ContactApp - A Case Study

Problem Statement

Build a system to search for a Contact, get Contact statistics and add Contact to favourite list.

Requirements

 find Contact, get Contact statistics and add Contact to favourite list.

  - Logout feature should be implemented.

- User can add a Contact to favourite list and should be able view the favourite list.
- JWT authentication(Optional)
- Sorting and pagination (optional)

Modules

(User interface) - should be able to
  - Register user, login and logout
  - Search a Contact by name
  - View Contact statistics
  - Add a Contact to favourite list
  - should be able to see favourite Contact

UserService
  - Creating a server in Asp.net Core
APIto facilitate user registration and login using SQL Server
  - should be able to manage user accounts.
FavouriteService
  - should be able to store all the favourite Contact for a user

Tech Stack
    - Asp.net Core Web API
    - Entity Framework Core
    - SQL Server
    - Angular

Flow of Modules

Building
        * Register/Login
        * Search for a Contact
        * Contact list - populating from external API

Building the UserService
   1. Creating a server in Asp.net Core
APIto facilitate user registration and login with SQL
Server as backend. Upon login.
   2. Writing swagger documentation
   3. Unit Testing of the entire code which involves the positive and negative
scenarios

Building the Favourite Service
   1. Building a server in Asp.net Core
APIto facilitate CRUD operation over favourite Contact stored in SQL Server.
   2. Writing Swagger Documentation
   3. Write Unit Test Cases and get it executed.

Demonstrate the entire application
    1. Make sure all the functionalities are implemented
    2. server side (For all layers) codes are unit tested.