**GitHub Repo link:** [**https://github.com/sderohitkumar/DockerizedBlogApp/**](https://github.com/sderohitkumar/DockerizedBlogApp/)

**Docker hub link: <https://hub.docker.com/repository/docker/rohitkumar09/blogapp>**

**Brief overview of the multi-service application:**

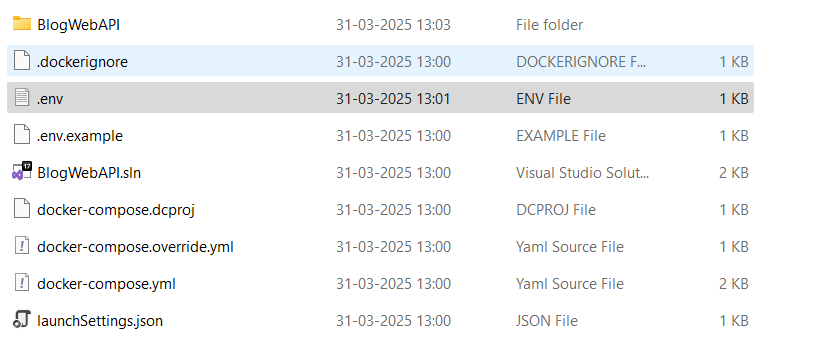
* Created a blog application which allows user to create, read, update, delete blogs.
* The application contains 3 initial blogs which are created by seeding the data when application runs for the very first time.
* The blog application consists of 4 different components -
  + Frontend (React)
  + Backend (.net core web api)
  + SQL database
  + Redis(in-memory database)
* Docker networking is added to create a common network so that different application can communicate with each other.
* Added support of environment variables to handle different environments.
  + development
  + testing
  + production

**Images used in Application:**

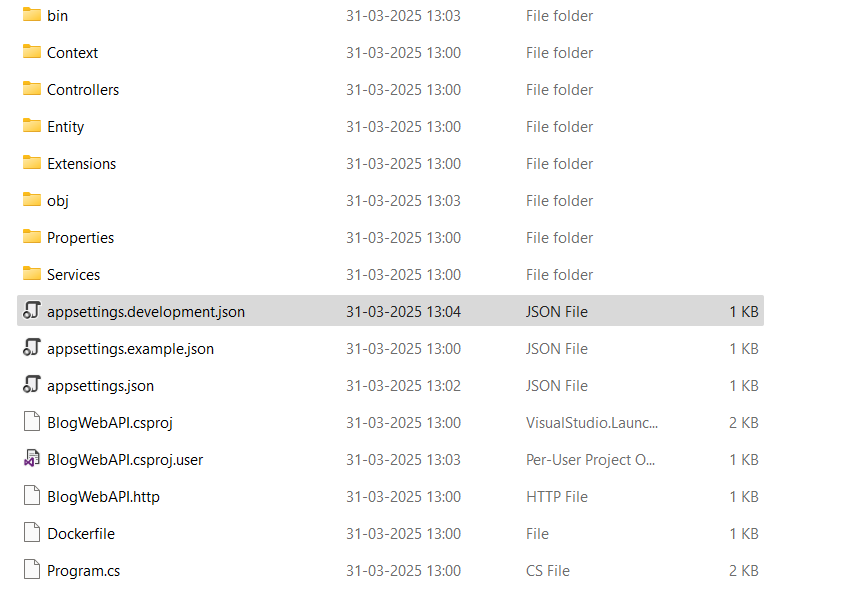
* SQL server - **mcr.microsoft.com/mssql/server:latest**
* Redis - **redis:latest**
* Backend: **rohitkumar09/blogapp:blogapi-v1** 
  + Custom Image created from: BlogWebAPI\BlogWebAPI\Dockerfile
* Frontend: **rohitkumar09/blogapp:blogfrontend-v1**
  + Custom Image created from: BlogWebApp\BlogFrontend\Dockerfile

**To run the application:**

* The application utilizes docker compose to manage and run all the services at once.
* Firstly, go inside the BlogWebApp\BlogWebAPI folder, create a new .env file, a sample .env.example is already added for reference what all variables are needed.

