

Software Design Document

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1 Introduction

1.1 Design Overview

This website is basically a recruitment portal where we connect the candidates to their respective companies depending upon the interview and experience. So in our website there are 2 logins :-

1. Company login:

By using the Company login the company has access to view all the candidates resume and select them depending upon the work experience and resume. they can even post the no of candidates required for a particular job with its details.

2. Candidate Login:

In candidate login the person can Upload its resume but if the person has not created the resume then we have added an extra feature where u can create the Resume on our website .We also have shown a feature where the candidate can view all the jobs that are available and at what post.

Essential Features:

Candidate can choose its job by filtering the location, packages, type of job. Even the company can choose the candidate by filtering location, type of job.

How to match the requirements of the user:-

We are trying to collaborate with many emerging companies so that the candidate has wide variety of jobs that they can choose. We are also monitoring the amount of projects the candidate has completed within a time , and promoting them with their ranks to keep the competition on between the candidates .

1.2 Requirements Traceability Matrix

	Employee	Recruiter	Application form	Resume	Online test	interview
Apply for job	X		X	X	X	X
All Candidates Availability	X	X				
All job Availability	X					
Create Resume	X		X	X		

Figure 1: Requirements Traceability Matrix

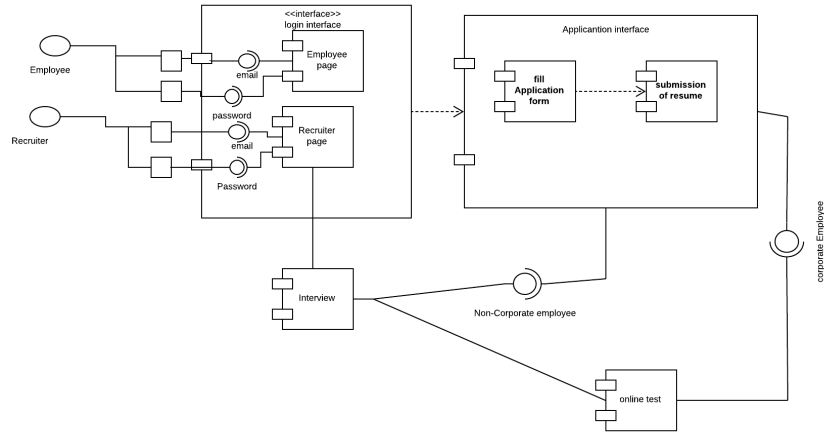


Figure 2: Component Diagram

2 System Architecture

From the project we can identify following modules-

1. **Employee management:** The Employee Management module deals with the punctuality and working of the employees .The module records the time at which the workers start and end their work. It records their working hours during the 3 phases of the day i.e morning, afternoon and evening .It also keeps track of the overtime work done by each employee thereby removing the need of assigning a separate personal to keep track of the records. The module also handles the increment to be given to each employee based on the amount of overtime work he/she has done. The Employee Evaluation module analyzes the information from the Employee.
2. **Employee Evaluation Module:** The Employee Evaluation module analyzes the information from the Employee Management module. Based on the data the productivity of each worker is analyzed every month and their ranks are calculated. Based on the ranks employee of the month and respective perks are awarded for each team of employee. Whenever the request for any new work come to the company it is assigned to the teams based on their rankings. Each and every employee can keep track of how he /she is evaluated for their work assigned on daily or monthly basis. The employee can check their salary breakdown based on different schemes given by the company.
3. **Recruitment Portal:**It is responsible for finding freelance workers/teams of workers based on the criteria sent to us by the respective companies .Interviews are conducted based on the resume offered to us by the employee and the compatible.

2.1 Chosen System Architecture

The system architectural design used is Data Flow architecture. In data flow architecture, the whole software system is seen as a series of transformations on consecutive pieces or set of input data, where data and operations are independent of each other. In this approach, the data enters into the system and then flows through the modules one at a time until they are assigned to some final destination (output or a data store). Initially the user will upload the resume. If the resume satisfies any of the recruitment criteria the user will be considered for the job. The resumes will be filtered on the basis of whether the application is of corporate type and non-corporate type. The candidates belonging to the corporate category give an online test. Based on the results of the test decision is taken whether the candidate should be selected for the interview round. The interview round is common for both corporates and non-corporates. After further processing the candidates are selected and the information is stored in the database.

