Title: Solving Healthcare Accessibility with Data

Subtitle: A Data-Driven Approach to Addressing SDG 3: Good Health and Well-being

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Title: Overview of SDG 3 - Good Health and Well-being

Content:

SDG 3: *Ensure healthy lives and promote well-being for all at all ages.*

Objective: Address healthcare accessibility issues by analyzing hospital and patient data.

Relevance: Focus on improving accessibility and managing patient load.

Title: Problem Definition

Content:

Specific Problem: *Analyze healthcare accessibility by tracking hospital locations, patient demographics, and appointment distribution.*

Goal: *Identify which hospitals have the highest patient load and assess the distribution of patients across different hospitals.*

Title: Database Design and ERD

Content:

Entities:

Hospitals: HospitalID, Name, Location, Capacity

Patients: PatientID, Name, Age, Address

Appointments: AppointmentID, PatientID, HospitalID, AppointmentDate

ERD Diagram: Include a visual representation of the ERD showing the relationships between Hospitals, Patients, and Appointments.

Title: Database Schema and SQL Statements

Content:

Schema Creation:

```
-- Create Hospitals table
CREATE TABLE Hospitals (
    HospitalID INT PRIMARY KEY,
    Name VARCHAR(255),
    Location VARCHAR(255),
    Capacity INT
);

-- Create Patients table
CREATE TABLE Patients (
    PatientID INT PRIMARY KEY,
    Name VARCHAR(255),
    Age INT,
    Address VARCHAR(255)
);

-- Create Appointments table
CREATE TABLE Appointments (
    AppointmentID INT PRIMARY KEY,
    PatientID INT,
    HospitalID INT,
    AppointmentDate DATE,
    FOREIGN KEY (PatientID) REFERENCES Patients(PatientID),
    FOREIGN KEY (HospitalID) REFERENCES Hospitals(HospitalID)
);
```

Sample Data Insertion:

```
-- Insert sample data
INSERT INTO Hospitals (HospitalID, Name, Location, Capacity) VALUES (1, 'City Hospital', 'New York', 500), (2, 'Greenwood Clinic', 'San Francisco', 150), (3, 'Broadway Health Center', 'Los Angeles', 200);
INSERT INTO Patients (PatientID, Name, Age, Address) VALUES (1, 'Alice Smith', 30, '123 Elm Street'), (2, 'Bob Johnson', 45, '456 Maple Avenue'), (3, 'Carol White', 29, '789 Oak Drive'), (4, 'David Brown', 50, '101 Pine Lane');
INSERT INTO Appointments (AppointmentID, PatientID, HospitalID, AppointmentDate) VALUES (1, 1, 1, '2024-08-15'), (2, 2, 2, '2024-08-16'), (3, 3, 1, '2024-08-17'), (4, 4, 3, '2024-08-18'), (5, 1, 2, '2024-08-19');
```

Title: Sample Data

Content:

Hospitals Table:

HospitalID	Name	Location	Capacity
1	City Hospital	New York	500
2	Greenwood Clinic	San Francisco	150
3	Broadway Health Center	Los Angeles	200

Title: SQL Queries and Data Analysis

Content:

Number of Patients per Hospital:

```
SELECT HospitalID, COUNT(*) AS NumberOfPatients
FROM Appointments
GROUP BY HospitalID;
```

Title: Data Analysis Using Excel

Content:

Pivot Tables: Summarize the number of patients per hospital.
Charts: Visualize hospital capacities and patient distributions.
Interactive Dashboard: Show key insights with charts, slicers, and pivot tables.

Title: Insights and Findings

Content:

Key Insights:

Which hospitals are overburdened?
How does patient distribution affect hospital capacity?
Patterns in appointment scheduling.

Findings:

Highlight any significant trends or issues found through data analysis.

Title: Conclusion and Next Steps

Content:

Conclusion: Summarize how your data-driven approach addresses the problem of healthcare accessibility.

Next Steps:

Potential improvements or additional analysis.

Recommendations for healthcare policy or hospital management based on findings.