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BONAFIDE CERTIFICATE

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It is my pleasure to recommend that a report on “**Job Recommendation System**” has been prepared under my supervision by **Mr. Amrit Nuchchhe Pradhan, Mrs. Bandana Suwal, Mr. Deepak Dhakal** and **Mrs. Deepika Thapa** in partial fulfillment of the requirement of the degree of Bachelor of Science in Computer Science and Information Technology (BSc.CSIT). This report is satisfactory and is an original work done by them to process for the future evaluation.

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ABSTRACT

Job Recommendation System is the web application where employers can post the job vacancies according to their requirement and job seekers can search and apply for the jobs. Both employers and job seekers have to register their own account in order to use functionalities of the system. Furthermore, employers can also view the list of applications sent by different job seekers and send reply messages of those applications.

Unlike other job portal systems, this system recommends a list of job vacancies to the job seekers according to their profile. This system uses Content Based Filtering and Cosine Similarity Algorithm for the recommendation process. To develop this system, several technologies were studied and understood. These include server and client-side scripting techniques, implementation technologies such as PHP, HTML, CSS, Bootstrap, JavaScript, and MySQL for database handling.

Keywords: recommendation system, cosine similarity, collaborative filtering, content-based filtering

TABLE OF CONTENTS

ACKNOWLEDGEMENT.....	I
ABSTRACT.....	II
TABLE OF CONTENTS	III
LIST OF FIGURES	V
LIST OF TABLES	VI
ABBREVIATION	VII
CHAPTER ONE INTRODUCTION	1
1.1 INTRODUCTION TO THE SYSTEM.....	1
1.2 PROBLEM STATEMENTS	2
1.3 OBJECTIVES	2
1.4 SCOPE AND LIMITATION	2
1.5 REPORT ORGANIZATION.....	3
CHAPTER TWO REQUIREMENT ANALYSIS	4
2.1 LITERATURE REVIEW	4
2.2 ALGORITHM	5
2.3 REQUIREMENT SPECIFICATION	7
2.3.1 Functional Requirement.....	7
2.3.1.1 Job Seekers Module	7
2.3.1.2 Employers Module.....	7
2.3.1.3 Administrator Module.....	8
2.4 STRUCTURING SYSTEM REQUIREMENTS.....	10
2.4.1 Data Modeling	10
2.4.1.1 ER Diagram	10
2.4.1.2 Sequence Diagram	11
CHAPTER THREE METHODOLOGY.....	12
3.1 CONTENT BASED FILTERING	12

3.2 COSINE SIMILARITY	12
3.2.1 Term Frequency	12
3.2.2 Calculation Process	13
CHAPTER FOUR SYSTEM DESIGN.....	16
4.1 SYSTEM ARCHITECTURE AND OVERVIEW	16
4.2 SYSTEM DESIGN.....	18
4.2.1 Database Schema	18
4.2.2 Activity Diagram	18
4.2.2.1 Activity diagram for Job Seeker	19
4.2.2.2 Activity diagram for Job Employer	20
4.2.2.3 Activity diagram for Admin.....	21
CHAPTER FIVE SYSTEM IMPLEMENTATION AND TESTING	22
5.1 IMPLEMENTATION AND OVERVIEW	22
5.2 TOOLS USED	23
5.2.1 Front End	23
5.2.2 Back End.....	24
5.3 OPERATING SYSTEM	24
5.4 TESTING	25
CHAPTER SIX FUTURE WORK AND CONCLUSION.....	28
REFERENCES.....	30
ANNEX I: SNAPSHOTS.....	31
ANNEX II: QUESTIONNAIRE.....	35

LIST OF FIGURES

Figure 1: Use case diagram for employer	8
Figure 2: Use case diagram for job seeker and admin	9
Figure 3: ER Diagram	10
Figure 4: Sequence Diagram	11
Figure 5: System Architecture	16
Figure 6: Architecture of Recommender system	17
Figure 7: Database schema	18
Figure 8: Activity Diagram for job seeker	19
Figure 9: Activity Diagram for Employer	20
Figure 10: Activity Diagram for Admin	21
Figure 11: Waterfall Model	22

LIST OF TABLES

Table 1: UseCase Diagram description.....	9
Table 2: UnitTest Cases for application.....	25
Table 3: Test Case for applying jobs	27
Table 4: Test Case for listing all jobs	27

ABBREVIATION

HTML	Hyper Text Markup Language
CSS	Cascading Style Sheets
JS	Java Script
CV	Curriculum Vitae
PHP	Hypertext Preprocessor
SQL	Structured Query Language
DBMS	Data Base Management System
TF-IDF	Term frequency–inverse document frequency
ER	Entity Relationship

CHAPTER ONE

INTRODUCTION

1.1 Introduction to the System

A Recommendation System is a subclass of information filtering system that seeks to predict the "preference" a user would give to an item. In most of the existing job portal systems, users or job seekers have to manually search for the different job vacancies and apply for those job vacancies. The Job Recommendation System has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some case it reduces the hardships faced by the existing system. Moreover, this system is designed for particular need of the company to carry out operations in a smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error messages while entering invalid data. No formal knowledge is required for the user to use this system. Thus, by this all it proves that it is user friendly.

Job Recommendation System, as described above can lead to error free, reliable and fast management systems. It can assist the user to concentrate on their own other activities rather than concentrating on record keeping.