2.2 Discussions of Alternate Designs

1. Data Centered Architecture

In this architecture there is a single centralized data store. Store data is access continuously by the other components like an update, delete, add, modify from the data store. Such architecture is more suitable when there is a need for communication between different clients accessing the storage. But in our case only our company will be accessing the data store(i.e only 1 client) and thus there is no need of this architecture.

2. Call and Return

The main substyles that exist in this category are-

(a) Main Program or Sub-Program Architecture

The program is divided into smaller pieces hierarchically. The main program invokes many of program components in the hierarchy that program components are divided into subprogram.

(b) Remote procedure call architecture

The main program or subprogram components are distributed in network of multiple computers. The main aim is to increase the performance. Our project does not consist of hierarchical components or divided into subprograms. Also the software is not distributed over multiple devices but is situated on a single device and can be replicated if required. Thus this architecture is not suitable for us.

3. Object Oriented Architecture

This architecture is the latest version of call-and-return architecture. It consist of the bundling of data and methods. Since this architecture is based on call and return and offers similar functionality it is rejected.

4. **Layered Architecture**

The different layers are defined in the architecture. It consists of outer and inner layer. The components of outer layer manage the user interface operations. Components execute the operating system interfacing at the inner layer. Even though the layered architecture has its pro's and is suitable for us to a certain extent it also increases the complexity of the software architecture. Thus we felt that Data Flow architecture was more suited than layered architecture.

2.3 **System Interface Design**

The system interface is as follows:

1. **OS:**The web app can be run on Windows(32/64 Bit),Mac Os.
2. **Networking:**Apache Tomcat Server is used for hosting the app on local-host.
3. **Libraries:**
 - **MySQL:**Used for database connectivity.
 - **Php:**Multiple php libraries used for developing business logic.

3 **Detailed Description of Components**

3.1 **Employee page:-**

In these after the employee creating the account and after entering the correct email and password the Employee will be taken to the Employee page.

3.2 **Recruiter page:-**

In these after the recruiter creating the account and entering correct email and password the Recruiter will be taken to the Recruiter page.

3.3 **Application form:-**

In these component for applying the Job the employee must fill the application form by filling with complete details.

3.4 **Submission of Resume:-**

After filling of the complete form the Employee has to Submit his resume for applying the Job.

3.5 Online Test:-

After submitting the resume if an employee is selected for further round and If an employee is an corporate employee then for qualifying for further Round he has to pass through the online test round.

3.6 Interview:-

After passing through all the rounds the there is an final round in which an interview is taken by the recruiter .

