Data Collection and Preprocessing Phase

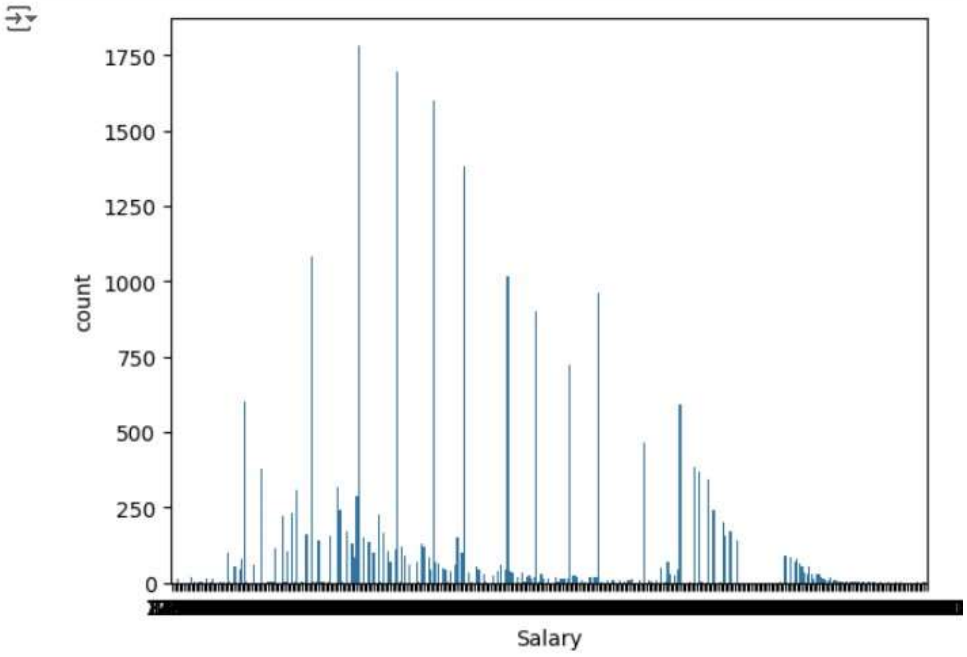
Date	31 June 2024
Team ID	740677
Project Title	Software Salary Prediction
Maximum Marks	6 Marks

