

Assignment:

Create web application that user can create a vote with options and other user can access a created vote to select only one option to vote. A result page should show number of voters and score of each option.

The web application must be created as SPA with Angular2 and use NgBootstrap to create beautiful and easy-to-use UI. The database schema must be created by Code-First approach. You have to use MS SQL or Mongo as database server. Lastly, REST API must design CRUD endpoint with proper HTTP method and understandable path/url naming. Your code should secure by Git with appropriate message.



Objective:

Understand how modern website works.

After you take this assignment, you should:

- Can explain how modern web application works.
- Can create SPA with Angular2 with Typscript and using SCSS and Bootstrap.
- Can create REST API with ASP.NET core.
- Can create database with Code-First approach.

References

Tech stacks:

- Frontend
 - Angular2
 - CSS/SCSS
 - Bootstrap5
 - Typscript
- Backend
 - ASP.NET Core with C#
 - MS SQL
 - Mongo DB
 - Entity Framework
- DevOps/Tools
 - Git
 - Postman

Technical terms

- Client - Server
- REST API
- MVC pattern
- N-tier architecture
- Single page application (SPA)
- Repository pattern
- Dependency Injection(DI) and Inverse of Control (IoC)
- async/await, Task (C#), Promise(JS)
- Code first - Entity framework
- Package Manager (npm, NuGet)