Every organization, whether big or small, has challenges to overcome and manage the information of vacancy, job, vacancy, job candidate, interview schedule. Through this system, every organization can have their own personal account, post the jobs, and view the applications sent by different job seekers for those jobs. And also, this system is very useful for those people who are seeking job opportunities. This system will ultimately allow employers to better manage resources. This system is equally advantageous for job seekers as they can manually search for the jobs in which they are interested and apply for that job. Another important feature of this system is it recommends the job seeker, a list of relevant jobs matching the content of user profile and job specification of job vacancies using content based filtering and cosine similarity algorithm. Thus, this unique feature of the system makes it different from existing job portal system.

1.2 Problem Statements

In existing Job Portal Systems such as merojob.com, indeed.com, SimplyHired.com etc., job seekers have to manually search for the job vacancies that are suitable to them also some of the existing systems do not have a resume upload mechanism.

So our motive is to solve this problem by introducing the system in which job seekers can register their account and upload their resume and create their own profile based on their experience and skills. According to their profile, our system suggests the list of the jobs that are relevant to them.

Relevant job recommendations are therefore crucial for a good user experience. Here we present a method to compute the similarities between user profiles and job specification related to different jobs using cosine similarities and provide a list of jobs that are according to their similarities.

1.3 Objectives

The general objective of the project is to develop a web-based application where different organizations can post job vacancies and job seekers can search and apply for the job suitable for them as well as this system will also recommend the job relevant to their job. Another objective is to build the application program to reduce the manual jobs of managing the jobs and vacancy.

1.4 Scope and Limitation

Our future plan for this system is to ensure that the website is available, accessible and reached to every Nepali job seeker and recruiter. In the near future this recommendation system will fulfill the necessity in a speedy manner. Our system will be a game changer over traditional online job portals.

The scope of the system can be as follow:

- Maintain job seeker and employer records.
- Provide customized job postings.
- Maintain job posting details.
- Maintain the job applications lists.

1.5 Report Organization

In Chapter 1, This chapter explains the introduction, problem statement, objectives, scope and limitation of system.

In Chapter 2, This chapter covers literature review, algorithm and requirement specification system.

In Chapter 3, This chapter explains the methodology used for implementation of the system.

In Chapter 4, This chapter illustrates system architecture and system design including database schema and activity diagram.

In Chapter 5, This chapter covers the implementation overview, different hardware tools, operating system and test cases of the system.

In Chapter 6, This chapter covers future work and conclusions.

CHAPTER TWO

REQUIREMENT ANALYSIS

2.1 Literature Review

Recommender Systems have become an important research field since the emergence of the first paper on collaborative filtering in the mid-1990s. In general, these systems are stated as the support systems which help users to find content, products, or services (such as books, movies, music, TV programs, and websites). By gathering and examining suggestions from other users, which means reviews from various establishments, and users.

These systems are broadly classified into collaborative filtering (CF) and content-based filtering (CB). Content-Based recommender system [1] tries to guess the features or behavior of a user given the item's features, he/she reacts positively to.

In 2008 [2] Kleanthi Lakiotaki, Stelios Tsafarakis, and Nikolaos Matsatsinis proposed UTA-Rec. UTARec is a Recommender System that incorporates Multiple Criteria Analysis methodologies. The system's performance and capability of addressing certain shortfalls of existing Recommender Systems is demonstrated in the case of movie recommendations. UTARec's accuracy is measured in terms of Kendall's tau and ROC curve analysis and is also compared to a Multiple Rating Collaborative Filtering (MRCF) approach. Juan A.

Mucheol Kim & Sang Oh Park [3] in 2011 proposed an intelligent movie recommender system with a social trust model. The proposed system is based on a social network for analyzing social relationships between users and generating group affinity values with user profiles. In experiments, the performance of this system is evaluated with precision-recall and F-measures.

In 2012 Punam Bedi, Ravish Sharma [4] proposed a Trust based Ant Recommender System (TARS) that produces valuable recommendations by incorporating a notion of dynamic trust between users and selecting a small and best neighborhood based on the biological metaphor of ant colonies.

Along with the predicted ratings, displaying additional information for explanation of recommendations regarding the strength and level of connectedness in the trust graph from where recommendations are generated, items and number of neighbors involved in predicting ratings

can help active users make better decisions. Also, new users can highly benefit from pheromone updating strategy known from ant algorithms as positive feedback in the form of aggregated dynamic trust pheromone defines “popularity” of a user as recommender over a period of time. The performance of TARS is evaluated using two datasets of different sparsity levels viz. Jester dataset and Movie Lens dataset (available online) and compared with traditional Collaborative Filtering based apps convince users about the product. It is an agent-based recommender system. It combines a hybrid recommender system with automated argumentation.

Recommender system is one of the application which is being used by many vectors and online service providers to believe the necessity of online users. Thus, the recommender system is presented as an intelligent system, which identifies the user category on the basis of user information and then user interest analysis. Once such information is obtained, in the second stage, the analysis is performed to obtain the similarity group respective to necessity products and services. To perform such an analysis there are some existing techniques such as content based as well as collaborative recommender systems.

2.2 Algorithm

The implemented recommendation system is content based filtering and the algorithm used is cosine similarity algorithm.

