.NET DEVELOPER

PEOPLE DIRECTORY ASSESSMENT

1. ASSESSMENT OVERVIEW

Create a 'People Directory' application that has 2 parts to it:

1. [Client Section](#)
2. [Admin Section](#)

1.1. CLIENT SECTION

1.1.1. User Stories

1. As a user, I'd like to be able to perform a search for a person that may exist within the directory, by entering a person's name into a search input field and viewing possible matches.
2. As a user, I'd like to be able to view a person's Contact details and Personal Information once I select a returned search result.
3. As a user, I'd like to be able to filter my search results with a:
   a. Country filter
   b. City filter
   c. *Anything else is up to you… (being a test scenario feel free to impress!)*

1.1.2. Requirements

1. Present the Frontend UI using any HTML5 free template available on Google or your own HTML/CSS. Or use an MVC Template with any SPA JavaScript Frontend (i.e. Angular; React etc).
2. The UI should contain a *"predictive / type ahead"* method of returning possible matches, based on First Name or Surname only.
3. Make use of a REST service to complete the "predictive / type ahead" text lookup.
4. Once a match is found *(i.e. for First name = Mark),* all the results for "Mark" should output to a table/grid *(catering for the Name or Surname)* and shows only a summary of all the returned matches.
5. The search results / matches, should be clickable so that the user can then view the persons full Personal Information:

a. Name

b. Surname

c. Address *(country and city)*

d. Profile picture

e. Mobile number

f. Gender

g. Email address

h. Anything else you wish to include…

1.2. ADMIN SECTION

1.2.1. User Stories

1. As an Admin User, I'd like to be able to login and manage the people directory database to edit, add new and update records.
2. As an Admin User, I'd like to be informed via email whenever a record is edited or created confirming the changes made.

1.2.2. Requirements

1. Provide a login mechanism for the Admin section
2. Allow the Admin to manage the people database - CRUD
3. When creating a new record and the Admin populates the City and Country fields, allow the Admin to choose a Country from a dropdown list and prepopulate the city dropdown, based on the Country selected.
4. Once a record is edited, send a confirmation email that:
   - Says what was edited / changed
   - Says what the new values are
   - Sends an email to: mark@bluegrassdigital.com

2. TECHNICAL REQUIREMENTS

2.1. Patterns

1. MVC
2. Repository
3. Dependency Injection
4. SOLID principles

2.2. Technologies

1. C#
2. .Net 4.5 MVC or .NET 3.1+
3. Entity Framework 6 or above *(Use the code first approach and not the EDMX model)*
4. .Net Web API or .NET Core *(for REST call)*