

PROJECT REPORT ON

Online Job Portal

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CERTIFICATE



This is to certify that the project entitled as “Online Job Portal” is a Bonafede report of the work carried out by:

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1. Introduction

1.1 Brief Introduction

The Online Job Portal System is a package to be used by agencies to improve the efficiency of business. The Online Job Portal System to be developed benefits greatly the job seekers. The system provides jobs catalogue and information to job seekers which helps them decide on the jobs to apply. The Administrator can keep the jobs catalogue updated all the time so that the members (Job seekers and the agencies) get the updated information all the time.

1.2 Tools/Technologies Used

Technologies:

- Windows Communication Foundation(WCF)
- C#
- ASP .NET
- SQL Server
- Bootstrap
- JavaScript
- HTML

Tools:

Visual Studio Code

Platform

Local development server

2. Software Requirement Specifications

2.1 End Users

- Job Applicant
- Job Provider
- Administrator

2.2 System Functional Requirements

R.1 MASTER ENTRY

R.1.1 : Administrator Login

Description : Admin can login by entering username and password .
If username and password match correctly then confirmation message should be displayed.

Input : Username and Password of Admin.

Output : Confirmation message.

Processing: Password validation.

R.1.2 : Add Job Category

Description : Admin can add new job categories by entering name of job post.

Input : Name of new Job Post.

Output : Confirmation message.

R.2 JOB PROVIDER MANAGEMENT

R.2.1 : New Job Provider Registration

Description : Any Job provider is allowed to create its account on this portal by entering details for company registration.

Input : Company name, contact information, location etc.

Output : Confirmation message.

R.2.2 : Add new Job Post

Description : Job provider can add new job post for its company by providing relevant details.

Input : Job Post Category, Vacancy, Duration of Job, Salary etc.

Output : Confirmation message.

R.2.3 : Manage Job Post

Description : Job provider can update or delete job post posted in the past by the company.

Input : New Job Post details in case of updation or Selection of Job Post which needs to be deleted.

Output : Confirmation message.

R.2.4 : View Job Applicants of Job Post

Description : Job provider can view all the job applicants of particular job post posted by the company.

Input : Job Post Category.

Output : List of Job Applicants with detailed information.

R.3 JOB APPLICANT

R.3.1 : Job Applicant Registration

Description : Any job seeker is allowed to create his/her account on this portal by providing necessary details.

Input : Name, email address, contact number etc.

Output: Confirmation message.

3.2 : Application for Job

Description : Job Seeker can apply to any job from the list of job posts.

Input : User selection.

Output: Confirmation message.

3.3 : View Job Applications

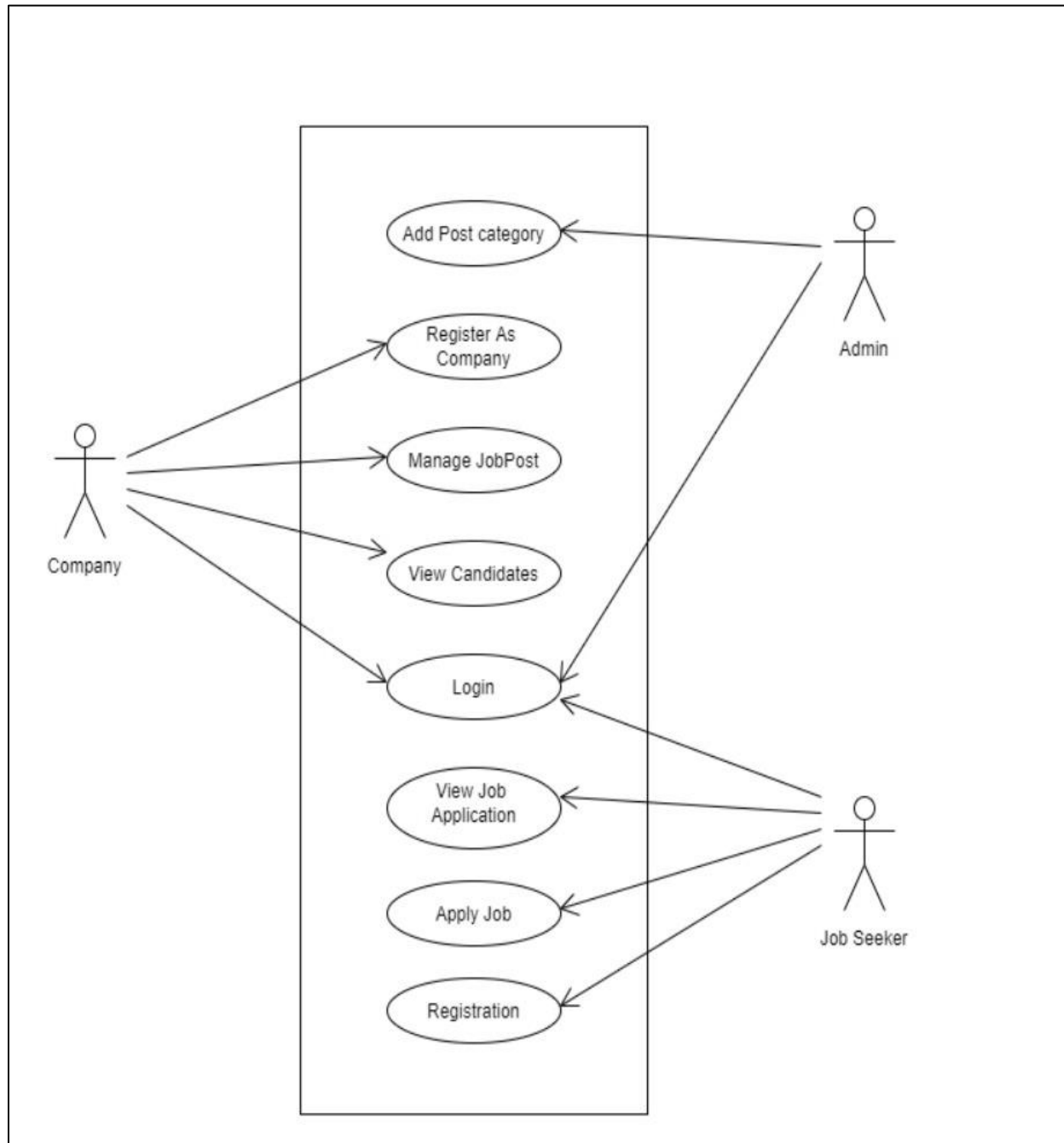
Description : Job Seeker can view job applications made by him/her.

