

# **GUNDA RASHMI**

## **ELEVATE LABS**

### **INTERNSHIP PROJECT PHASE**

## **Healthcare Appointments No-Show Prediction**

### **Introduction**

Missed healthcare appointments are a common issue that impacts resource planning, patient care, and operational efficiency. This project aims to identify patterns in patient behaviour using Power BI visualizations to reduce no-show rates and improve scheduling effectiveness.

### **Abstract**

The goal of this project is to analyse historical appointment data and uncover insights about patient no-show behaviour. Using Power BI, an interactive dashboard was created to highlight trends across weekdays, time slots, and visit types. These visuals help healthcare providers understand and act on patterns to reduce missed appointments.

### **Tool Used**

- Power BI: For all data cleaning, transformation, and visualization

### **Steps Involved in Building the Project**

1. Data Import and Cleaning
  - Imported .csv file into Power BI
  - Removed invalid or incomplete records
  - Extracted new columns: Weekday, Hour, and cleaned Status
  - Filtered data to exclude cancelled appointments

## 2. Data Transformation

- Created measures for total appointments, no-shows, and show rate (as %)
- Converted appointment time to hour using Power Query

## 3. Visuals Created

- KPI Cards: Total Appointments, No-shows, Show Rate (%)
- Bar Chart: No-shows by Weekday
- Donut Chart: Appointments by Visit Reason
- Line Chart: No-show trends over time
- Bar Chart: No-show rate by Hour of Day
- Table: Detailed missed appointments list with filters

## 4. Filters for Interactivity

- Slicers for Month, Weekday, and Reason for Visit
- User-friendly background design and theme maintained

## Conclusion

With just Power BI, this project successfully highlights key behavioural patterns in appointment no-shows. The dashboard allows stakeholders to easily explore trends and make data-driven decisions to optimize clinic scheduling and reduce missed appointments.