

Example of one of the Most frequent Tasks

Task 1: Database Design

- You will be provided with a dataset, in this case in an Excel file named "materials.xlsx", that contains sample data related to materials.
- Please define tables, columns, and all keys as necessary.
- Your task is to design a relational database scheme based on the data in this Excel file.

Task 2: Data Import

- Write a script or code to import the data from the provided Excel file into the database.
- Ensure the data is correctly mapped to the database schema.

Task 3: Web Interface

- Create a basic, user-friendly, and responsive web interface with a search bar and a "Search" button.

Task 4: Search Functionality

- Implement the search functionality in the most appropriate technology to display search results on the web page.

Task 5: .NET Core API

- Create a .NET Core API with the appropriate endpoints to return data in JSON format:
 - to search for materials by name.
 - to retrieve material details and properties.
- The API should connect to the database using a common and most appropriate method to perform database operations.

Task 6: Display Material and Properties

- Display the material and its associated properties on the web interface using the data retrieved from the API in a clear and organized manner.