Input : User selection.

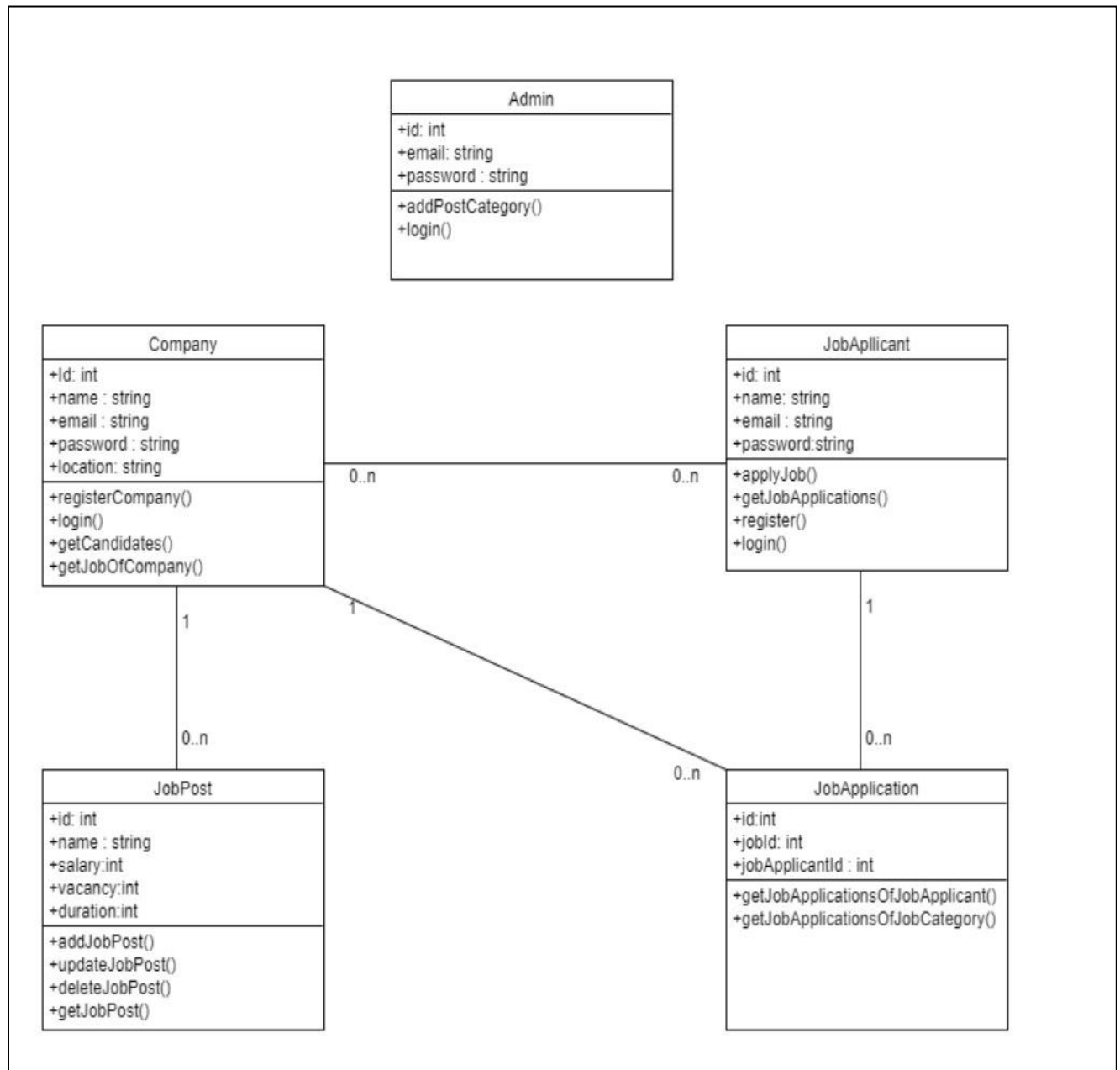
Output: List of Job Applications.

