**Project Synopsis on**

“Revenue Insights in Hospitality Domain”

Submitted to



**I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY KAPURTHALA**

In partial fulfillment of the requirement for the award of degree of

Bachelor of Computer Applications (BCA)

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Batch 2022-2025

**Introduction:**

This project involves the development of a comprehensive data analytics dashboard tailored for a hospitality company. Designed to capture all key aspects of the company’s business data, this dashboard will provide valuable insights into various operational areas, facilitating data-driven decisions to enhance performance and efficiency. By visualizing crucial metrics and trends, the dashboard will empower the company with actionable insights, ultimately contributing to improved customer satisfaction, revenue growth, and strategic planning.

**Objective:**

1. Create the metrics according to the metric list.

2. Create a dashboard according to the mock-up provided by stakeholders.

3. Create relevant insights that are not provided in the metric list/mock-up dashboard.

**Problem Statement:**

The hospitality industry often faces challenges in leveraging vast amounts of data to make informed business decisions. Many companies struggle with fragmented or inaccessible data, leading to missed opportunities for operational improvement and customer satisfaction. This project addresses these issues by creating a centralized data analytics dashboard, enabling the company to view and analyze critical metrics in real-time. The goal is to empower the organization to make data-driven decisions, streamline operations, and identify key areas for growth and improvement. By consolidating and visualizing data, the dashboard will serve as a powerful tool to overcome inefficiencies and drive business success in a competitive market.

**Scope:**

Scope

1. Requirement Understanding: Conduct a thorough analysis of the hospitality company’s business needs, defining key performance indicators and data points essential for the dashboard.

2. Mockups and Solution Design: Develop initial mockups and designs to outline the dashboard’s structure and functionality, ensuring alignment with business goals.

3. Data Collection and Data Modeling: Gather and preprocess relevant data using Excel and Power Query, establishing a robust data model that supports accurate and efficient analytics.

4. Dashboard and Insights Generation: Create the final dashboard in Power BI, focusing on delivering actionable insights through clear visualizations and data-driven metrics.

5. Stakeholder Feedback: Present the dashboard to stakeholders for review, gather feedback, and make adjustments to enhance usability and effectiveness.

**Methodology:**

Methodologies

This Project uses the following methodologies

Technologies

1. Excel: Data is stored, organized, and preprocessed using Excel, with Power Query for data cleaning and transformation.

2. Power BI: Power BI is used to create an interactive dashboard, turning data into visual insights that support real-time, data-driven decision-making.

**Expected Outcome:**

• A functional and user-friendly dashboard that enables clear understanding of business insights derived from the provided data.

• Visual representation of multiple key metrics covering various business aspects, supporting a holistic view of operational performance.

• Ability to filter metrics and data as needed, allowing users to focus on specific insights relevant to different business dimensions.

• Enhanced data-driven decision-making capabilities by providing accessible, real-time insights that support strategic improvements.

**Conclusion:**

This project delivers a data analytics dashboard for a hospitality company, utilizing Excel for data management and Power BI for interactive visualization. Key stages include requirement analysis, mockup design, data modeling, dashboard creation, and stakeholder feedback. The dashboard will provide essential metrics and insights, enabling real-time, data-driven decisions that improve business efficiency and support strategic growth.

**References:**

Any research or literature you’ve referred to while preparing the synopsis.