Tableau Reinforcement Project Description

The objective of this project is to showcase your ability to independently create a meaningful and visually engaging Tableau dashboard. This project will test your skills in data preparation, analysis, visualization, and presentation, allowing you to demonstrate your proficiency with Tableau's core features.

Key Deliverables:

1. **Dataset:**

   o **Topic Selection**: Choose a topic that interests you, such as sales, healthcare, sports, education, or entertainment.

   o **Dataset Creation**: Use **Mockaroo** (https://www.mockaroo.com/) to generate your dataset. The dataset should be well-structured, relevant, and clean for analysis.

   o **Data Complexity**: The dataset should include multiple attributes (e.g., dates, categories, numerical values) to support a comprehensive analysis.

   o **Constraints**: Your dataset should consist of at least **1000 rows of data** and contain at least **10-12 different attributes** (e.g., sales figures, region, product type, etc.).

   How to Generate Data Using Mockaroo:

   ➢ **Visit Mockaroo Website:**

   o Open your browser and go to https://www.mockaroo.com.

   ➢ **Customize the Data Fields:**

   o On the homepage, you'll see a section where you can specify the columns for your dataset. Mockaroo allows you to select various **field types** for each column (e.g., Name, Age, Address, Date, etc.).

   o For example, if you're creating a dataset for a **Sales Dashboard**, you might choose the following fields:

   ▪ **Product Name**: Choose a type like Product Name or create your own using Custom List.

- **Sales Amount**: Choose a type like Decimal or Currency.

- **Date**: Choose a type like Date to randomly generate date values.

- **Region**: Choose a type like City or State.

- **Units Sold**: Choose a type like Number for randomly generated numeric values.

- **Sales Representative**: Choose Name for random names or create a custom list of names.

  - You can select as many or as few fields as needed based on your project requirements.

➢ **Set the Number of Rows:**

  - Mockaroo lets you decide how many rows of data you need. You can generate a dataset with up to 1,000 rows for free. For larger datasets, you may need to sign up for a premium plan.

  - For example, if you're creating a **Sales Dataset** for a dashboard, you might want to generate **1000 rows**.

➢ **Download the Data:**

  - After configuring your fields and selecting the number of rows, Choose the file format you need (e.g., CSV, Excel) for your analysis. Then click on the **Generate Data** button.

2. **Dashboard:**

  - **Design**: Create an aesthetically pleasing and functional dashboard that offers actionable insights.

  - **Chart Variety**: Use a mix of chart types (e.g., bar charts, line graphs, maps, etc.) that are appropriate for your data and analysis. Ensure that each chart type adds value to your narrative.

  - **Interactivity**: Add interactive elements such as filters, drop-down menus, or tooltips to allow users to explore the data dynamically. Ensure the dashboard is intuitive and easy to navigate.

3. **Storytelling:**

    o **Narrative Structure**: Use Tableau's **Story** feature to present your analysis in a compelling and cohesive narrative.

    o **Logical Flow**: Your story should have a clear structure, starting with an introduction, followed by the main analysis, and ending with conclusions and recommendations.

    o **Key Insights**: Highlight the most significant insights derived from your analysis, and provide actionable recommendations based on your findings.

4. **PowerPoint Presentation (PPT):**

    o **Title Slide**: Project title, your name, and a brief introduction to your topic.

    o **Dataset Overview**: Describe your dataset, including its source, attributes, and key features.

    o **Dashboard Overview**: Briefly explain your dashboard design and the main features included.

    o **Key Insights**: Present the most important findings from your analysis, highlighting any actionable recommendations.

    o **Conclusion**: Provide a conclusion that summarizes your analysis, with suggestions for potential real-world applications.

Key Requirements:

- **Calculated Fields**: Incorporate calculated fields in your analysis, such as calculated measures, ratios, or percentages, to add depth to your findings.

- **Advanced Features**: Utilize advanced Tableau features, including:

    o Filters and tooltips for enhanced interactivity.

    o Advanced chart types where applicable to your analysis (e.g., heat maps, tree maps, etc.).

- **Design and Clarity**: Ensure that your dashboard and story are not only visually appealing but also easy to understand, interpret, and insightful for the end user.

Evaluation Rubric for Tableau Reinforcement Project:

Evaluation Criteria	Marks
Dataset Preparation (Originality, Relevance, Data Cleaning)	**15**
Dashboard Design (Chart Variety, Aesthetic Appeal, Interactivity)	**30**
Storytelling (Logical Flow, Effective Use of Story Feature)	**20**
Key Topics Utilized (Calculated Fields, Advanced Techniques)	**15**
PPT & Presentation (Clear, Concise Summary, Visual Appeal)	**20**
Total Marks	**100**