Microservice Application

Created a fully functional web application with microservices. The app provides the folloeing key features.

- **User Authentication:**

  Allow user to register and login securely.

- **User registration form:**

  Create a simple web based registration form.

- ## User Interface

  User Interface is built using an asp.net core MVC project
  Different web pages are built using HTML and CSS
  Home, Register, Login, Login confirmation and Error views
  After Login Jwt token provided by the server is stored in the cookie.
  Client side application sends data to Services.AuthAPI

- ## APIS

  1. **Services.AuthAPI**
     User details are validated and Authentication done for the user.
     If user credentials are proper then Jwt token generated and sent to the client in the response.
     Logging of this API is written in txt file
  2. **Services.DataprocessAPI**
     This connects to Ms-Sql and stores/retrieves data from database**.**

- ## Running and Compiling

  - **Requirements**
    Visual studio 2022 or visual studio code
    Ms-Sql Server
    Docker Desktop
  - **Run**
    Source code in available in
    https://github.com/Hariprasad004/Assignment_Microservices
    1. **Clone the Repository**

    2. **Build and run docker compose project**

Once inside the project directory, you can use the docker-compose command to build and run the Docker Compose services defined in the docker-compose.yml file
Run the following command to build and start the services:

docker-compose up

This command will build the necessary Docker images (if not already built) and start the containers based on the configuration specified in the docker-compose.yml file

Keep ‘Docker Desktop’ running.

3. **Access the services**
   After running ‘docker-compose up’ your service should be running. Depending on the services desfined in your ‘docker-compose.yaml’ file, you can access them using their specified ports and endpoints.
   For example, if your docker compose project includes a web application running on port 8080, you can access it in your web browser at ‘https://localhost:8080’.
4. **Stop the Serices**
   To stop can use ‘Ctrl+C’ in the terminal where ‘docker-compose up’ is running or can run the following command to stop the containers

   docker-compose down

- ## Deployment

  App is containerized using docker and locally deployed using docker-compose