4 User Interface Design

4.1 Description of the User Interface

4.1.1 Screen Images

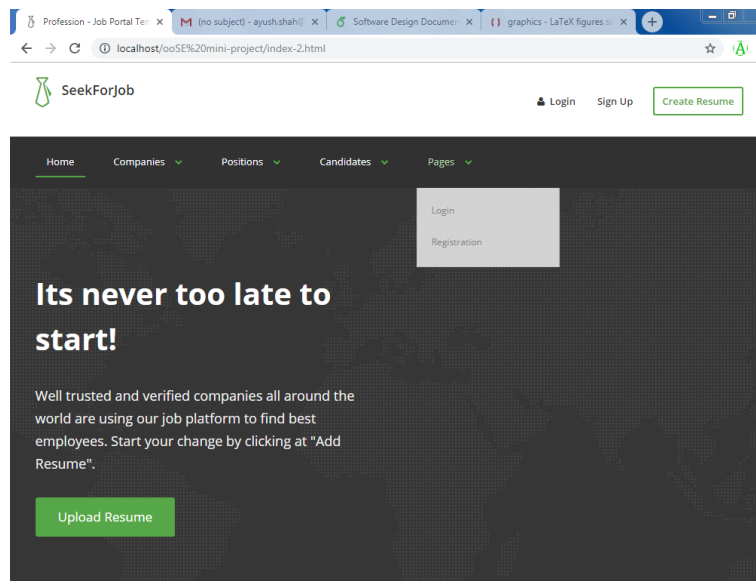


Figure 3: Homepage

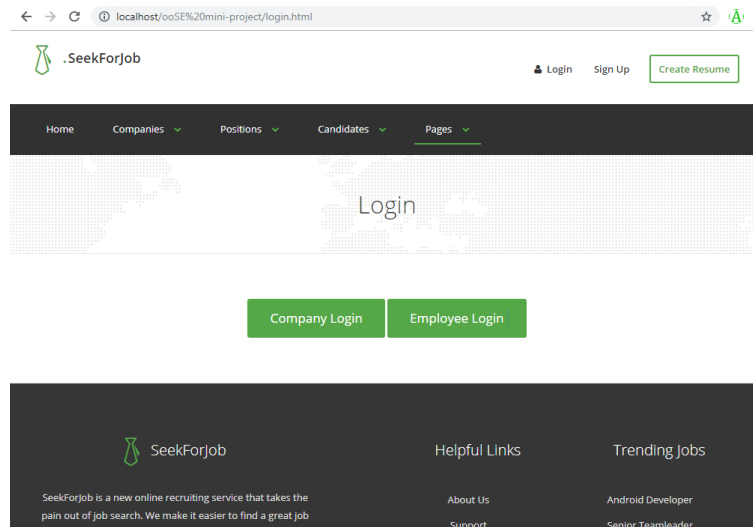


Figure 4: Login

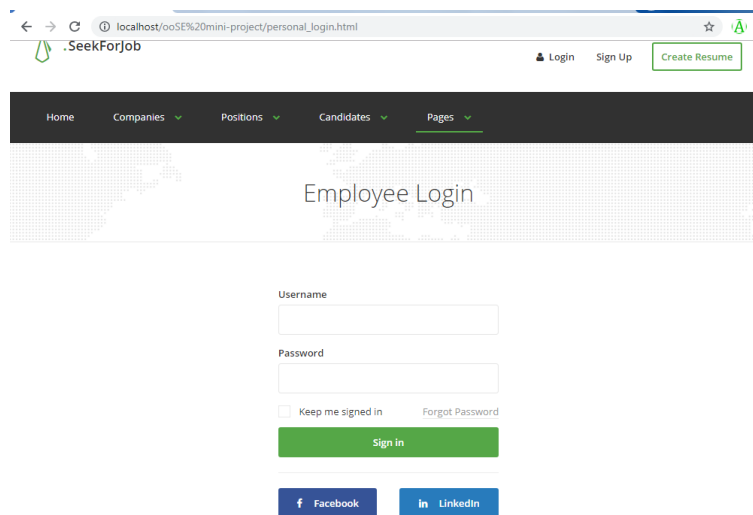


Figure 5: Employee Login

← → ↻ localhost/ooSE%20mini-project/company_login.html ☆ ⓘ

.SeekForJob Login Sign Up Create Resume

Home Companies Positions Candidates Pages

Company Login

Username

Password

☐ Keep me signed in [Forgot Password](#)

Sign in

[Facebook](#) [LinkedIn](#)

Figure 6: Company Login

← → ↻ localhost/ooSE%20mini-project/registration.html 🔍 ☆ ⓘ

.SeekForJob Login Sign Up Create Resume

Home Companies Positions Candidates Pages

Account Registration

Personal Account
 I'm looking for a job

Company Account
 We are hiring employees

Username First Name Surname

E-mail

Password

Retype

Photo Upload Photo

☐ By signing up, you agree with the [terms and conditions](#)

Create an Account

Figure 7: Personal Signup

← → ↻ localhost/ooSE%20mini-project/registration.html

.SeekForJob Login Sign Up Create Resume

Home Companies Positions Candidates Pages

Account Registration

Personal Account
 I'm looking for a job

Company Account
 We are hiring employees

Username

Company Name

Email

VAT No.