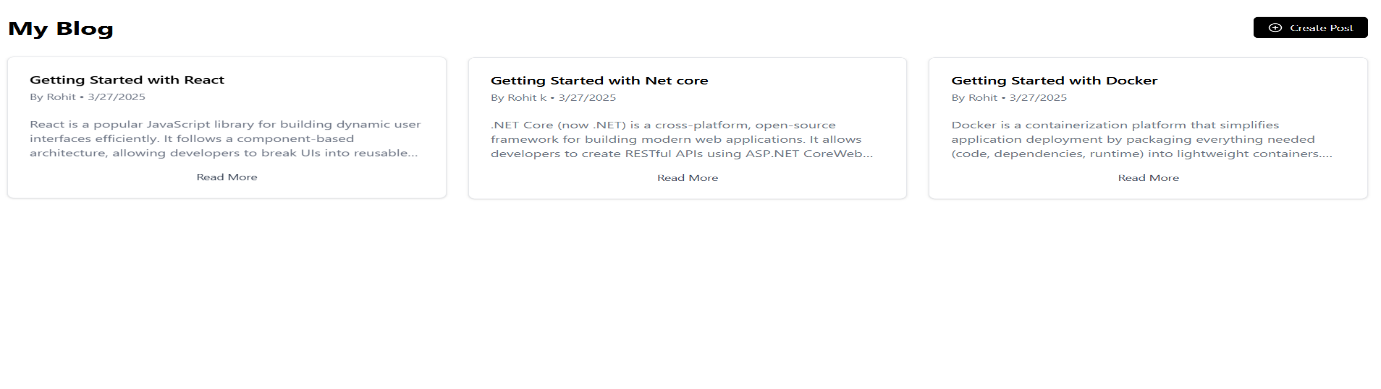
[](https://private-user-images.githubusercontent.com/204166880/428516488-8285c995-bc3b-4566-915f-173261e0562d.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3NDM0MTU0NTgsIm5iZiI6MTc0MzQxNTE1OCwicGF0aCI6Ii8yMDQxNjY4ODAvNDI4NTE2NDg4LTgyODVjOTk1LWJjM2ItNDU2Ni05MTVmLTE3MzI2MWUwNTYyZC5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjUwMzMxJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI1MDMzMVQwOTU5MThaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT0xMjZmZTQ4OTFhOWJjOTI0NDg4ODdmOTc2M2NkOWJlOTk0MTRkY2ZhY2MyNTUwM2FmNTE3ZDk1ZDczZDRhOTcxJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCJ9.a6HA-QunwshtO21Iq9NUy4bsaGaN-st5Mu3nYV7lUU8)

