Bike Buyers Dataset (Google Sheets Dashboard)

This dataset has details of 1000 users from different backgrounds and whether or not they buy a bike. This data can be used to build the dashboard in Google Sheets. There are some NA (Null / Empty) values injected in the dataset. Use this dataset for Data Cleaning, Exploration, and Visualization.

Columns -

- ID
- Marital Status
- Gender
- Income
- Children
- Education
- Occupation
- Home Owner
- Cars
- Commute Distance
- Region
- Age
- Purchased Bike

You are a data analyst and your job is to help the business stakeholders to make better decisions. You have to explore the dataset, perform the preprocessing, or any data manipulation that is required.

To solve this problem you need to build a dashboard in Google Sheets. Here are some suggestions that you can follow, feel free to explore more on your own.

1. Bar Chart (Marital Status):

Question: How does the count of bike purchases vary among different marital statuses? Are married individuals more likely to purchase bikes?

2. Bar Chart (Gender):

Question: Build a bar graph to compare the count of male and female customers. Does gender influence bike purchases, and if so, to what extent?

3. Histogram (Income):

Question: What is the distribution of income among bike buyers? Are there specific income brackets that show a higher likelihood of bike purchases?

4. Histogram (Age):

Question: Create a histogram to understand the age distribution of bike buyers. Are certain age groups more inclined to purchase bikes?

5. Box Plot (Income):

Question: Identify outliers in the income distribution of bike buyers. Are there any extreme income values, and how might they impact purchasing behavior?

6. Pie Chart (Region):

Question: Represent the distribution of bike purchases by region using a pie chart. Are there regions where bike purchases are notably higher?

7. Scatter Plot (Income vs. Age):

Question: Create a scatter plot to investigate the relationship between income and age. Do individuals with higher incomes tend to be in specific age groups?

8. Stacked Bar Chart (Marital Status & Gender):

Question: How does the distribution of bike purchases differ when considering both marital status and gender simultaneously? Are there notable patterns?

9. Correlation Heatmap (Numeric Variables):

Question: Use a heatmap to visualize the correlation matrix between numeric variables. What variables show a strong correlation, and how might this influence purchasing behavior?

10. Pair Plot (Subset of Variables): (This is optional in Google Sheets)

Question: Create a pair plot for a subset of variables (e.g., Income, Age, Children). Are there clear relationships between these variables, and how might they impact bike purchases?

The above 10 plots are suggestions that you can build, first, build the individual charts and then create a functional dashboard in a new sheet.

Once you complete the task submit the public URL of your dashboard in the Google sheet mentioned on the Task page.