3. Design

3.1 Use-Case Diagram



3.2 Class Diagram



3.3 Data Dictionary

JobCategory					
Field Name	Data Type	Unique	PF/FK	Referred Table	Description
id	int	Yes	PK	-	Auto Increment
name	varchar	Yes	-	-	-

Job Applicant						
Sr no.	Field Name	Data Type	Unique	PF/FK	Referred Table	Description
1	Id	int	yes	PK	-	Auto Increment
2	password	varchar	-	-	-	-
3	name	varchar	-	-	-	-
4	email	varchar	yes	-	-	-
5	mobile	varchar	-	-	-	-

Job Provider						
Sr no.	Field Name	Data Type	Unique	PF/FK	Referred Table	Description
1	ID	int	yes	PK	-	Auto Increment
2	email	varchar	yes	-	-	-
3	password	varchar	-	-	-	-
4	companyName	varchar	yes	-	-	-
5	location	varchar	-	-	-	-

JobPost						
Sr no.	Field Name	Data Type	Unique	PF/FK	Referred Table	Description
1	Id	int	yes	PK	-	Auto Increment
2	categoryId	int	-	FK	JobCategory	-
3	salary	Decimal	-	-	-	-
4	vacancy	smallint	-	-	-	-
5	Duration	smallint	-	-	-	-
6	companyId	int	-	FK	JobProvider	-

JobApplication						
Sr no.	Field Name	Data Type	Unique	PF/FK	Referred Table	Description
1	id	int	yes	PK	-	Auto Increment
2	jobApplicantId	int	-	FK	JobApplicant	-
3	jobId	int	-	FK	JobPost	-

4. Implementation Details

The system consists of 3 basic modules namely

1. Job Seeker Module
2. Job Provider Module
3. Administrator Module

Each module consists of several methods to implement the required functionality. Implementation is done using WCF Service Library. Database used in these modules is MySQL.

Job Seeker Module

This module allows job seeker to register him/her-self on the portal. He / She can view job posts from various Job categories and then apply for the job. Also can view the job applications made in the past.

Job Provider Module

This module allows new job provider to register on the portal. Job Provider can manage job posts like adding new job post based on job category, updating job post and deleting the same for their company and also view job applicants who have applied on their job post.

Administrator Module

This module allows admin for adding new job category on the portal.

4.1 Function prototypes

The main function prototypes of the system are as follows:-

- `int AddCompany(Company c)`
- `int AddJobPost(Job j)`
- `int UpdateJobPost(Job j)`
- `List<JobApplicants> GetJobApplicationsOfJobPost(Job j)`

- `int AddJobApplicant(JobApplicant ja)`
- `List<JobApplications> GetJobApplicationsOfApplicant(int jobApplicantId)`

- `List<JobCategories> GetAllJobCategories()`
- `List<Jobs> GetJobs(int categoryId)`

- `AddJobCategory(string category)`

5. Testing

The system is tested using Black Box testing method:-

1. For Job Seeker:-

Input	Expected Output	Actual Output	
<i>Existing username Correct password</i>	<i>Successful Login</i>	<i>User Login was successful</i>	✓
<i>Existing username Incorrect password</i>	<i>No login with error message</i>	<i>User can't login- Error: Incorrect Credentials</i>	✓
<i>Fresh application for job</i>	<i>Successful Application</i>	<i>Job Application successful</i>	✓
<i>Duplicate application for job</i>	<i>No application with error message</i>	<i>User can't apply- Error: Already applied!</i>	✓

2. For Job Provider:-

Input	Expected Output	Actual Output	
<i>Existing username Correct password</i>	<i>Successful Login</i>	<i>User Login was successful</i>	✓
<i>Existing username Incorrect password</i>	<i>No login with error message</i>	<i>User can't login- Error: Incorrect Credentials</i>	✓
<i>Add Job Post of unique category</i>	<i>Successful Posting of Job Post</i>	<i>Job Post added successfully</i>	✓
<i>Add Job Post of duplicate category</i>	<i>No Posting with error message</i>	<i>User can't post- Error: Job Post with similar category already exist!</i>	✓