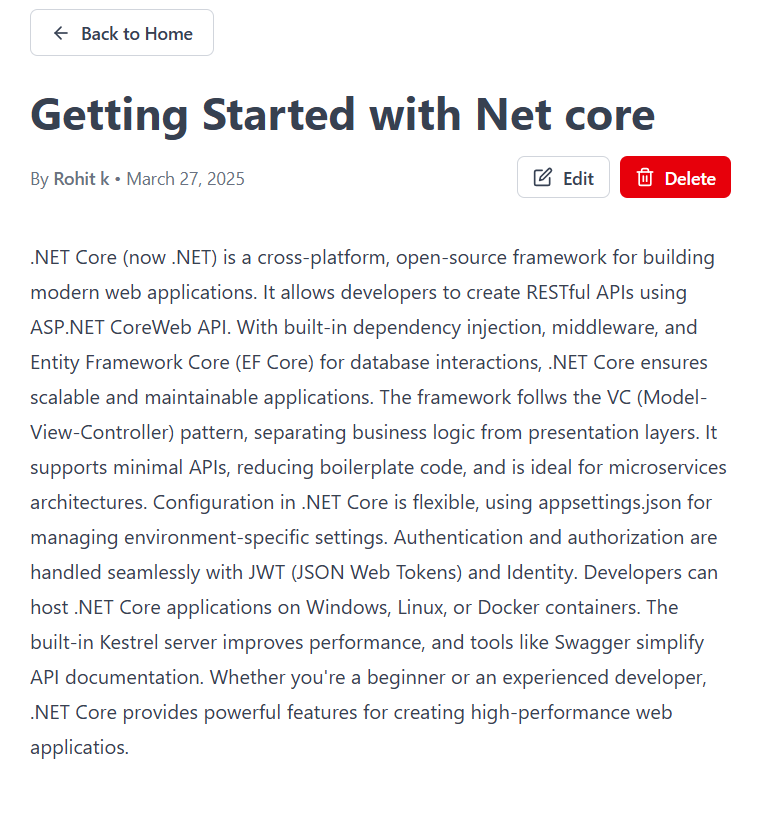
* Also, define a appsettings.{env}.json, where env is dynamic variable based on which environment you want to run. e.g appsettings.Development.json or appsettings.production.json

[](https://private-user-images.githubusercontent.com/204166880/428516743-dbe505c1-6940-4da8-8c8f-1b9b735fed67.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3NDM0MTU0NTgsIm5iZiI6MTc0MzQxNTE1OCwicGF0aCI6Ii8yMDQxNjY4ODAvNDI4NTE2NzQzLWRiZTUwNWMxLTY5NDAtNGRhOC04YzhmLTFiOWI3MzVmZWQ2Ny5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjUwMzMxJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI1MDMzMVQwOTU5MThaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT1hZTg1ZTc1NzBmOGY1ZTNlNmM5ZDBkZjJhYTA5OGYxZGRiOTFiNTFlMDJlYjdjNWNlMjBiMDNkNmI2YzY2NTMyJlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCJ9.oyPelIZkAIftyZm1z43qf7HERWJ3blEpOeIbggaFRJ8)

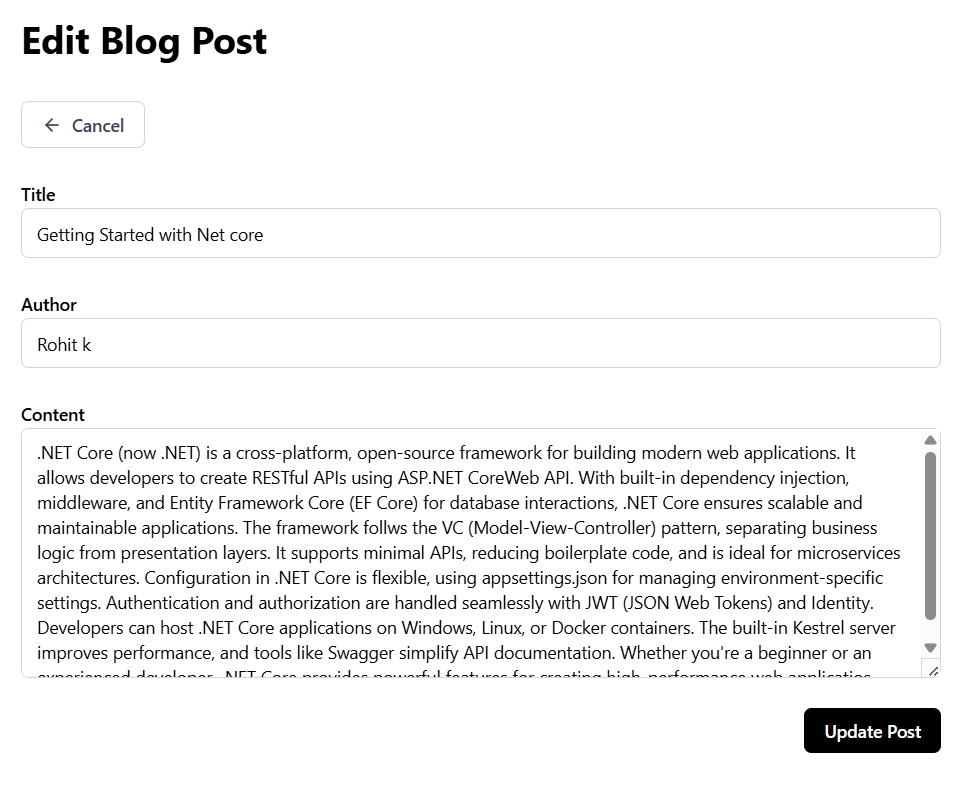
* Once env is added, open cmd and enter wsl and execute the following command along with the env file.
  + **docker compose --env-file .env up**
* When above command is run, images are pulled for sql server, redis and custom images for frontend and backend.
* Once images are downloaded, containers are created, and application is started.