Password

Website

Retype

Address Line

☐ By signing up, you agree with the [terms and conditions](#)

Create an Account

Figure 8: Company Signup

Home / Pages / Custom page

21 candidates matching your query

Mia Brown Data Analyst	Mumbai, Maharashtra Featured	64% completed
Tyrone Steans Java Developer	Pune, Maharashtra Most Recent	56% completed
Estelle Howard PR Manager	Chennai, Tamil Nadu Urgent	76% completed
Nan Singh Data Mining	New Delhi, Delhi Featured	87% completed
Ann Smith Python Developer	Mumbai, Maharashtra Most Recent	70% completed
Brandon LeBlanc Data Analyst	Pune, Maharashtra Urgent	20% completed

CONTRACT

- Full Time
- Part Time
- One Time

LOCATION: CITY

- Mumbai
- Pune
- Chennai
- New Delhi
- Dombivli

LOCATION: STATE

- Maharashtra
- Tamil Nadu
- Delhi

JOB POST

- Data Analyst
- Java Developer
- PR Manager
- Data Mining
- Python Developer
- Web Developer

STATUS

Figure 9: Candidates List

20 jobs matches your search criteria

LOCATION: CITY

☐ Mumbai

☐ Chennai

☐ New Delhi

☐ Pune

LOCATION: STATE

☐ Maharashtra

☐ Tamil Nadu

☐ Delhi

POST

☐ Data Analyst

☒ PR Manager

☐ Data Mining

☐ Python Developer

☐ Java Developer

STATUS

☐ Featured

☐ Urgent

☐ Most Recent

Reset Filter

Data Analyst

FEATURED

2018-11-01

📍

Mumbai, Maharashtra

👤

Aditya Technologies

Apply

PR Manager

URGENT

2018-11-01

📍

Chennai, Tamil Nadu

👤

Azari Informatics

Apply

Data Mining

FEATURED

2018-11-01

📍

New Delhi, Delhi

👤

Baan Info Systems

Apply

Python Developer

HOT DEBATE

2018-11-01

📍

Mumbai, Maharashtra

👤

HCL Infosystems

Apply

Data Analyst

URGENT

2018-11-01

📍

Pune, Maharashtra

👤

Hexaware Technologies

Apply

Java Developer

FEATURED

2018-11-01

📍

Chennai, Tamil Nadu

👤

Inflex Solutions

Apply

Figure 10: Company Listing

SeekForJob

LoginSign UpCreate Resume

HomeCompaniesPositionsCandidatesPagesSearch

Create Resume

Photo

Upload Photo

Browse

First Name

Middle Name

Surname

Sign In

LinkedIn Import

Quick Preview

Contact Information

Country

City

Address

Phone

E-mail

Website

Navigation

1. Basic Information

2. Contact

3. Biography

4. Experience

5. Education

Do you have an account?

Figure 11: Create Resume

4.1.2 Objects and Actions

1. **Homepage:**

This is the main page of our system which shows everything about our website. The user can either login into his account or signup to create an account. Also he/she can visit several other pages from this page. The user can get information about the positions available, companies who created a vacancy, candidates who have applied and much more. The user can also navigate to create resume from this page.

2. **Login Page:**

This page helps the user to choose between either logging in as employee or logging in as a company representative. The user can navigate to other pages as above from this page also.

3. **Employee Login Page:**

The user can enter his/her credentials to login as employee. Once Logged in as employee he/she can apply to various vacancies available.

4. **Company Login Page:**

The user can enter his/her credentials to login as company representative. Once Logged in as company the user can see all the applications for their posts.

5. **Personal Signup Page:**

On this page the user can enter the required data and credentials to create his/her new account as employee. Once created an account as employee, the user can avail all the facilities.

6. **Company Signup Page:**

On this page the user can enter the required data and credentials to create his/her new account as company representative. Once created an account as company representative, the user can avail all the facilities.

7. **Candidates List Page:**

On this page a user with logged in as company representative can see all the list of employees who have applied for the post.

8. **Company Listing Page:**

On this page a user with logged in as employee can see all the vacancies by all the companies and can apply for the same.