Content-based filtering, also referred to as cognitive filtering, recommends items based on a comparison between the content of the items and a user profile. The content of each item is represented as a set of descriptors or terms, typically the words that occur in a document. The user profile is represented with the same terms and built up by analyzing the content of items which have been seen by the user.

Several issues have to be considered when implementing a content-based filtering system. First, terms can either be assigned automatically or manually. When terms are assigned automatically a method has to be chosen that can extract these terms from items. Second, the terms have to be represented such that both the user profile and the items can be compared in a meaningful way. Third, a learning algorithm has to be chosen that is able to learn the user profile based on seen items and can make recommendations based on this user profile.

The information source that content-based filtering systems are mostly used with are text documents. A standard approach for term parsing selects single words from documents. The vector space model and latent semantic indexing are two methods that use these terms to represent documents as vectors in a multidimensional space.

Relevance feedback, genetic algorithms, neural networks, and the Bayesian classifier are among the learning techniques for learning a user profile. The vector space model and latent semantic indexing can both be used by these learning methods to represent documents. Some of the learning methods also represent the user profile as one or more vectors in the same multidimensional space which makes it easy to compare documents and profiles. Other learning methods such as the Bayesian classifier and neural networks do not use this space but represent the user profile in their own way.

Cosine Similarities Algorithm:

Step 1: Convert words to vectors.

Step 2: Find the cosine angle between the vectors by using the formula as below:

$$\vec{a} \cdot \vec{b} = \sum_{i=1}^n a_i b_i = a_1 b_1 + a_2 b_2 + \cdots + a_n b_n$$

To calculate the dot products of two different vector components.

$$\vec{a} \cdot \vec{b} = \|\vec{a}\| \|\vec{b}\| \cos \theta$$

$$\cos \theta = \frac{\vec{a} \cdot \vec{b}}{\|\vec{a}\| \|\vec{b}\|}$$

To calculate the cosine value of the vectors.

2.3 Requirement specification

If there is any one thing any project must have in order not to be doomed to failure, it will be a sensible and compressive collection of both the functional and non-functional requirements.

2.3.1 Functional Requirement

A function is described as a set of inputs, the behaviors and outputs. Functional requirements define the functions of a system or its components. It also describes the services that a system is expected or can provide. The following are some of the functionalities the system will provide;

2.3.1.1 Job Seekers Module

- Registration
- Login
- Forgot Password
- Search for Job vacancies
- Upload resumes
- Apply for Job
- Update Profile
- Logout
- Send Feedback
- View applied jobs

2.3.1.2 Employers Module

- Registration
- Login
- Forgot Password
- Search Resume
- View Job applications
- Create and view job post
- Search job seekers profile
- Update profile
- Send reply message to applicant

- Logout

2.3.1.3 Administrators Module

- Login
- View number of job seekers and employers registered in the system
- Approve job seekers and employer's account
- Deactivate employer's and jobseeker's account
- Publish notices
- View Feedback
- Logout

Use Case Diagram:

