**tbl\_User**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UserId | UserName | Role | LastLogin | FName | LName | Department | DOJ | MgrId | Seniority | EmpCode |
| 105 | Acc0185 | A/C Mgr | 2020-08-23 14:25:34 | Sanjay | agarwal | Accounts | 2018-05-20 | 78 | 5.08 | ACC0034 |
| 106 | Acc0567 | Asst. | NULL | Amit | Sharma | Accounts | 2020-09-16 | 105 | 8.15 | ACC0598 |
| 428 | Dev0476 | VP | 2020-09-19 10:45:12 | Lokesh | Kumar | Development | 2018-22-12 |  | 1.05 | DEV0833 |
| 568 | ADM6633 | Exec | NULL | Naresh |  | Admin | 2011-06-06 | 70 | 9.01 | ADM0048 |

Refer to the above table (‘tbl\_User’). Other details related above table are:-

* UserId(Primary Key), Username, EmpCode are unique fields
* Assume Role and Department values to be fixed values or use values as given above
* Seniority field values range from 0(highest) to 9.99(lowest)
* EmpCode field will contain unique values in following format (XXX9999). Where first 3 characters are alphabets in uppercase and last 4 characters are digits.
* There is no need to develop entry screen for above table. Data in above table may be entered manually or assumed to be there.

You are required to develop two screens (Search Parameters Entry & Search Form) using JavaScript/Jquery, Asp.net/Asp.net MVC and SQL Server

**Search Parameters Entry Screen**

Implement search parameters entry screen with following requirements

* Create an UI along with required validations in JavaScript/Jquery.
* Create entry screen with following fields
  + Username (Mandatory): This field is required because Search parameters will be saved user wise.
  + Fieldname (Mandatory)
  + Datatype (Mandatory): data type of field like numeric, float, datatime, string etc.
  + ControlType (Mandatory): This field specifies type of control like textbox, dropdownlist, numeric textbox, datetime field etc.
  + Constraint (Mandatory): This field will specify whether Search parameter field is mandatory or optional
  + MaxLength (Optional): max. field length if required
  + Min. Limit (Optional): min. value limit if required
  + Max. Limit (Optional): max value limit if required
  + MaskPattern (Optional): This field can be used to define input entry pattern/ RegEx pattern for a particular field. For example, it may be used to define this pattern (XXX9999) for ‘EmpCode’ field. Where first 3 characters are alphabets in uppercase and last 4 characters are digits.
* You are required to enter data for minimum 3 fields (choose any fields) and save all the search parameters as JSON collection into the database for each user in a single row. You may name this table as ‘tbl\_SearchParameters’. You may generate table structure for this table as per requirement.

**Search Page**

In Search page, Search option is to be provided to user to search data from ‘tbl\_User’ table. Details are given as below:-

* Based on Username provided by user, you have to dynamically generate UI for search fields from the Search parameters JSON saved in ‘tbl\_SearchParameters’ table.
* Implement all the constraints and validations defined in Search parameters JSON using JavaScript/jquery.
* Develop stored procedure for Search inputs provided by user and show the results in grid/table format.