

MS.NET SPRINT-2 CASE STUDY

Online Recruitment System (ORS)

Document Revision History

Date	Revision No.	Author	Summary of Changes
20th Nov. 2008	1	Ganesh Desai	Initial Draft
15th Dec 2008	1	Anil Patil	Review
25th July 2011	2	Karthik	Review after integration Process
11th May 2015	3	Vaishali Kasture	Implementing changes as per new curriculum
13th July 2016	4	Vijay Vishwakarma	Incorporating changes as per new curriculum
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13 th March 2020	6	Ramkumar Nandabaalan and Raghu KN	Incorporating changes as per the requirement of partial immersive batch



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INTRODUCTION

This document SPRINT2 for the .NET LOT. The project is to develop an Online Recruitment System (ORS). This document contains the workflow of the system and gives guidelines on how to build the functionality.

SETUP CHECKLIST

Minimum System Requirements

- Intel Pentium 4 and above Windows 7 & above
- Memory 4 GB
- Internet Explorer 8.0 or higher
- SQL Server 2012 client and access to SQL Server 2012 server
- Visual Studio 2015/2017, Visual Studio Code

INSTRUCTIONS

- The code modules in the SPRINT2 should follow all the coding standards.
- Create a directory by your name in drive **<drive>**. In this directory, create a subdirectory SPRINT2. Store your Project here.
- You can refer to your course material.
- You may also look up the help provided in the MSDN
- Since this project work will span over week, you will need to take care of maintaining the code

PROBLEM STATEMENT

OBJECTIVE

Development of an Online Recruitment System (ORS)

ABSTRACT OF THE PROJECT

This project automates the process of recruitment of a company through internet. Online Recruitment System allows a job seeker (fresher or a working professional) to log into the application and submit his resume with other academic information.

The job seeker can search for a job with the many given categories.

An employer can also sign up and provide the employment details and search for fresher or working professional with the corresponding details.

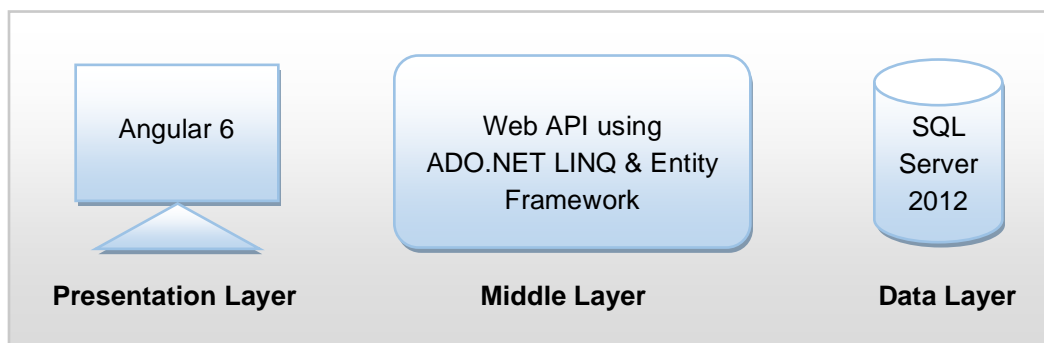
FUNCTIONAL COMPONENTS OF THE PROJECT

Application Architecture:

Distributed web applications traditionally to be designed and built across three logical tiers:

- Database Access Layer (DAL)
- Business Logic Layer (BLL)
- Presentation Layer

The DAL refers to the database itself, the stored procedures, and the component that provides an interface to the database. The BLL refers to the component that encapsulates all the business logic of the application. And, the Presentation layer refers to the web application pages.



Design guidelines

- All the exceptions/errors to be captured and user-friendly message to be displayed on the Common Error page (to be done during SPRINT2).
- To develop Data access layer use ADO.NET Entity Framework. Make use of stored procedures. All the database interaction would be performed using Data Access Component.

TECHNOLOGY USED:

- *Presentation Layer*
 - *Angular 6*
- *Business Layer*
 - *Web API Using ADO.Net LINQ & EF*
- *Database Layer*
 - *RDBMS: - SQL Server 2012*

IMPLEMENTATION

GUIDELINES ON THE FUNCTIONALITY TO BE BUILT:

The functionality and components to be built in each of the course modules of .NET LOT is as follows:

Course: SQL Server 2012

This section describes some of the basic steps involved in designing and creation of the database for the application.

Create Data Model - identify the different tables and fields that we will need, which would later be used for building the rest of the application.

Database Schema - Create the following database tables (Make your assumptions for creating all required fields for the tables) & if required some more tables apart from the mentioned below.

- **JobSeeker:** this will store all Job seeker details along with his resume and photo of the employee. [For e.g. Name, contact Details, Email, Telephone No, Mobile No, and Address.
- **Employer:** This will contain details information of the company, employer clients, current openings, location of the openings, designation etc.

Course: ADO.NET 4.5, LINQ and Entity Framework

Write Data Access Components to perform any CRUD operations using ADO.NET & Entity Framework.

- Use LINQ to query record sets returned by Data Access Components
- Build the web application and deploy on the IIS server and test the application.

Course: ASP.NET Web API

Create RESTful Web Services using ASP.NET Web API & C#-7.0 to expose CRUD operation services to be consumed by any HTTP client, for instance Angular-2+ client.

Course: Angular 6

Develop the prototypes for following functionalities:

- **Login / Sign In:** Login screen would display asking user to enter 'User Id' & 'Passwd'. If the supplied user credentials are valid the HomePage would be displayed, else appropriate Login error message would be displayed

Use Token based authentication.

- **First time users Register:** First time new users would use this screen to create their profile (userId and password). On click of 'Submit' button new user entry (user id & password) would be saved into database table for further user authentication purpose
- **Home Page:** On successful user authentication (validation of userid/password provided by the user in login screen) the homepage would be displayed. The Homepage would contain below sections/contents:
- **Header section:** The header section would be common across all the pages and would mainly have –
 - **Sign In Link** – On click it would take to Login page
 - **Search** – Should search based on Experience, Profession, SkillSet, Location, and Designation.
- **Main content section:** It would display generic Welcome message giving overview of the site. Some Links to different companies based on the categories for example IT is one of the categories so the Web page should have a link for IT companies.
- **For Job Seeker:**
 - Once a job seeker has logged in he should see his resume and have option for modifying the resume.
 - Design a Page for Modifying the Resume of the Employee. It should also display a page how the employer's will have a view of the resume.
- **For Employer:**



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- Once an Employer Login's then all the details of the Employee should be visible and he should be in position to Update the details
- Employer's current openings should be also updated and displayed date wise sorted

In this course you need to develop the user interface using Angular 6. The screens should include the fields as per the functionality mentioned above. Include Validations wherever required.

Further enhancement:

Any additional enhancements made will be appreciated.