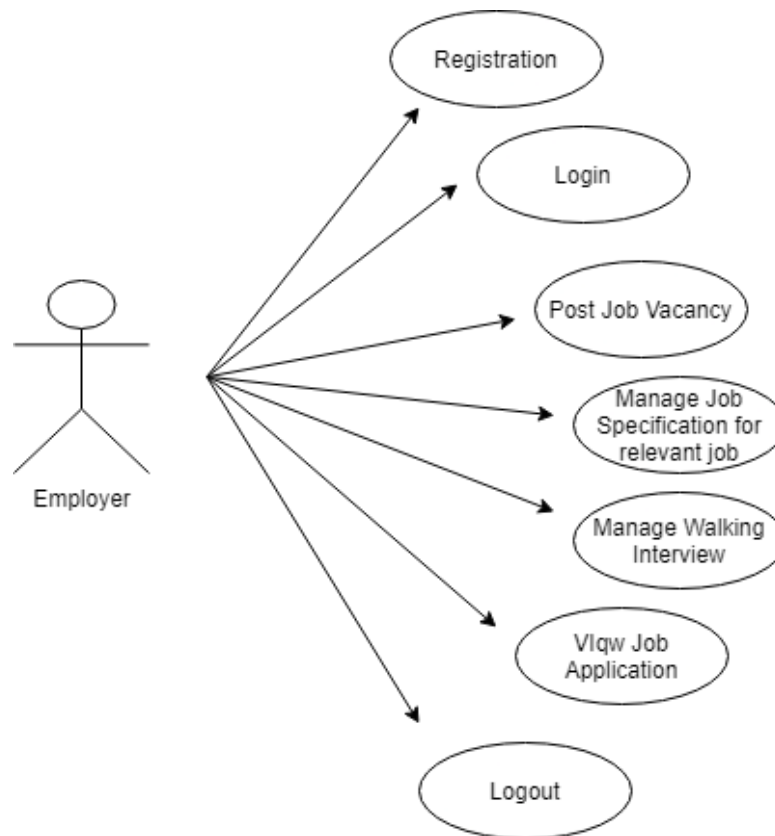


Figure 1: Use case diagram for employer

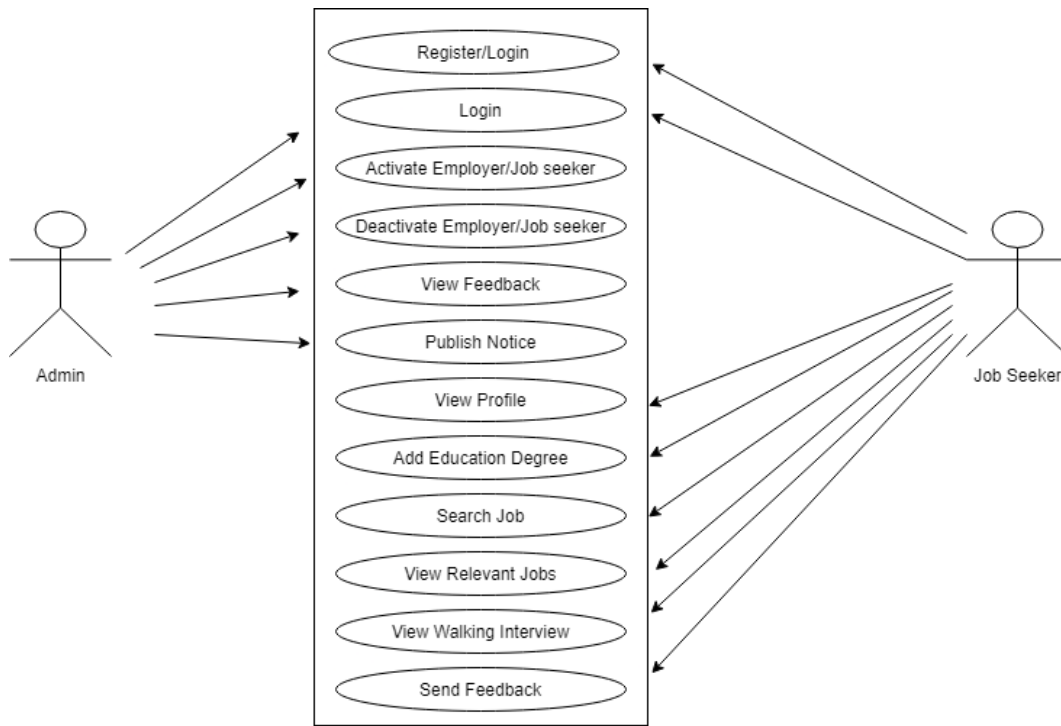


Fig 2: Use Case Diagram for Job Seeker and Admin

Name	Description
Initiating actor	Job Seeker
Registration	To get access to the system
Login	To get access to the system
Profile	To view profile
Educational Degree	Adding additional qualification
Search Job	Look for job posted by different Employers
View Relevant Job	Job seeker can view the jobs that are relevant to them
Send Feedback	Job Seeker can send feedback to admin

Table 1: Use Case Diagram for description

2.4 Structuring System Requirements

2.4.1 Data Modeling

2.4.1.1 ER-Diagram

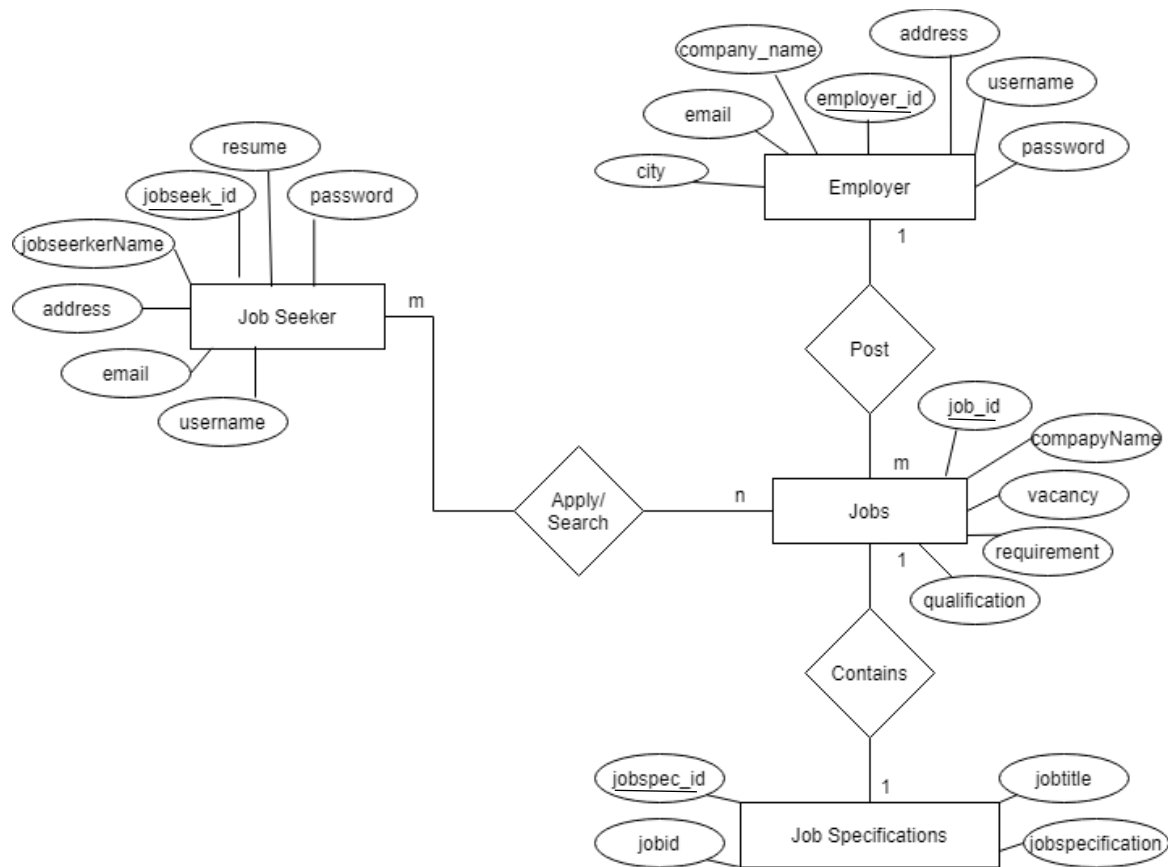


Fig 3: ER Diagram.

