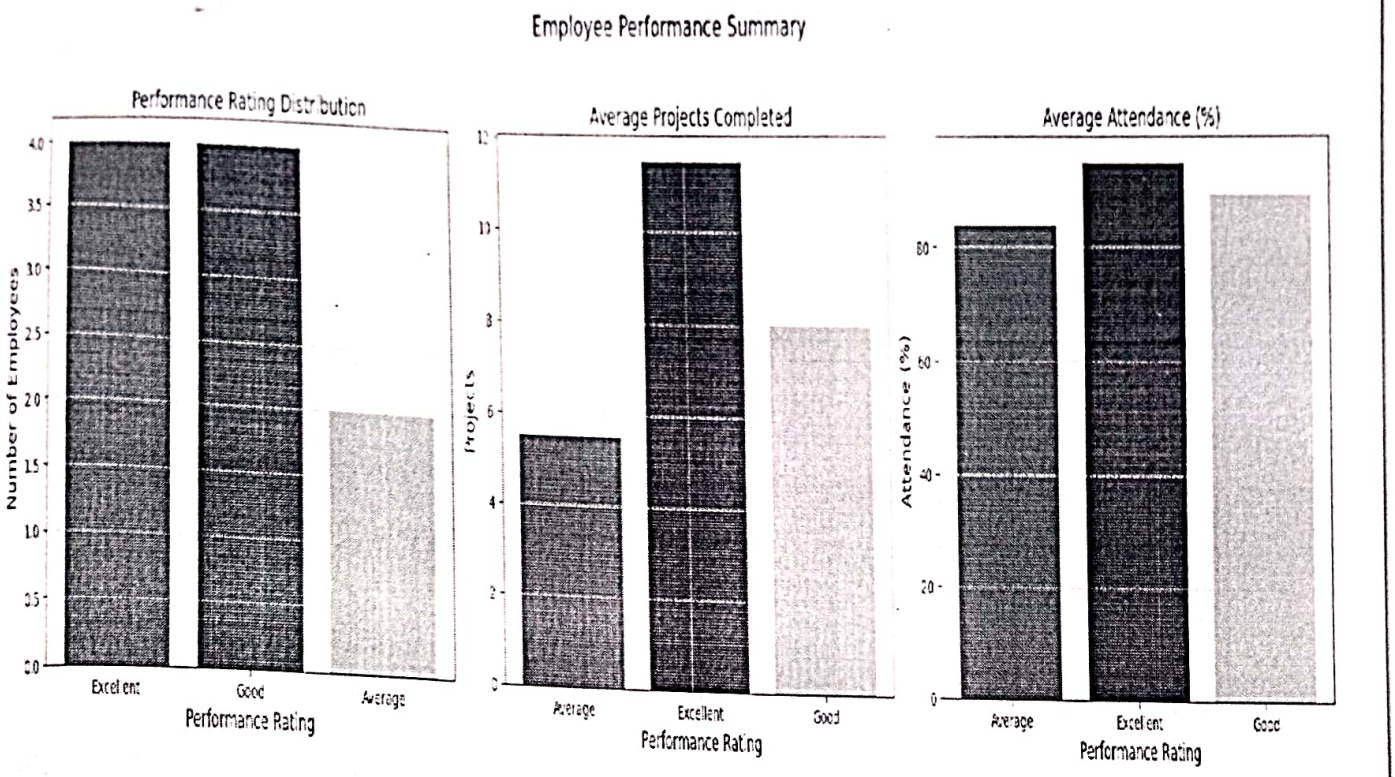
Name of the Experiement : Create an infographic using matplotlib summarizing the key insights from a dataset

Coding Phase: Pseudo Code / Flow Chart / Algorithm

→ load the dataset
→ Aggregate data: calculate rating distribution, average projects, and attendance.
→ create subplots for each data point.
→ plot performance rating distributing as a bar chart.
→ plot average projects completed as a bar chart.
→ plot average attendance as a bar chart.
→ Add an overall title
→ Adjust layout and display the infographic

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. S. Harini

Name : G. Sumanth

Regn. No. : 211801131001

Signature of the Faculty:

```
Import pandas as pd
Import matplotlib.pyplot as plt
df = pd.read_csv('employee_performance.csv')

rating_counts = df['performance Rating'].value_counts()
average_projects = df.groupby('performance Rating')['projects
                                                completed'].mean()
average_attendance = df.groupby('performance Rating')
fig, axs = plt.subplots(1, 3, figsize = (18,6))
axs[0].bar(rating_counts.index, rating_counts.values,
                        color = ["green", "blue", "orange"])
axs[0].set_title("performance Rating Distribution", fontsize=14)
axs[0].set_ylabel("Number of employees", fontsize=12)
axs[0].set_xlabel("performance Rating", fontsize=12)
axs[0].grid(axis='y', linestyle='--', alpha=0.7)
axs[1].bar(average_attendance.index, average_attendance
                        values, color = ["green", "blue", "orange"])
axs[1].set_title("Average Attendance (%)", fontsize=14)
axs[1].set_ylabel("Attendance (%)", font size=12)
axs[1].grid(axis='y', linestyle'--', alpha=0.7)
plt.suptitle("Employee performance summary", fontsize=16)
plt.tight_layout(rect=[0, 0.03, 1, 0.95])
plt.show()
```