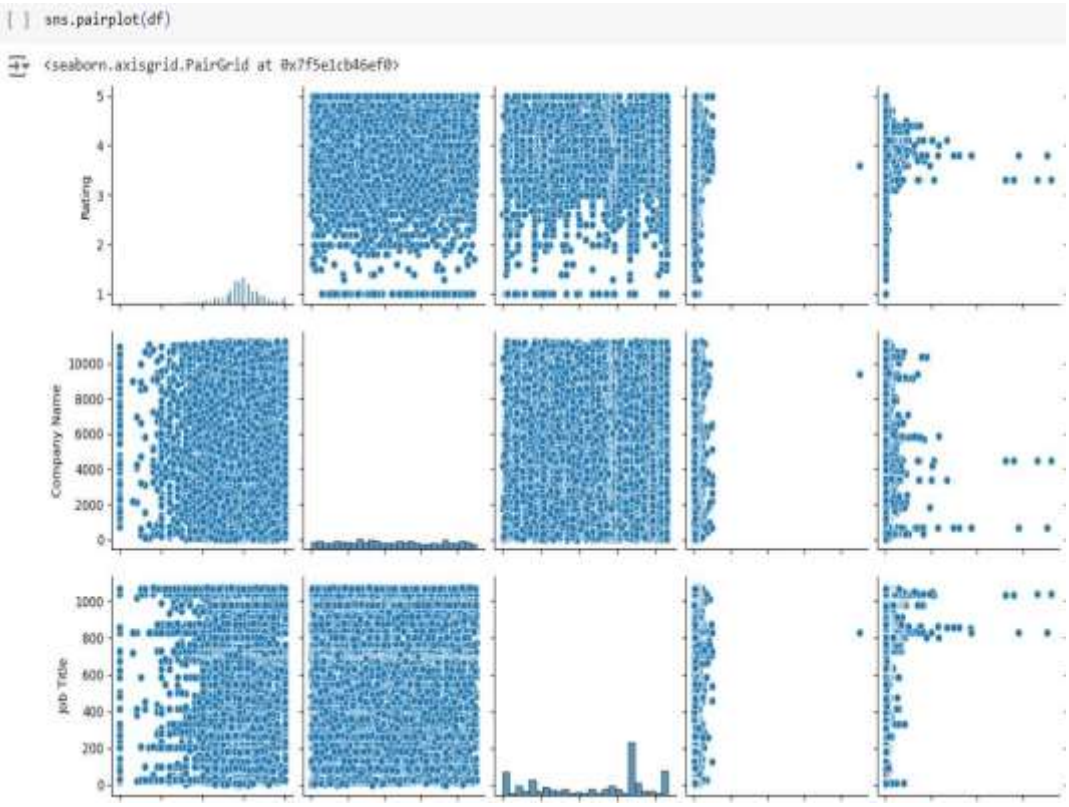
Data Exploration and Preprocessing

Dataset gets statistically analysed to identify patterns and outliers. Data preprocessing addresses missing values, improving data quality for further analysis and modelling, and forming a strong foundation for insights and predictions.

Section	Description
Data Overview	Dimensions: 64rows*8 Columns Descriptive Statistics: `[ ] df.describe()` (output table below)

	Rating	Company Name	Job Title	Salary	Salaries Reported	Location	Employment Status	Job Roles
count	22770.000000	22770.000000	22770.000000	2.277000e+04	22770.000000	22770.000000	22770.000000	22770.000000
mean	3.918213	5478.825209	597.435968	6.953872e+05	1.855775	3.150812	1.071322	5.465086
std	0.519675	3224.603280	348.305504	8.843990e+05	6.823668	3.529116	0.342450	3.221968
min	1.000000	0.000000	0.000000	2.112000e+03	1.000000	0.000000	0.000000	0.000000
25%	3.700000	2756.000000	237.000000	3.000000e+05	1.000000	0.000000	1.000000	3.000000
50%	3.900000	5317.500000	753.000000	5.000000e+05	1.000000	2.000000	1.000000	7.000000
75%	4.200000	8336.000000	850.000000	9.000000e+05	1.000000	8.000000	1.000000	8.000000
max	5.000000	11260.000000	1079.000000	9.000000e+07	361.000000	9.000000	3.000000	10.000000

Univariate Analysis	`[ ]` `sns.countplot(x='Salary',data=df)`
	`plt.show()`
	 

Bivariate Analysis	
Multivariate Analysis	

Outliers and Anomalies	----------

Data Preprocessing

Code Screenshots

Loading Data

```
df = pd.read_csv('Salary_Dataset_with_Extra_Features.csv')
```

```
df.head()
```

	Rating	Company Name	Job Title	Salary	Salaries Reported	Location	Employment Status	Job Roles
0	3.8	Sasken	Android Developer	400000	3	Bangalore	Full Time	Android
1	4.5	Advanced Millennium Technologies	Android Developer	400000	3	Bangalore	Full Time	Android
2	4.0	Unacademy	Android Developer	1000000	3	Bangalore	Full Time	Android
3	3.8	SnapBizz Cloudtech	Android Developer	300000	3	Bangalore	Full Time	Android
4	4.4	Appoids Tech Solutions	Android Developer	600000	3	Bangalore	Full Time	Android

Handling Missing Values

```
[ ] df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 22770 entries, 0 to 22769
Data columns (total 8 columns):
 #   Column             Non-Null Count  Dtype
---  ------             --------------  -----
 0   Rating             22770 non-null  float64
 1   Company Name       22769 non-null  object
 2   Job Title          22770 non-null  object
 3   Salary             22770 non-null  int64
 4   Salaries Reported  22770 non-null  int64
 5   Location           22770 non-null  object
 6   Employment Status  22770 non-null  object
 7   Job Roles          22770 non-null  object
dtypes: float64(1), int64(2), object(5)
memory usage: 1.4+ MB
```

Data Transformation	--
Feature Engineering	--
Save Processed Data	--