Fig shows the logical relationship between the number of entities. Job seeker, Employer, Jobs, Job specification are the entities and each entity has their respective attributes.

2.4.1.2 Sequence Diagram

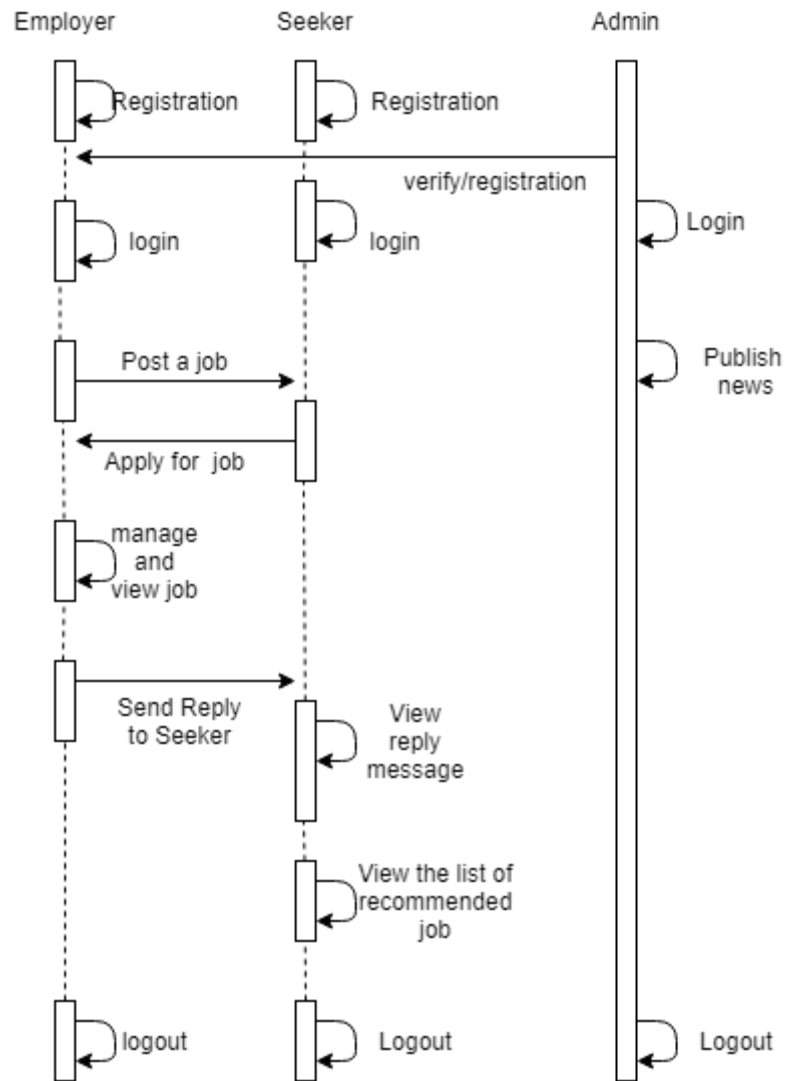


Fig 4: Sequence Diagram.

CHAPTER THREE METHODOLOGY

3.1 Content Based Filtering

Content based filtering methods are based on information about the items that are going to be recommend. Recommendations are based on content of items.

In this Job recommendation system, content of user profile is compared with content of job specifications that are related to different jobs. Finally, only those jobs whose specifications are similar to the user profile are recommended to the job seeker.

3.2 Cosine Similarity

This concept is used in this project to calculate the score between two document vectors. The similarity between two vectors is defined by the angle between them. If the angle between two vectors are zero and thus $\cosine=1$, representing the perfect match.

If those two vectors are perfectly dissimilar, then the angle between the vectors is perfect 90 degree and $\cosine=0$, representing the perfect dissimilar.

The inputs required for cosine similarity calculation must be represented in the form of a Vector Space Model. A Vector Space Model is the mathematical structure formed by a collection of vectors.

In this recommendation system we have implemented the cosine similarity between job seeker's bio data and job specifications that is related to different jobs. For calculating cosine similarity, we have to convert these two texts (bio, specification) into document vectors. In order to obtain document vectors, we use the concept of term frequency.

3.2.1 Term Frequency

Term frequency is a measure of how often a term is found in the collection of documents.

A reasonable scoring mechanism is computed with document terms. It counts the frequency of the terms that match between the query terms and the document term list which is denoted by $tf(t,d)$.

3.2.2 Calculation Process

Here we consider,

text1= bio data

text2= job specification

Using the explode function where the delimiter is space.

