PROJECT REPORT

(Project Semester January-April 2025)

APP PERFORMANCE DASHBOARD

Submitted by

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Registration No…12310816…...

Programme and Section   Cse K23EG …………
Course Code ..INT 217............

Under the Guidance of

JAFFAR AMIN CHACKET

Discipline of CSE/IT

Lovely School of ____ComputerScience and Engineering_____

Lovely Professional University, Phagwara

<u>CERTIFICATE</u>

This is to certify that Pratiksha Tripathi bearing Registration no.12310816 has completed INT 217 project titled, **"APP PERFORMANCE DASHBOARD "** under my guidance and supervision. To the best of my knowledge, the present work is the result of his/her original development, effort and study.

Signature and Name of the Supervisor

Designation of the Supervisor

School of Computer Science and Engineering

Lovely Professional University

Phagwara, Punjab.

Date: 12-04-2025

DECLARATION

I, Pratiksha Tripathi, student of BTECH CSE under CSE/IT Discipline at, Lovely Professional University, Punjab, hereby declare that all the information furnished in this project report is based on my own intensive work and is genuine.

Date: Signature

Registration No. ...12310816   Name of the student

                                                                                            Pratiksha

ACKNOWLEDGEMENT

 I would like to express my heartfelt gratitude to everyone who contributed to the successful completion of this project. First and foremost, I am deeply thankful to my project mentor and faculty guide for their constant encouragement, valuable feedback, and expert guidance throughout the duration of this work. Their insights and support played a crucial role in shaping this project and helped me navigate through challenges with confidence. I would also like to extend my appreciation to the faculty and staff of the School of Computer Science at Lovely Professional University for providing a supportive academic environment and the necessary resources to carry out this project effectively. A special thanks goes to my fellow classmates and peers for their helpful discussions, motivation, and collaboration, which greatly enriched my learning experience. I am equally grateful to my friends for their moral support and uplifting words that kept me motivated during difficult moments. Lastly, I would like to express my sincere appreciation to my family, whose unwavering love, patience, and encouragement have been my source of strength throughout this academic journey. Their belief in me has always inspired me to give my best. This project is the result of the collective support, knowledge, and encouragement I received, and I am genuinely thankful to all who played a part in its completion.

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1. Introduction

Mobile applications are a major touchpoint in the digital ecosystem. Tracking and analyzing app performance metrics like downloads, user engagement, and revenue is crucial for developers and companies. This project aims to build an **interactive App Performance Dashboard** that gives a comprehensive view of app usage across platforms, regions, and categories.

Using Excel, a visual and dynamic dashboard was created to monitor daily downloads, session durations, revenues, and user engagement by country and category. This enables stakeholders to make informed decisions based on real-time insights.

2. Source of Dataset

The dataset includes real-world simulated data on app usage and performance. The data fields include:

- App Name

- Downloads

- Session Duration

- Revenue

- Platform (iOS/Android)

- Country

- App Category

3. Dataset Preprocessing

Key preprocessing steps include:

- **Data Cleaning**: Removed duplicates, handled missing values in downloads and revenue.

- **Feature Engineering**: Calculated metrics like daily active users, average session duration.

- **Data Transformation**: Standardized date formats and categorized app types.

- **Aggregation**: Grouped data by app, country, and category using pivot tables.

4. Analysis on Dataset

i. General Description

- Data Size: 25,000 records

- Platforms: Android and iOS

- Categories: Utility, Streaming, Ride Sharing, Productivity, Entertainment

- Countries: 10 (including Brazil, India, UK, USA, etc.)

ii. Specific Objectives

- Track app downloads and session durations

- Analyze revenue by app, category, and country

- Identify most active platforms (iOS vs Android)

- Determine top-performing apps based on user engagement

iii. Analysis Results

- **Total Revenue**: 1,250.0M

- **Total Installs**: 18,764,326

- **Daily Active Users (DAUs)**: 494,402

- **Downloads (Android vs iOS)**: 69% Android, 31% iOS

Top App Categories by Revenue:

CATEGORY	REVENUE
Ride Sharing	3.4M
Productivity	3.2M
Entertainment	3.2M

Top Countries by Revenue (Pie Chart):

- Brazil: 11%

- USA: 10%

- India: 9%

- Germany, Canada, France: Remaining

iv. Visualization

The dashboard includes:

- **Bar Charts**: Daily downloads, DAUs

- **Line Graph**: Avg session duration by app

- **Pie Chart**: Revenue by country

- **Donut Chart**: Android vs iOS installs

- **Horizontal Bar**: Revenue by app category

- **Filters**: App name, country

5. Conclusion

The App Performance Dashboard provides clear visibility into app metrics across platforms and countries. It highlights user preferences, platform dominance, and revenue patterns that are critical for business strategy. Insights from this dashboard can help developers prioritize features and target markets more effectively.

6. Future Scope

- Incorporate predictive analytics for forecasting app usage

- Integrate real-time tracking via APIs

- Expand the dashboard to include user reviews and sentiment analysis

- Build a mobile version for on-the-go access

7. References

1. Microsoft Excel – Official Documentation
2. Udemy Course – Excel Dashboards
3. App Annie – Mobile App Industry Data
4. Statista – Global Mobile App Statistics
5. LPU Class Notes and Resources