INTERNSHIP REPORT

- **1. Introduction** During my internship, I was assigned the task of building an interactive dashboard for analyzing mobile app performance data using python and Plotly. The primary objective was to provide visual insights into app installs, revenue trends, and user engagement using dynamic and filtered data visualizations.
- **2. Background** The internship project focused on creating data-driven visuals for an app dataset containing fields like app category, type (free/paid), installs, revenue, reviews, size, content rating, Android version, and timestamps. Understanding patterns in this data would help product teams and stakeholders make better strategic decisions.

3. Learning Objectives

- Learn how to build data dashboards using matplotlib .
- Create intuitive visualizations using Plotly.
- Implement time-based conditional visualizations.
- Gain experience with real-world data wrangling and analytics.

4. Activities and Tasks The key tasks completed during the internship included:

- Creating a scatter plot to show correlation between installs and revenue for paid apps.
- Designing a dual-axis chart comparing average installs and revenue for free and paid apps in top 3 categories with strict filtering conditions.
- Developing a time-series chart to show month-over-month installs by category, with highlighted areas of significant growth.
- Implementing time-based conditional rendering to ensure certain graphs are shown only during specified hours.

5. Skills and Competencies

- **Technical Skills**: Python, matpoltlib, Plotly, EDA, Pandas, Data Visualization
- **Soft Skills**: Time management, problem-solving, attention to detail, and communication of technical work.
- **Data Handling**: Data cleaning, filtering, aggregation, and conditional formatting

6. Challenges : Handling complex filter combinations for multiple each filter. Implementing time-based conditions . Solution: Used Python's datetime and pytz libraries to control graph visibility based on IST time

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9. Conclusion This internship provided valuable hands-on experience with dashboard development and real-world data analysis. I enhanced my technical proficiency in Python, and visualization tools, and gained practical experience in building interactive applications that solve analytical problems with clarity and precision.

THANK YOU