\$text1= Computer Engineer BscCSIT HTML CSS JS

\$text2= Front End Developer HTML CSS JS BscCSIT

Conversion of text into Array:

\$array_text1=['Computer', 'Engineer', 'BscCSIT', 'HTML', 'CSS', 'JS']

\$array_text2=['Front', 'End', 'Developer', 'HTML', 'CSS', 'JS', 'BscCSIT']

Step1:

Removing duplicate terms from array_text1 using function

array_unique(\$array_text)

Step2:

Assigning key values for \$array_text1 using function

a\$=a = array_fill_keys(\$array_text1, 0) with key value zero.

\$a=Array(

 [computer]=>0

 [Engineer]=>0

 [BscCSIT]=>0

 [HTML]=>0

 [CSS]=>0


```
[JS]=>0
```

Step 3:

Now, it again assign the key value for \$array_text1 and \$array_text2 which is 1 and it is added with \$a.

1. \$array_text1=array_fill_keys(\$a,1)+\$a
2. \$array_text2=array_fill_keys(\$b,1)+\$a

Output for \$array_text1:

```
array([computer]=>1
```

```
  [Engineer]=>1
```

```
  [BscCSIT]=>1
```

```
  [HTML]=> 1
```

```
  [CSS] => 1
```

```
  [JS] =>1
```

Output for \$array_text2:

```
[Computer]=> 0
```

```
[Engineer] =>0
```

```
[BscCSIT]=> 1
```

```
[HTML] =>1
```

```
[CSS]=>1
```

```
[JS]=>1
```

```
[front]=>1
```

```
[End]=>1
```

```
[Developer]=>1
```

Thus, we compute cosine similarity using output of array text 1 and array text 2 using following formula:

$$\vec{a} \cdot \vec{b} = \|\vec{a}\| \|\vec{b}\| \cos \theta$$

$$\cos \theta = \frac{\vec{a} \cdot \vec{b}}{\|\vec{a}\| \|\vec{b}\|}$$

If similarity is greater than 0.5 then we will suggest corresponding job vacancy to the jobseeker.

CHAPTER FOUR SYSTEM DESIGN

4.1 System Architecture and Overview

System design is the process of defining the elements of a system such as the architecture, modules and components, the different interfaces of those components and the data that goes through that system. It is meant to satisfy specific needs and requirements of a business or organization through the engineering of a coherent and a well-running system. We have developed a web-based Job Recommendation System which requires internet connection for its functioning. To use this system, we need a database, android/ mobile, laptop that supports web browsers and the user. The system architecture is clearly defined by the following figure:

