

Part 1: SDG Selection and Problem Definition

1. SDG Selection:

- Choose an SDG that resonates with you.
- Define a specific, data-driven problem related to your chosen SDG. For example:
 - SDG 3: "Improving access to healthcare in rural areas by analyzing healthcare facility distribution."
 - SDG 7: "Identifying regions with poor access to clean energy sources and proposing solutions."

Part 2: Database Design

1. ERD (Entity-Relationship Diagram):

- Design an ERD for the SDG problem you're addressing. For instance, for SDG 3:
 - Entities:
 - Relationships:
 - Tools: You can use tools like Lucidchart, Draw.io, or MySQL Workbench to create the ERD.

Part 3: Data Analysis Using Excel

1. Import Data:

- Export your SQL results (e.g., using MySQL Workbench) and import them into Excel.

2. Analysis:

- Use Excel's Pivot Tables, Charts, and other tools to analyze the data. For instance, create a Pivot Table showing patient counts per region.

3. Dashboard:

- Create an interactive Excel dashboard. You could visualize:
 - A bar chart showing healthcare facility distribution.
 - A map chart showing regions with healthcare access issues.
 - Pivot tables summarizing key metrics.

Part 4: Integration and Testing

1. Integration:

- Document how you imported data into Excel and ensured consistency (e.g., verifying table joins, removing duplicates).

2. Testing:

- Test your Excel dashboard and database integration to ensure the data visualizations reflect the correct insights.