3. For Administrator:-

Input	Expected Output	Actual Output	
<i>Existing username Correct password</i>	<i>Successful Login</i>	<i>User Login was successful</i>	✓
<i>Existing username Incorrect password</i>	<i>No login with error message</i>	<i>User can't login- Error: Incorrect Credentials</i>	✓
<i>Add fresh Job Category</i>	<i>Successful Creation of Category</i>	<i>Job Category added successfully</i>	✓
<i>Duplicate application for job</i>	<i>No Creation with error message</i>	<i>User can't create- Error: Job Category with similar category name already exist!</i>	✓

6. Screenshots

Home Page

OnlineJobPortal

Home Register As Company Sign Up Log In

Job Posts

Software Engineer
Show Jobs

Data Analyst
Show Jobs

Data Scientist
Show Jobs

Web Developer
Show Jobs

Hardware Engineer
Show Jobs

HR
Show Jobs

Login Page

OnlineJobPortal

Home Register As Company Sign Up Log In

User Login

User Email
Email

User Password
Password

Login As Company

Login As Job Applicant

Login As Admin

Apply Job(For Job Applicant)

Job Posts

Software Engineer

Show Jobs

Data Analyst

Show Jobs

Data Scientist

Show Jobs

Web Developer

Show Jobs

Hardware Engineer

Show Jobs

HR

Show Jobs

Jobs Showing for 'Software Engineer '

Company	Location	Email	Duration	Vacancy	
TCS	ABd	tcs@gmail.com	3	3	Apply
Infosys	Delhi	info@gmail.com	4	5	Apply
amazon	USA	amazon@gmail.com	2	9	Apply

View Job Applications made by Job Seeker

OnlineJobPortal

Home

Register As Company

Job Applications

Log Out

Company	JobPost	salary	vacancy	duration
TCS	Software Engineer	60000	3	3
TCS	Hardware Engineer	50000	2	2
Infosys	Software Engineer	56080	5	4
amazon	Hardware Engineer	100	1	5
Infosys	Hardware Engineer	212	1	1

Manage Job Posts(For Company)


OnlineJobPortal

Home

Manage Job Posts

Sign Up

Log Out



Post Section

Post Name

Software Engineer ▾

Duration

Number of Years

Vacancy

Number of Posts


Salary

Rupees

Add Post

Name	Duration	Vacancy	Salary	
Software Engineer	3	3	60000	<div>EditDeleteShow Job Applicants</div>
Hardware Engineer	2	2	50000	<div>EditDeleteShow Job Applicants</div>

View Job Applicants(For Company)



Post Section

Post Name

Software Engineer ▾

Duration

Number of Years

Vacancy

Number of Posts

Salary

Rupees

Add Post

Name	Duration	Vacancy	Salary	
Software Engineer	3	3	60000	<div>EditDeleteShow Job Applicants</div>
Hardware Engineer	2	2	50000	<div>EditDeleteShow Job Applicants</div>

name	email	phone
Rahul	rahul@gmail.com	1234567890
samson	samson@gmail.com	1234567892
kl	kl@gmail.com	1456789230

Add Job Category(For Administrator)

OnlineJobPortal

Home

Register As Company

AddJobCategory

Sign Up

Log Out



Job Category

Job Catgeory

Name

Add Category

Id	name
1	Software Engineer
2	Hardware Engineer
3	Data Analyst
4	HR
5	Data Scientist
6	Web Developer

7. Conclusion

The functionalities are implemented in system after understanding all the system modules according to the requirements. Functionalities that are successfully implemented in the system are:

- Job Provider Registration
- Job Seeker Registration
- Add Job Category
- Add Job Post
- Manage Job Post
- Application for Job
- View Job Applications
- View Job Applicants of particular Job
- Login
- User authentication
- Logout

After the implementation and coding of system, comprehensive manual testing was performed on the system to determine the errors and possible flaws in the system.

8. Limitations and Future Enhancements

We are able to implement the functionality model of the “Online Job Portal”. Currently, the system supports only for viewing applications of Job Applicants for the Job Company. And the system does not support uploading of CV of Job Applicant as part of their profile.

The project can be extended to support inbuilt CV(Resume) making and uploading as part of Job Applicant Profile. Also, the status of whether the application of Job Applicant is accepted or rejected by Job Provider can be added as an extended functionality which will benefit both parties.

We can enhance more as per future requirements.

9. Bibliography

Following links and websites were referred during the development of this project:

stackoverflow.com

docs.microsoft.com