

# Healthcare Analysis

## Team Members:

- **Abdulrahman Waheed Ismael**
- **Abdulrahman Hisham**
- **Hoda Ebrahim Elkady**
- **Mohammad Abdulhakim Moghazy**

## Week 1: Build Data Model, Data Cleaning, and Preprocessing.

- **Tasks**
  - **Data Preprocessing:** Build a data model, then clean and preprocess the data.
  - **Tools:** SQL, Python (pandas and Matplotlib).
- **Deliverables**
  - Cleaned dataset, ready for analysis.
  - Data preprocessing notebook.

## Week 2: Analysis Questions Phase

- **Tasks:**
  - **Determine Data Analysis Questions:** Determine all possible analysis questions that can be deduced from the given dataset and would be of interest to the organization's decision makers.
  - **Tools:** SQL, Python (pandas and Matplotlib).
- **Deliverables**
  - Set of analysis questions that can be answered via the dataset.

## Week 3: Forecasting Questions Phase

- **Tasks**
  - Determine a set of forecasting questions and answer them using the trends found in the given dataset.
  - **Tools:** Python (scikit-learn, pandas, and Matplotlib).

- **Deliverables**
  - Visualization plots answering forecasting questions.

## **Week 4: Visualization Dashboard and Final Presentation**

- **Tasks**
  - **Build a visualization dashboard:** Build a Tableau visualization dashboard that visualize the answers to all the answered forecasting questions.
  - **Final Presentation:** Prepare a report and presentation summarizing the project work, including data analysis, model development, and deployment.
  - **Tools:** SQL, Python (pandas and Matplotlib), Tableau.
- **Deliverables**
  - Visualization Dashboard
  - Final report and presentation.