9. **Create Resume Page:**

On this page an employee can create his/her resume for using it to apply for the vacancies.

5 System Architecture

5.1 Use Case Diagram:

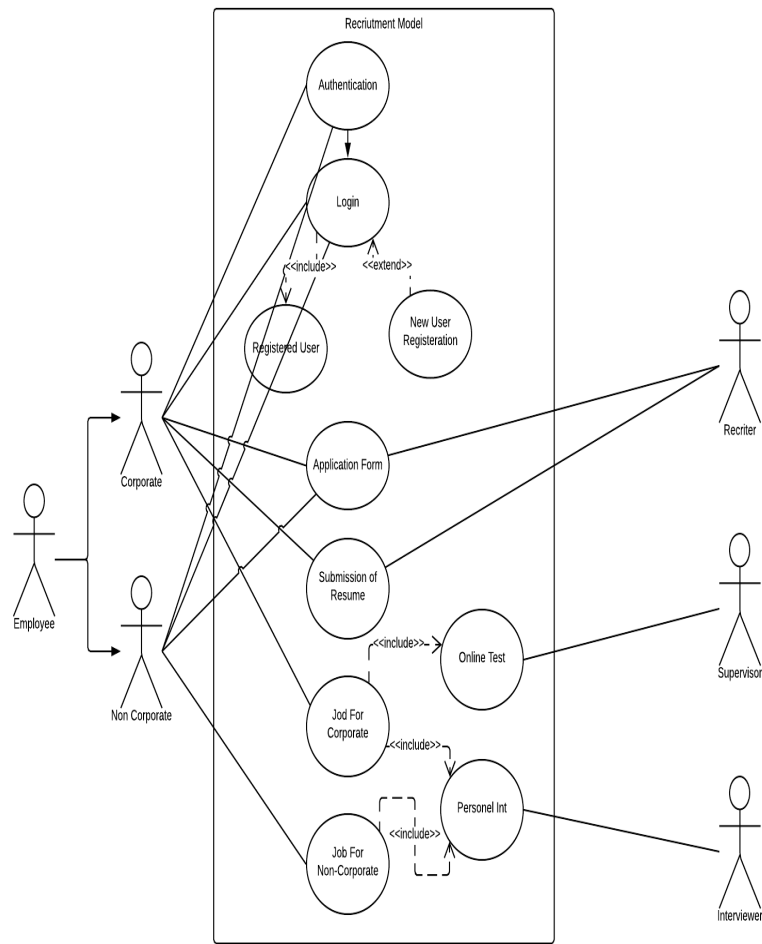


Figure 12: Use Case Diagram

5.2 Use Case Specification

Use Case ID:	1		
Use Case Name:	RECRUITMENT MODEL FOR LABOUR MANAGEMENT SYSTEM		
Created By:	AYUSH SHAH	Last Updated By:	AYUSH SHAH
Date Created:	14/08/2018	DateLastUpdated:	21/08/2018

Primary Actors	Corporate Employee, Non-Corporate Employee
Secondary Actors	Recruiter, Supervisor, Interviewer
Trigger	—
Description	The use case diagram shows the interaction between the employee. And the recruiters and also describes the process of recruitment.
Preconditions	The whole system should be ready before any user uses it.
Postconditions	The final result will be displayed to the user.
Normal Flow	The user logs into his/her account if he/she has already has an account. If not he/she can create an account. After logging in the user can fill an application form to apply for a job. After application the user can submit his/her resume and appear for online test or appear for an interview.
Alternative Flows	If the user applying for the post belongs to the corporate sector then he/she have to go through the online test. Else the user can directly appear for the interview.
Exceptions	—
Includes	<ol style="list-style-type: none"> 1. For Logging in the user must have an existing registered account. 2. For a user from corporate sector he/she must go through an online test. 3. All kinds of user must go through an interview.
Priority	1
Frequency of Use	1
Business Rules	—
Special Requirements	—
Open Issues	—
Assumptions	Every user is an authentic user with no fake accounts or profiles.
Notes and Issues	—

