

Dotnet Assignment

# Online Auction Application



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# Online Auction Application

## Technology

Web APIs (Backend) – .Net / .Net Core

UI (Frontend) – Angular

Database – MSSQL Server

Database ORM – Entity Framework

## Total Hours

4 Hours

## Tools Required

- Visual Studio 2022
- Visual Studio Code
- SQL Server Management Studio
- Git
- Google Chrome / Mozilla Firefox

## Problem Statement

Develop an Online auction application. The application should allow users to participate in online auctions to buy and sell products.

## Must Have Features

### Product Listing

- Allow users to list products they want to sell in the auction.
- Users provide details such as
  - Product Name
  - Description
  - Starting price
  - Auction duration (in hours)

- Product Category
  - Reserved Price (Minimum price for selling the product)
- Implement validation checks to ensure required fields are filled and starting price/reserved price is a valid numeric value.

## Bidding & Auction:

- Users can place bids on products they want to buy.
- The application ensures that bids are higher than the current highest bid.
- Users can search auctions based on product names or categories
- User should be able to filter or sort the search list based on
  - Price
  - Time remaining

## Note

- The application manages ongoing auctions, displaying product details, current highest bids, and time remaining.
- Signup functionality is not required. Add Normal users and Admin user data into the database directly using the seed method.
- Both Admin and normal users can login using email and password.
- Feel free to add any other fields if found necessary. The fields given are just for reference.
- Implement user authentication to ensure only logged in users should be able to participate in the auctions.

## Good to Have (Bonus Functionality)

- The admin can view and delete auctions and suspend or ban users if needed.
- The admin can view the previous history of user participation, including the auctions they have participated in, the products they have bought or sold, and their bidding or offer history.

## Guidelines

- Form validations should be implemented wherever needed.
- Exception Handling should be implemented to handle errors.
- Routes should have proper authorization to restrict access based on user roles.

- Mention relevant assumptions taken while implementing assignment.
- Standard coding guidelines and clean coding practices should be strictly followed.
- Feel free to enhance the user experience such that the application should be responsive and user-friendly.
- Follow N-Layer or Clean Architecture to develop Web APIs.
- You can refer official documentation for any syntax/code issue but downloading project from internet, cloning from GitHub or taking reference from StackOverflow/ChatGPT is strictly prohibited. (Angular - <https://angular.io/>) (.Net - <https://learn.microsoft.com/en-us/docs/> )
- Do not include Node Modules folder while uploading/submitting the assignment.

## Deliverables / Expectations

- Web Application (UI) developed using Angular.
- Restful Web APIs developed using .Net/.Net Core.
- Database Backup File (.bak).
- Readme file to setup the application.

## Evaluation Criteria

- Functional and Non-Functional requirements completion.
- Bonus Functionality.
- Clean coding practices and standard coding guidelines.
- Overall Application structure and DB-Design.