**Application screenshot:**

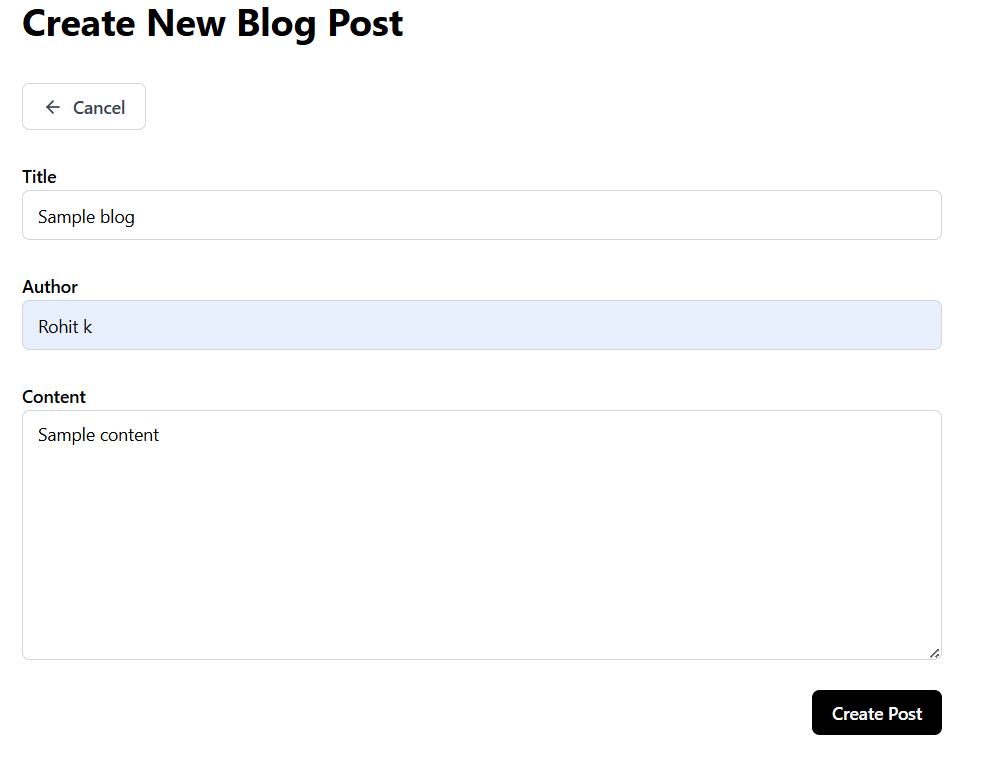
* **Blog Home Page**: [](https://private-user-images.githubusercontent.com/204166880/428425293-827ea62a-776c-4db4-9a32-a74f342d50aa.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwiYXVkIjoicmF3LmdpdGh1YnVzZXJjb250ZW50LmNvbSIsImtleSI6ImtleTUiLCJleHAiOjE3NDM0MTU0NTgsIm5iZiI6MTc0MzQxNTE1OCwicGF0aCI6Ii8yMDQxNjY4ODAvNDI4NDI1MjkzLTgyN2VhNjJhLTc3NmMtNGRiNC05YTMyLWE3NGYzNDJkNTBhYS5wbmc_WC1BbXotQWxnb3JpdGhtPUFXUzQtSE1BQy1TSEEyNTYmWC1BbXotQ3JlZGVudGlhbD1BS0lBVkNPRFlMU0E1M1BRSzRaQSUyRjIwMjUwMzMxJTJGdXMtZWFzdC0xJTJGczMlMkZhd3M0X3JlcXVlc3QmWC1BbXotRGF0ZT0yMDI1MDMzMVQwOTU5MThaJlgtQW16LUV4cGlyZXM9MzAwJlgtQW16LVNpZ25hdHVyZT1jM2MxYTIxNjMyNTFlNjFmZDIxNTQyNDc1NmQ1OWY4ZjEwMGRlMjJlNzdmMDZmMDlmZDA2OWRkMTgwNWY0OTY2JlgtQW16LVNpZ25lZEhlYWRlcnM9aG9zdCJ9.16eWphhNa-YMR23bT54NRSLd3IJ2pBml8JN63kPvZac)
* **Blog Detail Page**:

