covidApp - A Case Study

Problem Statement

Build a system to keep track of Covid-19 cases in different countries. A user should able to search a country covid cases as well as it should register itself onto application. The search data can be saved for a logged in user after user can put countries in watch list for their covid cases.

Requirements

1) page show entire world covid cases in real time.
2) The Covid Watcher - View to select the country to display its covid cases
3) There should be a functionality for putting the cities in watch list.
4) Search Service- View to select the country to display its Covid cases
5) Search result should be presented by infected cases, Recovered cases, deceased cases.
6) JWT authentication(Optional)
7) Sorting and pagination (optional)

Modules

(User interface) - should be able to
  - Register user, login and logout
  - Search a match by country name
  - View covid statistics

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

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

Flow of Modules

Building
        * Register/Login
        * Search country wise cases
        * Covid cases - populating from external API

Building the UserService
  1. Creating a server in Asp.net Core
     Core to facilitate user registration and log
     in 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 Core with covid cases.
  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. For all layers codes are unit tested.