

ASP.NET MVC Web API Project

Choose any kind of item you want and like to manage, and name the types according to.

URL	Method	Authorize	Description	Request body	Response body
/api/item	GET	User/Admin	Get all user's items		list of items
/api/item/{id}	GET	User/Admin	Get a user's item by ID		item
/api/item	POST	User/Admin	Add a new item to user	item	item location
/api/item/{id}	PUT	User/Admin	Update user's item	item	
/api/item/{id}	DELETE	User/Admin	Delete user's item		
/api/user	GET	User/Admin	Get my user		user
/api/user	GET	Admin	Get all users		list of users
/api/user	POST	Admin	Add a new user	user	user location
/api/user/{id}	DELETE	Admin	Delete user + his item's		
/api/login	POST		Login	user	JWT

Server-side notes:

- Only administrators can add/delete users.
- Administrator can edit all users, including all properties.
Regular user can only edit his own user details, and cannot make himself administrator.
- Users can handle only their own items, and cannot see items of other users.
- Both items and users, should be saved in a JSON file.
- Both items and users, should be accessed via an injected service through an interface, so it would be easy to change it to a DB-based app.
- Add a scope-based service for active user, and inject it wherever you need, so the user id and its role will be available easily.
- Add an extension method of IServiceCollection for an easy registration of all your services.
- Each request should be written to a log file, including start date & time, name of controller & action, name of the logged-in user if there is one, and the duration of operation in milliseconds.

Client-side notes:

- The default page should show the user's items and let add / update / delete items.
- In case there is no logged in user (no token saved in local storage, or the token expired), instead of default page, user should see a login page.
- If the user has administrative privileges, there should be a link from the items list page to the users list page, and vice versa.

Challenge:

- Replace your own log middleware, with popular log services such as Serilog or log4net, in order to save log files. Make sure the path is configurable and the files don't grow bigger than 100mb.
- Allow users log-in using their own google account.