SUBJECT: - EDS Practice Session Assignment

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1. Bar Graphs (Bar Charts)

Significance: Bar graphs are used to compare quantities across different categories. They are useful for showing discrete
data or categorical comparisons. Bar charts can be oriented vertically or horizontally.

2. Histograms

Significance: Histograms represent the distribution of a dataset and show the frequency of data within certain intervals or
bins. Unlike bar charts, histograms are used for continuous data.

3. Line Graphs (Line Charts)

Significance: Line graphs are used to track changes over periods, showing trends, patterns, or relationships in data over
time. They connect individual data points with a continuous line, highlighting temporal progressions

4. Pie Charts

Significance: Pie charts are circular charts divided into segments to show proportional data. Each segment represents a
category's contribution to the whole.

5. Scatter Plots

Significance: Scatter plots display individual data points along two axes, revealing the relationship or correlation between
two continuous variables.

6. Box Plots (Box-and-Whisker Plots)

Significance: Box plots summarize the distribution of data through its quartiles, highlighting the median, interquartile
range, and potential outliers.

7. Area Charts

Significance: Area charts are similar to line graphs but with the area below the line filled in. They are used to show
cumulative totals over time or the distribution of a variable.

8. Heatmaps

Significance: Heatmaps use colour gradients to represent values in a matrix format, making it easy to visualize the intensity
of data across two dimensions.

9. Bubble Charts

Significance: Bubble charts are a variation of scatter plots where each data point is represented as a bubble. The size of the
bubble represents an additional variable.

10. Violin Plots

Significance: Violin plots combine aspects of box plots and density plots, showing the distribution of data across different categories while visualizing the density of the data.

11. Stacked Bar Charts

Significance: Stacked bar charts break down each bar into segments representing subcategories, making it easier to see both the total value and how that total is distributed across different parts.

12. Radar Charts (Spider Charts)

Significance: Radar charts are used to display multivariate data with variables represented on axes that radiate from a central point. It is useful for comparing different categories or groups.

13. Tree Maps

Significance: Tree maps display hierarchical data using nested rectangles, where the size of each rectangle represents a data value. The colour can represent a secondary measure.

14. Candlestick Charts

Significance: Common in financial data visualization, candlestick charts show the open, high, low, and close prices of a stock over time. Each candlestick provides a snapshot of market behavior during a specific period.