



Test for .Net developer

Time to create: 5 working days



Test task: .NET Core 8 or Core 9 + Radzen

Test Description

You are required to create a web application using C# .NET Core 8 or 9 for the backend and Radzen Blazor with Radzen for the frontend. The application will handle user management and offer management. The application should support different user roles with distinct permissions.

Tasks

1. Authentication

- Create a login form using Radzen UI components.
- Create a registration form that will allow users to be added to the database.
- Use ASP.NET Core Identity to manage users.

User Management

- Users should have the following roles:
- Admin: Can see and manage all offers.
- User: Can see and manage only their own offers.
- Anonymous: Can only see the home page without any offers.

Provide functionalities for:

- User registration
- User login
- Role assignment (Admin, User, Anonymous)
- User profile editing

2. View users

- Create a view that displays a list of all users using Radzen DataGrid.
- Enable the following options:
 - Edit user
 - Delete user
- Enable search and pagination.



3. Offer Management

An offer should contain the following fields:

- Name of the offer
- Date created
- Customer
- Description
- Price
- Discount
- Shipping details
- Contact number

Functionalities to:

- Create, read, update, and delete offers (CRUD operations)
- Admin can manage all offers
- Regular users can only manage their own offers
- Display a list of offers filtered based on the user role

4. Dynamic filters for user search

- Allow the user to filter the user list by multiple criteria:
 - Name
 - Email
- - Registration Date
- Use Radzen DropDown, DatePicker and TextBox for filters.
- Implement filters on the server to optimize database queries.

6. API communication and calls

- Create a REST API endpoint in .NET Core (8 or 9) that returns a list of users in JSON format.
- Use the Radzen Invoke REST API to display the data on the frontend.
- Implement

7. Files upload

- Make it possible to upload a file (eg profile picture for the user).
- Save the file in the wwwroot/uploads folder and the path to the database.
- Display image in Radzen DataGrid.



8. Notifications

- Enable display of Radzen toast notifications when adding/deleting users.

Evaluation Criteria

- Correctness: The application meets all the specified requirements.
- Code Quality: Clean, readable, and maintainable code.
- Security: Proper implementation of authentication and authorization.
- User Interface: Functional and user-friendly interface using Blazor and Radzen components

Good luck! 😊