ML Dental Clinic Data Analytics Project Report

Project Overview

This project focuses on leveraging data analytics to uncover actionable insights for ML Dental Clinic. It includes data cleaning, exploratory data analysis, SQL querying, and dashboard creation in Power BI.

Objectives

- Understand patient demographics and treatment trends.

- Analyze revenue performance.

- Identify areas for operational improvement.

- Build interactive visual dashboards for business stakeholders.

Data Sources

- **Patient Records:** 1000+ entries including treatments, payments, and locations.

- **Revenue Data:** Transactional details for services rendered.

Technologies Used

- **Python (Pandas, Matplotlib)** for EDA.

- **MySQL** for relational querying.

- **Power BI** for dashboard creation.

Key Insights

- Total revenue and patient count over time.

- Top-performing doctors and treatments.

- Revenue contribution per location.

- Treatment-wise revenue segmentation.

- Outstanding dues and free OPD utilization.

Deliverables

- Cleaned datasets.

- 13 SQL query outputs in Excel format.

- Power BI dashboard file.

- Visual exports of key charts.

Outcome

The analysis provided clear evidence of revenue drivers and underutilized services, helping the clinic make informed operational decisions.

Author

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