

# MS.NET Mini Project Job Portal System (JPS)



# **Document Revision History**

| Date       | Revision No. | Author | Summary of Changes                 |
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| 03-02-2020 | 1.0          | Raghu  | Modification for partial immersive |
|            |              |        |                                    |
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# Table of Contents

| Introduction                                 | 4  |
|----------------------------------------------|----|
| Setup Checklist                              | 4  |
| Instructions                                 | 4  |
| Problem Statement                            | 5  |
| Objective                                    | 5  |
| Development of Job Portal System (JPS)       | 5  |
| Functional components of the project         | 9  |
| Technology used:                             | 10 |
| Implementation                               | 11 |
| Summary of the functionality to be built:    | 11 |
| Guidelines on the functionality to be built: | 12 |



# INTRODUCTION

This document outlines a mini project for the .NET Line of Technology (LOT). The project is to develop Job Portal System. This document contains the requirements, work flow of the system and gives guidelines on how to build the functionality gradually in each of the course modules of the .NET LOT.

### SETUP CHECKLIST

### **Minimum System Requirements**

- Intel Pentium 4 and above Windows 2007, 2008 and 2010
- Memory 4 GB
- Internet Explorer 8.0 or higher
- SQL Server 2012 client and access to SQL Server 2012 server
- Visual Studio 2017

### INSTRUCTIONS

- The code modules in the mini project should follow all the coding standards.
- Create a directory by your name in drive <drive>. In this directory, create
  a subdirectory Sprint1. 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 couple of months, you will need to take care of maintaining the code



# PROBLEM STATEMENT

### **OBJECTIVE**

Development of Job Portal System (JPS)

### Abstract of the project

**Job Portal System (JPS)** provides job seeking facilities to job seekers across the globe. It is an online system through which job seekers can post their details and search for jobs.

The Online Job Portal System should support the following users.

- 1. Administrator (A)
- 2. User(Job Seeker) (U)
- Phase 1: The system will first develop using C# only where job seekers data will be store as a Collection Classes. For user interaction, system will use Console Application

### **Macro level Operations/offerings:**

- 1. Add Job Details
- 2. Edit Job Details
- 3. Delete Job Details
- 4. Search and View Details
- 5. Mange the Users



### **MODULE LIST and MODULE DETAILS**

### 1. Administrator

### **Add Job Details**

 As part of this operation, the admin should have the ability to add job details into the system and get confirmation on successful entry and JobID is auto-generated.

### **Edit Job Details**

As part of this operation, the admin should have the ability to edit
Job details in the system by picking JobID from the list, and get
confirmation on successful entry.

### **Delete Job Details**

 As part of this operation, the admin should have the ability to delete Job details in the system by picking JobID from the list whenever particular job request from employer is closed.

### Search and View details

- Search criteria are:
  - Name starts with
  - Year of experience

### 2. User (Job Seeker)



- User(Job Seeker) :User Registration An unregistered user should be able to register into the system with the following details.
  - o Registration details include (all mandatory):
  - FirstName
  - LastName
  - Age
  - o Gender
  - Password
  - Address
  - o PhoneNo

When the registration is complete, a UserID (numeric) will be auto-generated and displayed to the user

### User Login

 The User should be able to do the following operations once he has logged in with his unique UserID and password.

## Search/View jobs



### **Constrains**

- Proper validation is required
- System must show appropriate massage on all activity (whether activity is successful or failure)
- User must have proper menu to select the activity (create, modify, search, view, remove) that user want to perform.



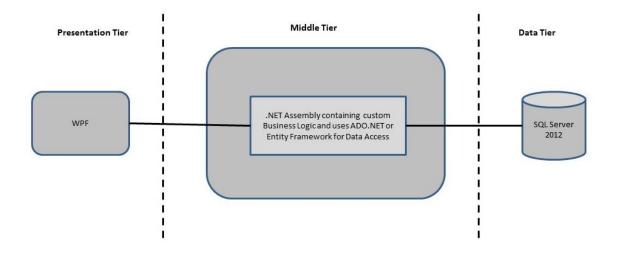
### **FUNCTIONAL COMPONENTS OF THE PROJECT**

### **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 CommonError page.
- Data access layer of 3-tier use Entity Framework data access using SQL stored procedures - All the database interaction would be performed using Data Access Component.

### **TECHNOLOGY USED:**

- Presentation Layer
  - 1. Console Application
- Business Layer
  - 1. Business Logic Components and Services :
    - a. C# 7.0
- Database Layer
  - 1. Databases:-
    - a. Storing the data in generic collection and serializing.



# **IMPLEMENTATION**

### **SUMMARY OF THE FUNCTIONALITY TO BE BUILT:**

The participants need to develop the Loan Management System by building the functionality incrementally in each of the course modules of .NET LOT.

| Sr. No | Course                                           | Duration | Functionality to be built                                                                                                           |  |
|--------|--------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------|--|
|        |                                                  | (in PDs) |                                                                                                                                     |  |
| 1      | NET Framework 4.6 + C# 7.0 + Introduction to WPF | 8.5      | Developing Presentation components (Console application), Business components (C# classes) and Data access components (Collections) |  |



### **G**UIDELINES 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:

### 1. Course: C# 7.0

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

a. Create the collections of the following type: [make your assumptions in case you require few more fields]

| Class: User Information |                  |                                                                                                                                                                             |  |
|-------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Field Name              | Information Type | Description                                                                                                                                                                 |  |
| UserID                  | Number           | It will be a numeric value sequentially generated by the system and need not be passed from the client. It will be added by the system whenever a new user gets registered. |  |
| Password                | Text             |                                                                                                                                                                             |  |
| First Name              | Text             | First Name of the user                                                                                                                                                      |  |
| Last Name               | Text             | Last Name of the user                                                                                                                                                       |  |
| Age                     | Number           | Age of the user                                                                                                                                                             |  |
| Gender                  | Text             | Gender of the user                                                                                                                                                          |  |
| Address                 | Text             | Address of the user                                                                                                                                                         |  |
| PhoneNo                 | Number           | Phone No of the user                                                                                                                                                        |  |
| UserType                | Text             | A-Administrator                                                                                                                                                             |  |



# MS.NET MINI PROJECT JOB PORTAL SYSTEM (JPS)

| Class: LoginCredentials |                  |                     |  |
|-------------------------|------------------|---------------------|--|
| Field Name              | Information Type | Description         |  |
| UserType                | Text             | A-Administrator     |  |
| UserID                  | Text             | User Identification |  |
| Password                | Text             | Password            |  |

| Class: JobDetails |                  |                                                       |
|-------------------|------------------|-------------------------------------------------------|
| Field Name        | Information Type | Description                                           |
| JobID             | Number           | It will be a numeric value sequentially generated by  |
|                   |                  | the system and need not be passed from the client. It |
|                   |                  | will be added by the system whenever a new user       |
|                   |                  | gets registered.                                      |
| Employer          | Text             |                                                       |
| Address           | Text             |                                                       |
| ContactNumber     | Number           |                                                       |
| ContactEmailID    | Text             |                                                       |
| SkillsRequired    | Text             |                                                       |
| Qualification     | Text             |                                                       |
| Location          | Text             |                                                       |
| Salary            | Number           |                                                       |
| NoOfVacancies     | Number           |                                                       |