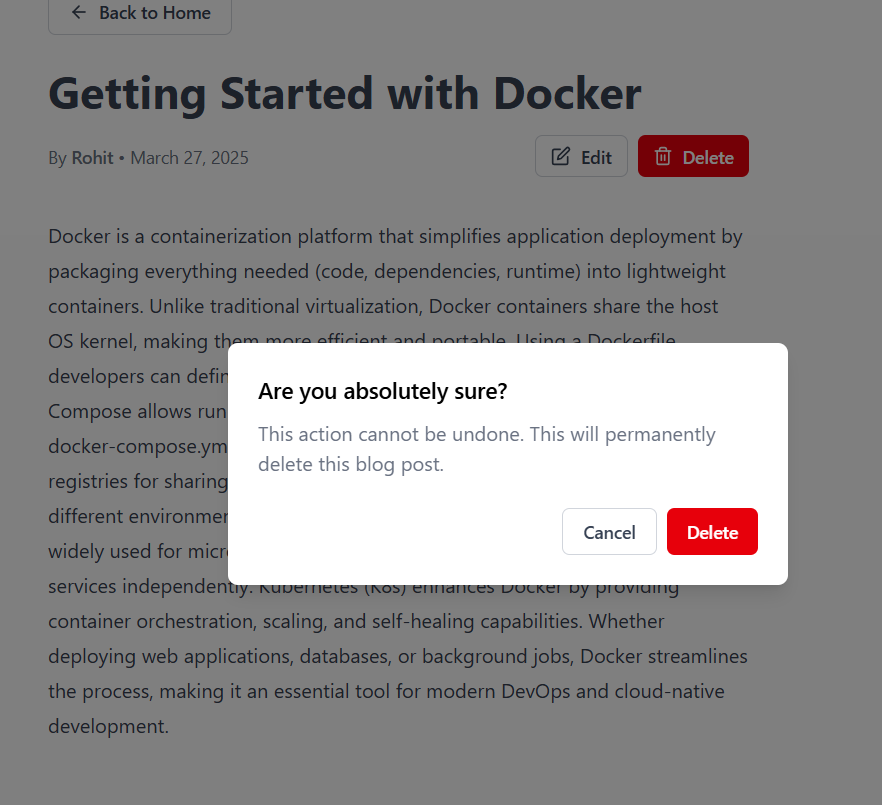
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* **Blog Edit Page**:

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* **Blog Create Page**:

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* **Blog Delete**:
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