Table 1: Caption

5.3 Data Flow Diagrams:

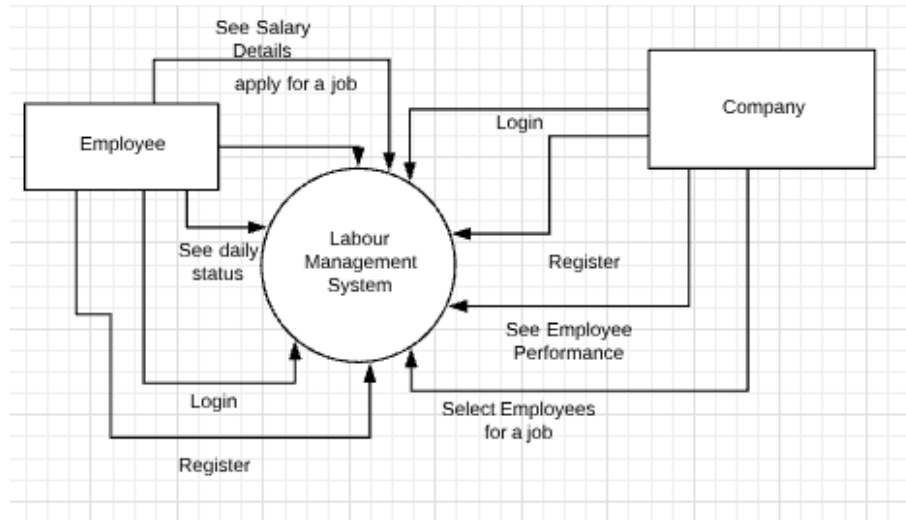


Figure 13: Level-1 DFD

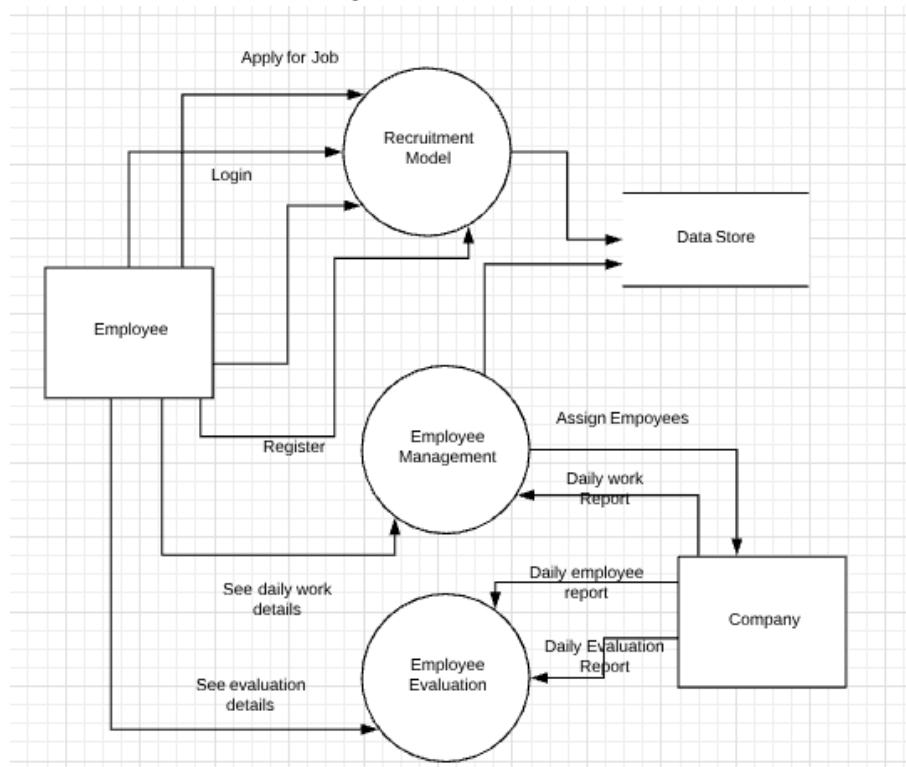


Figure 14: Level-2 DFD