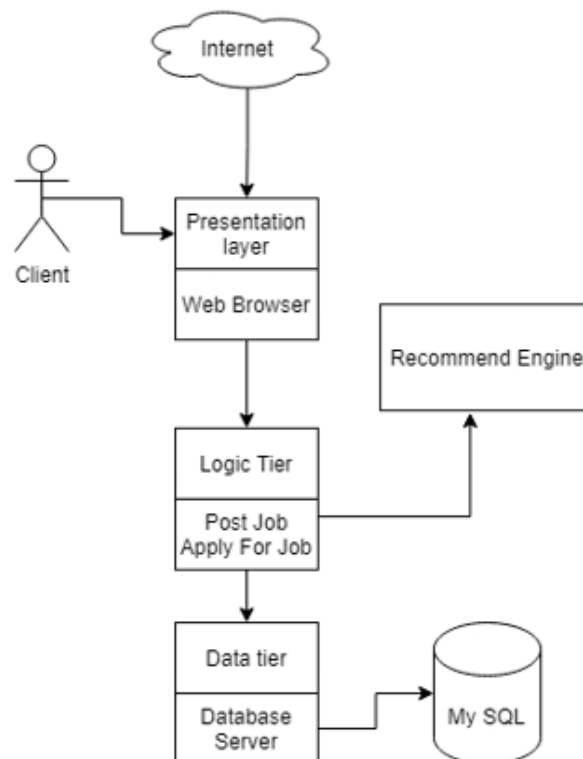


Fig 5: System Architecture

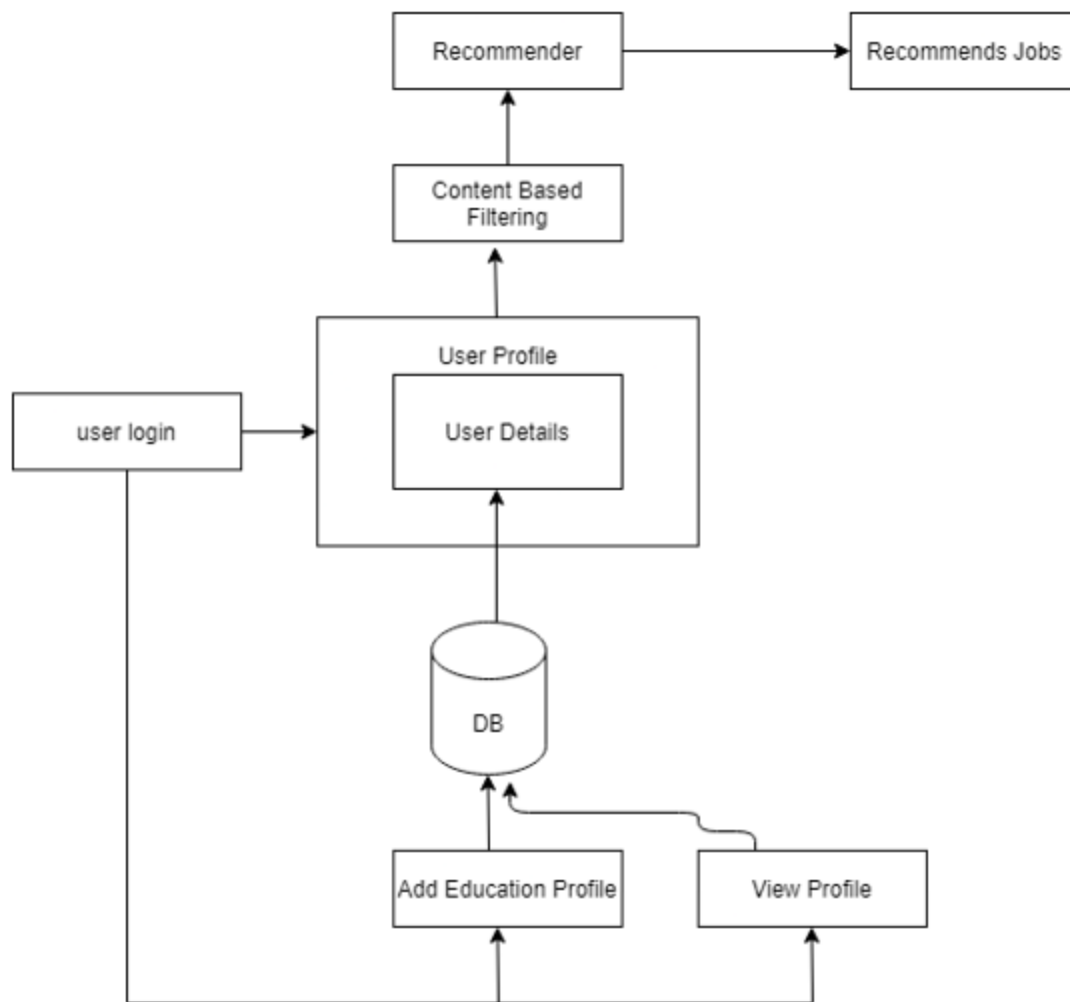


Fig 6: Architecture of recommender system

4.2 System Design

4.2.1 Database Schema

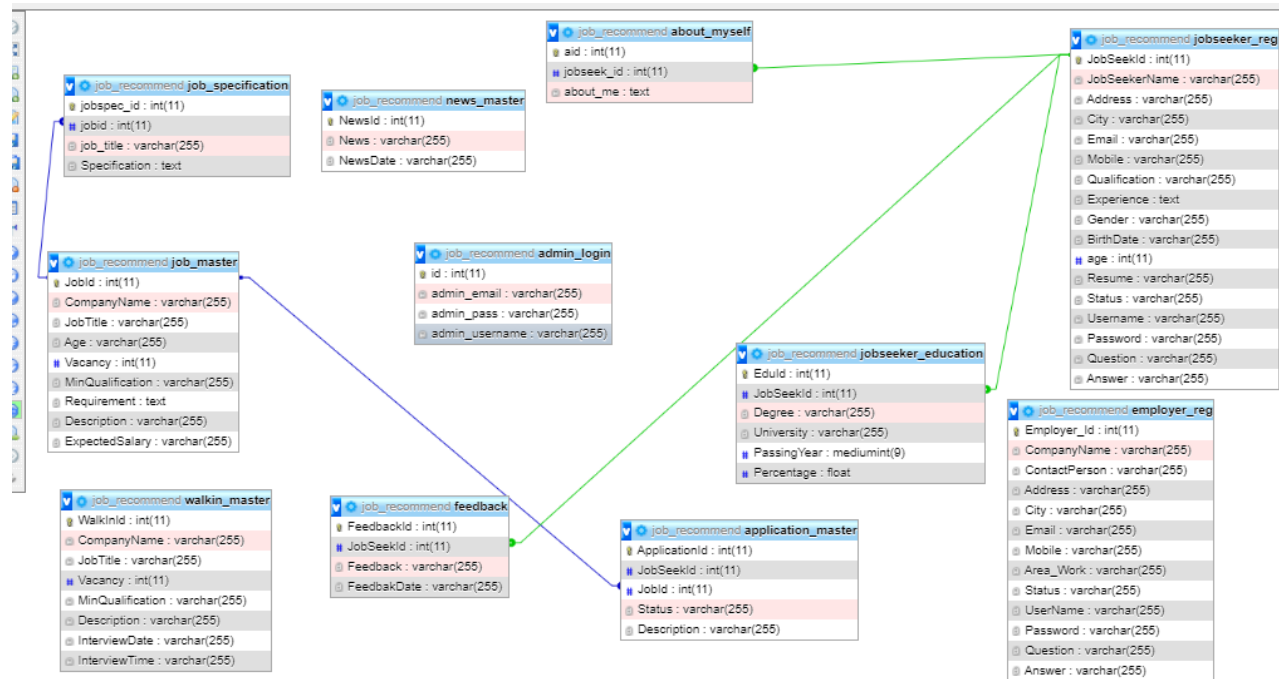


Fig 7: Database schema

The Figure 7 is the visual representation of organization and structure of our database. It contains schema objects like tables, columns, data types, relationships, primary key, foreign keys, etc.

