

dot net api 2yrs

Assignment

Summary

You need to create a .NET Core based Web API with following specification.

1. It should be based on **.NET Core 3.1**
2. You need to use a **InMemory database** which should be accessed via **Entity Framework Core**
3. There will be two controllers
 - **TodoController** : Should have all the CRUD APIs
 - `/get/{id}` : Get single todo item
 - `/getall` : Get all the todo items
 - `/put/{id}` : Update single Todo item
 - `/create/{id}` : Create new todo item
 - `/delete/{id}` : Delete a todo item
 - **AuthController** : Should have APIs related to registration and login
4. **TodoController** will be protected via `[Authorize]` header and only authenticated users will have access to the controller. There will be two roles in the database for user with different set of access.
 - **User** : These users will be able to get list of todo items, when accessing other APIs, they should get a HTTP 401: Unauthorized error
 - **Admin** : Admin users will be able to access all the APIs
5. In **AuthController** as response to successful login, a `JWT` token will return in response. The JWT token should have following fields encoded:
 - First Name
 - Last Name
 - Email
 - IsActive
 - Roles
6. The code should be uploaded to a public GitHub repository and its link should be shared with the moderator or interviewer.

While coding please keep following things in mind:

- Please document all the controllers and APIs by using proper comments through out the application
- Proper indentation and naming of the variables is highly appreciated
- Verbose commit messages will be appreciated
- A ReadMe file in the GitHub repo root folder explaining what does the API do and small documentation of each API can be beneficial

For any doubt or questions, contact your interviewer.