**Candidates Project**

Build a Full Stack Web Application using Angular 16+ (or any other frontend technology if unfamiliar with Angular) and .NET Core Web APIs, Entity Framework Core and SQL Server or PostgreSQL

Project contain two main entities Organization and Company

Each company belong to one organization.

1. **Add Update Organization**

* **Overview:**
  + Adding a new organization will start by clicking on "Add New Organization" from the "Organization Definition" page.
  + Once the user clicks on the "Add New Organization" button, the system should navigate the user to a new section to add the new organization without showing the organization inquiry list and search parameters.
  + The user will be able to add as many organizations as he needs.
* **Page Content:**
  + each field is described in the table below
  + **Upper Section**
    - In the upper section of the page will show the following:
      * New Organization as a label that will be changed upon the user typing in the "Organization Name" text box and whenever the user changes any text in the organization name the text in this area will be changed directly without any post back.
      * "Back to Organization" button, once the user clicks on this button, the system will generate a confirmation message to the user to inform him that he is about to lose his changes and the user will decide whether he will confirm or abort:
        + Message: "You haven't saved your changes yet. Do you want to leave without saving"
        + Options:

"Stay on this page" -> The system will remove this message and let the user resumes his work.

"Leave this page" -> The system will discard all unsaved changes and will redirect the user to the Organization Definition page.

* + **Entry Section:**
    - Each field is described in the table below.
  + **Saving button:**
    - After filling all fields and passing all validations, and clicking on the "Save" button, the system should provide the user with a success message "Organization saved successfully".
  + **Cancel button:**
    - Once the user clicks on cancel, the system should behave the same way as the "Back to Organizations" button mentioned above.

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| --- | --- | --- |
| **Field Name EN** | **Required** | **Field Description** |
| Organization Name | Yes | The primary Name of the Organization |
| Organization Code | Yes | The abbreviation of the organization |
| Country | Yes autocomplete | The Country where this organization is located |
| Phone | Yes | The main Phone No for the organization |
| Full Address | Yes | The main full address for the organization location |
| Creation Date | Disabled | This field should be filled by default from the back end upon the user saves the information  \* The system should pick the timestamp about the exact date and time once the users saves the record  \* This field will be always disabled |
| Updating Date | Disabled | \* This field should be filled by default from the back end upon the user saves the information  \* The system should pick the timestamp about the exact date and time once the users update the record,  will always store the last timestamp of updating, while the previous timestamp will be removed and the last date and time will be previewed in this field  \* This field will be always disabled |

1. **Search predefined organizations**

* **Overview:**
  + The user will be able to inquire about any predefined organization in order to update it, delete it, or even add a new organization.
* **Page Content:**
  + There will two sections on this page:
    1. Search section (will be used to filter any existing organization by filling all of the parameters or part of them).
    2. Search result (according to the filled search parameters the system should filter existing organization and show in the search result list the matched result).
  + **Search section:**
    1. Panel Name: "Organization Inquiry".
    2. Fields in the search section are listed in the table below

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| **Field Name EN** | **Control Type** | **Searching Expectations** |
| Organization Name | Text Box | \* By matching Name \* By matching any part of the name \* By matching upper or lower cases \* Removing leading or trailing spaces |
| Organization Code | Text Box | \* By matching any part of the code \* By matching upper or lower cases \* Removing leading or trailing spaces |
| Country | AutoComplete | \* In case the user selected "All Countries", the system should not consider this parameter as part of the criteria \* Selecting one country of the list, the system should pick organizations that have the same country |

* + 1. After all fields will have the "Search" button, the system will return the results that meets the filled parameters
    2. The system should consider ANDing between all parameters
    3. Upon clicking on the "Search" button, the system should show the search result list with all columns without filling any data, till the whole response returned back (Lazy Loading).
  + **Search Result section:**
    1. Panel Name: "Organization List".
    2. Columns that will be shown in the list:
       - Code
       - Organization Name
       - Phone
       - Actions:
         * Edit Icon
         * Delete Icon
    3. Pagination should be applied on the returned result.
    4. Sorting columns ASC or DESC should be available on each column.

