Executive SummarySlide

- Briefly summarize the project objectives, methodology, and key results.
- Example: "This project explores SpaceX launch data to understand mission outcomes, visualize trends, and predict future results.
- We performed EDA, SQL analysis, and machine learning to gain insights and build predictive models."

Introduction Slide

Introduce the problem and its significance.

Explain why the analysis is important.

Example: *"Space exploration is rapidly evolving. This project analyzes SpaceX's launch data to uncover insights, trends, and predictive capabilities that contribute to cost-efficient space missions."*

Data Collection and Data Wrangling Methodology Slides

Describe the data sources (e.g., SpaceX API, Kaggle datasets).

Mention the steps for cleaning and transforming the data.

Example:

- Collected data from SpaceX API.
- Cleaned and handled missing values in columns like landingPad.
- Applied one-hot encoding for categorical variables.

EDA and Interactive Visual Analytics Methodology Slides

Describe the exploratory data analysis process.

Mention interactive visualizations used (e.g., Folium maps, Plotly).

Example: *"Explored launch outcomes, payload masses, and booster versions using Python libraries like Matplotlib, Seaborn, and Plotly. Created interactive maps to visualize launch site locations."*

Predictive Analysis Methodology Slide

Describe the predictive analysis approach.

Mention the algorithm used (e.g., logistic regression, decision trees).

Example: *"Used classification models to predict mission success based on features like payload mass, orbit, and booster version."*

EDA with Visualization Results Slides

Present key insights with visuals (bar charts, scatter plots, etc.).

Highlight trends, such as:

- Booster version success rates.
- Payload mass impact on mission outcome.
- Launch site frequencies.

Include brief descriptions of each chart

EDA with SQL Results Slides

- Show SQL queries and results for key questions:
- Example: *"SELECT MIN(payload_mass_kg) FROM SPACEXTBL"*.

Explain findings, such as the launch site with the highest success rate or the heaviest payload launched.

Interactive Map with Folium Results Slides

- Include screenshots of the Folium map showing:
  - Launch sites.
  - Success or failure of missions.
- Briefly explain what the map shows.

Plotly Dash Dashboard Results Slides

Add screenshots of your Plotly Dash app.

Describe key features, such as dropdown filters, interactive graphs, or real-time updates.

Predictive Analysis (Classification) Results Slides

Present the performance of your machine learning model:

- Accuracy, precision, recall.
- Confusion matrix.

Include a summary of the results and their implications.

. Conclusion Slide

Summarize key findings.

Mention potential applications and future improvements.

Example: *"This analysis highlights the factors influencing mission success. Future work could integrate more data or advanced machine learning techniques for better predictions."*

Creativity and Innovation

Ideas:

- Use custom design templates, icons, and animations.
- Include unique insights or observations not explicitly required.