

Data Science Tool Workshop CDCSC19

Project 3 (PowerBI) Healthcare Patient Management Dashboard



Team -

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OVERVIEW

The Healthcare Power BI Dashboard project is designed to provide a comprehensive data visualization solution using Power BI. The primary objective of this project is to offer an interactive and insightful tool for Hospital Management Teams to track and analyze various aspects of patient visits, instrument availability, revenue generated across different age groups, appointment waiting times, and feedback on medical prescriptions and hospital services.

Objective

The main goals of this project are:

- **Data Visualization:** Develop interactive visualizations aiding in understanding hospital metrics.
- **Data Transformation:** Perform comprehensive data transformations using Power Query Editor for consistency and accuracy.
- **Data Modeling:** Design an efficient data model establishing relationships between fact and dimension tables.
- **Key Performance Indicators (KPIs):** Develop KPIs for better insights.

- **Interactive Visuals:** Create a range of visuals like bar charts, line charts, maps, and tables.
- **Custom Visuals:** Utilize custom visuals for enhanced user experience.
- **Drill-Down Capabilities:** Implement drill-down and drill-through functionalities.
- **Filtering and Slicing:** Incorporate filters and slicers for easy data segmentation.
- **Navigation:** Use navigational elements for seamless report browsing.

Project Overview

Data Source: Utilized MS Excel for data inputs.

• **Data Transformations:** Employed various transformations such as merge, remove, trim, and column data type changes in Power Query Editor to ensure data consistency.

• **Data Model:** Designed and implemented a data model establishing relationships between different tables including bed details, staff details, department, and dataset tables.

• **Visualizations:** Developed KPIs using card visuals and an array of interactive visuals including bar charts, line charts, maps, and tables.

- **Customization:** Utilized custom visuals like rotating card, scroller, etc., for enhanced user experience.
- **Functionality:** Implemented drill-down and drill-through capabilities to provide detailed patient views, along with filters, slicers, and button navigators for ease of use.

The Healthcare Power BI Dashboard project is aimed at aiding Hospital Management Teams in efficiently managing and analyzing critical data for better decision-making processes.