1. **Add Update Company**

* **Overview:**
  + Adding a new company will start by clicking on "Add New Company" from the "Company Definition" page.
  + Once the user clicks on the "Add New Company" button, the system should navigate the user to a new section to add the new company without showing the company inquiry list and search parameters.
  + The user will be able to add as many companies as he needs.
* **Page Content:**
  + each field is described in the table below labels and error messages.
  + **Upper Section**
    - In the upper section of the page will show the following:
      * New Company as a label that will be changed upon the user typing in the "Company Name" text box and whenever the user changes any text in the company name the text in this area will be changed directly without any post back.
      * "Back to Companies" button, once the user clicks on this button, the system will generate a confirmation message to the user to inform him that he is about to lose his changes and the user will decide whether he will confirm or abort:
        + Message: "You haven't saved your changes yet. Do you want to leave without saving"
        + Options:

"Stay on this page" -> The system will remove this message and let the user resumes his work.

"Leave this page" -> The system will discard all unsaved changes and will redirect the user to the Company Definition page.

* + **Entry Section:**
    - Each field is described in the table below.
  + **Get Organization Details:**
    - This button will be enabled once the user selects one organization.
    - Once the user clicks on this button, the system will pull all predefined fields on the organization level (Phone, Country and full address) and fill them in the related fields in the company entry fields.
    - In case the user has already filled part of the fields, the system should show the user a confirmation message to inform the user that all filled fields will be overridden by the organization information and the user will have the option to cancel this action or to confirm it:
      * Message: "The system will override all company details according to the predefined information on the organization level, Are you sure you want to continue ?"
      * Options:
        + "Fill organization details" -> The system will fill all matched fields on the company entry section from the organization predefined data.
        + "Cancel" -> The system will not fill in any of the company details and will abort the operation.
  + **Saving button:**
    - After filling all fields and passing all validations, and clicking on the "Save" button, the system should provide the user with a success message "Company saved successfully".
  + **Cancel button:**
    - Once the user clicks on cancel, the system should behave the same way as the "Back to Companies" button mentioned above.

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| --- | --- | --- |
| **Field Name EN** | **Control Type** | **Field Description** |
| Organization Name | Dropdown | The organization that the company is about to be created will belongs to |
| Company Name | Text Box | The primary Name of the Company |
| Company Code | Text Box | The abbreviation of the company |
| Country | Text Box | The Country where this company is located |
| Phone | Text Box | The main Phone No for the company |
| Full Address | Text Box | The main full address for the company location |
| Creation Date | Text Box | \* This field should be filled by default from the back end upon the user saves the information with the username  \* The system should pick the timestamp about the exact date and time once the users saves the record  \* This field will be always disabled |
| Updating Date | Text Box | \* This field should be filled by default from the back end upon the user saves the information  \* The system should pick the timestamp about the exact date and time once the users update the record,  will always store the last timestamp of updating, while the previous timestamp will be removed and the last date and time will be previewed in this field  \* This field will be always disabled |

1. **Search predefined company**

* **Overview:**
  + The user will be able to inquire about any predefined company in order to update it, delete it, or even add a new company.
* **Page Content:**
  + There will be two sections on this page:
    1. Search section (will be used to filter any existing company by filling all of the parameters or part of them).
    2. Search result (according to the filled search parameters the system should filter existing company and show in the search result list the matched result).
  + **Search section:**
    1. Panel Name: "Company Inquiry".

|  |  |  |  |
| --- | --- | --- | --- |
| **Field Name EN** | **Control Type** | **Required** | **Searching Expectations** |
| Organization Name | AutoComplete | Yes | \* The system should pick predefined organizations |
| Company Name | Text Box | No | \* By matching Name \* By matching any part of the name \* By matching upper or lower cases \* Removing leading or trailing spaces |
| Country | AutoComplete | No | \* In case the user selected "All Countries", the system should not consider this parameter as part of the criteria \* Selecting one country of the list, the system should pick companies that have the same country |
| Company Code | Text Box | No | \* By matching any part of the code \* By matching upper or lower cases \* Removing leading or trailing spaces |

* + 1. Fields in the search section are listed in the table below.
       - After all fields will have the "Search" button, the system will return the results that meets the filled parameters
       - The system should consider ANDing between all parameters
       - Upon clicking on the "Search" button, the system should show the search result list with all columns without filling any data, till the whole response returned back (Lazy Loading).
    2. **Search Result section:**
       - Panel Name: "Companies List".
       - Columns that will be shown in the list:
         * Organization Name
         * Code
         * Company Name
         * Phone
         * Actions:

Edit Icon

Delete Icon

* + - * Pagination should be applied to the returned result.
      * Sorting columns ASC or DESC should be available on each column.