ASP.NET MVC Project Library System

Web Application for monitoring and controlling the transactions in a library.

Specifications:

The project focuses *on basic* operations in a library like adding new member, new books, searching books and members and facility to borrow and reading books.

System has 4 types of users (identity roles): Basic Admin., Admin, Employee and Member.

<u>Basic Admin:</u> responsible of adding or removing any admin from the system, monitor the entire system data and updating any system data.

Administrator: responsible of

- 1- adding / removing Employees from the system.
- 2- Adding/removing or updating books

Employee: responsible of

- 1- Adding/removing members
- 2- Borrow books
- 3- Allow Reading Books

Member: Can show his/her data on system like profile, borrowed books, reading books, dead line of borrowing and so on.

General Requirements

• Use a responsive layout with suitable html template.

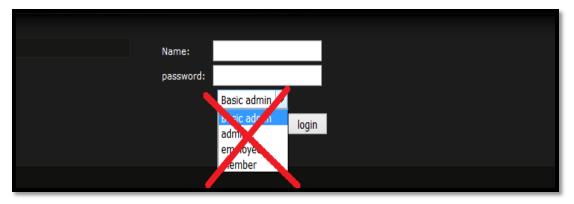
- All Validations Must be Available in All Views client and server.
- Controllers, models and views should have descriptive names.
- Fill database with real data (readable and correct information).
- Any view (ex: employee page should contains all employee's functionality links (ex. Employee's functionality as update ,add ,remove....)).
- Take care of site security and user sessions.
- Database should be a file inside your project not inside local SqlServer.
- use CodeFirst or code first from database.
- basic admin will add admin profile data. The admin will add the employee profile data. The member will add his profile data and he can't do any functionality until his data verified by the employee.
- Email should be verified and any notifications should appear in a view and send it to email.
- (Bonus) using core Dependency injection or any IoC Containers.

Pages and Functionalities:

Login View

Don not use drop down list to specify user type as

-Bous(make it popup)



(users registrations will be as follow)

Basic Administrator add his data in the database

<u>Basic Administrator:</u> will add admin users information as (FirstName, LastName, Password, HireDate and Salary, Email).

At <u>First Time</u> Admin user will login to the account he/she should Change Password ,complete his/her full data and <u>Upload his/her own photo</u> (<u>Image type in DataBase</u>) except hiredate and salary.

Admin User will not be able to proceed to admin functionality on the system until this step is finished on the first login.

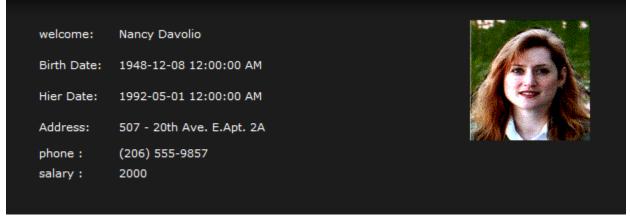
<u>Administrator:</u> will add Employee users information as (FirstName, LastName, Password, HireDate, photo and Salary, Email).

At first time login employee should Change Password and complete his/her full data except hiredate and salary.

<u>Member</u> will add his data and will be verified by employee, member can not do his functionality until his data be verified by the employee.

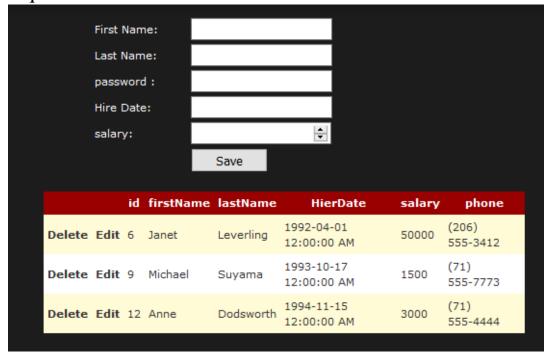
1-Basic Administrator Functionality

After login Basic admin page should appears as follow



With update profile capability and the following functionalities links (don't forget logout link)

a-Add/remove/update Admin users (It should be as Follow), increase any required data such as email



- ID's shouldn't be appeared
- Adding throw Save Button (Ajax form)
- Editing.
- Delete.

b-remove/update Employee Users

when Basic admin. change or delete any employee data Admin user should be notified because this is Admin Functionality and employee should be notified as well (on update or delete)

c- remove/ update Member Users

when Basic admin. change or delete any Member data Admin user should be notified because this is Admin Functionality and Member user should be notified as well (on update or delete)

d-View all system data as report pages (put your team logic here what should basic admin know about what is going on the system???).

2-Administrator Functionality:

(Update Administrator Data Using <u>Ajax</u> except Picture will be updated through server side Update button)

Administrator functionality

- a- View and Update Profile
- b- Add/remove/update Employees
- c- Searching for employee By FirstName and LastName (Auto Complete Capability in searching textboxes using JQueryAjax)
- d- Adding, removing and Updating Books Data

 Book contains (ID , title , auther , publisher, Publishing Date, Category
 , Edition, pages, NoOfCopies, Avilable, shelf Number) add any columns as
 needed

3-Employee Functionality

- a- Update his Profile
- b- List of all members data
- c- Authenticate/ unauthenticate Members data,
- d- Searching for Member By Name or E-mail (bonus AutoComplete Capability using JqueryAjax)
- e- List of All books data
- f- Searching for a book by Publisher, Author Or Title then show if the book is available or not, no. of borrowed and available copies from that book
- g- Borrow Book to verified Member (put your team logic here considering the following points)
 - 1- Employee can borrow when the book is available and number of borrowed copies not exceed the number of available copies.
 - 2- Employee can't borrow the same book for same member if the member still has copy from that book, if Member returned that book then he/she can borrow it again.
 - 3- Employee Can't borrow any book if number of copies of that book is ONE (Library must have spare book for reading).
 - 4- If member exceeds return date Employee can prevent that Member from borrowing any book in the library for a week.

So if any employee login and try to borrow that book to that member System will prevent him.

- h- Give book for reading but make sure that book is returned before the end of the day
- i- Return borrowed books from Members.
- j- Alert the employee if any member exceeds the return date of borrowed books.

4- Member Functionality:

- a- Register his data.
- b- Update Profile.
- c- List of reading books in current month, this page will have capability of showing reading books filtered by month and year
- d- List of borrowed books in current month, this page will have capability of showing borrowed books filtered by month and year
- e- New arrived books to the library
- f- Current borrowed books and return date and number of borrowed times for any book.(warning with late returned books)
- g- Search for any book in the library filtered by year, category, publisher, author, Title and availability

(Add extra Functionality as needed)

Thank you