It shows seven tables, along with their data types, relationships between the tables, as well their primary keys and foreign keys.

4.2.2 Activity diagram

4.2.2.1 Activity diagram for Job Seeker

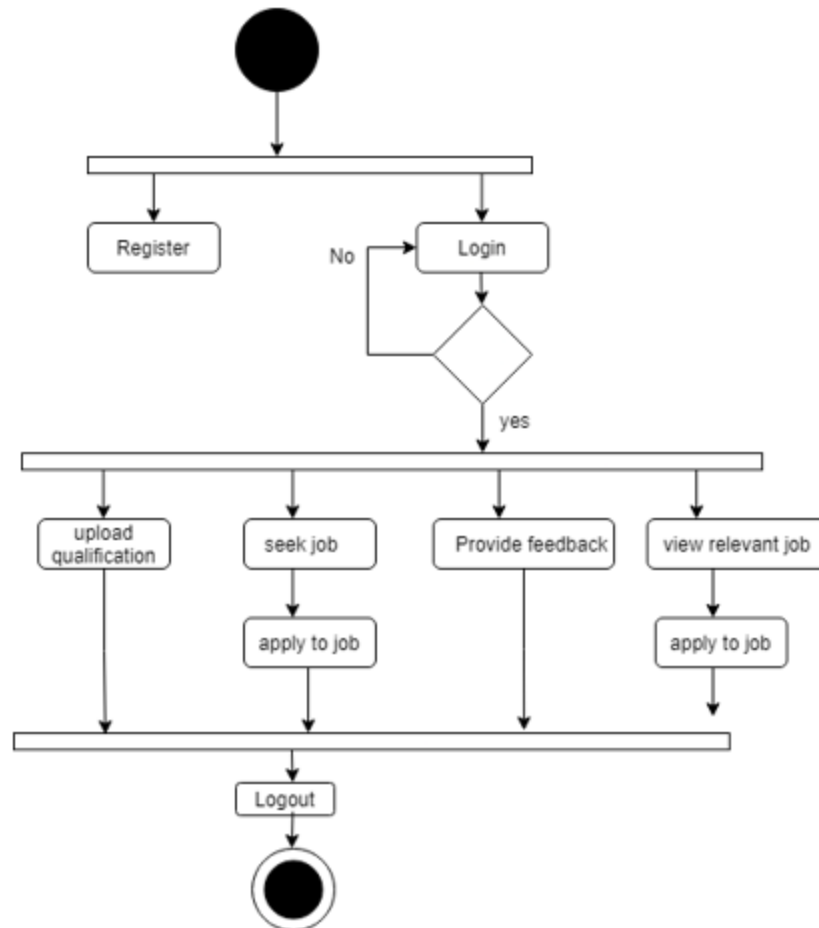


Fig 8: Activity Diagram for job seeker

4.2.2.2 Activity diagram for Job Employer

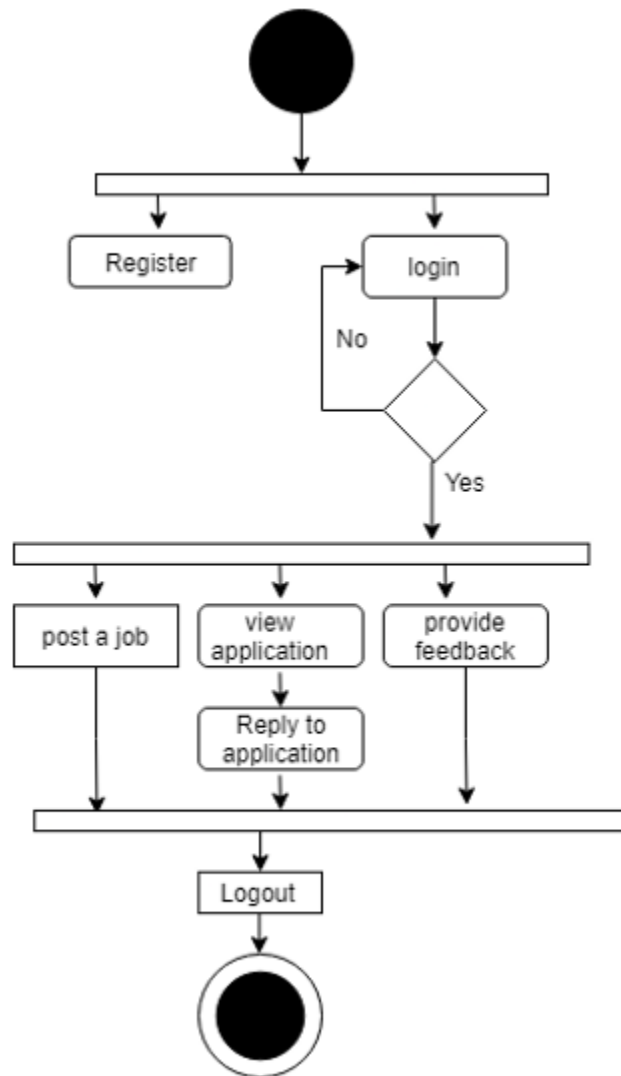


Fig 9: Activity diagram for Employer

4.2.2.3 Activity diagram for Admin

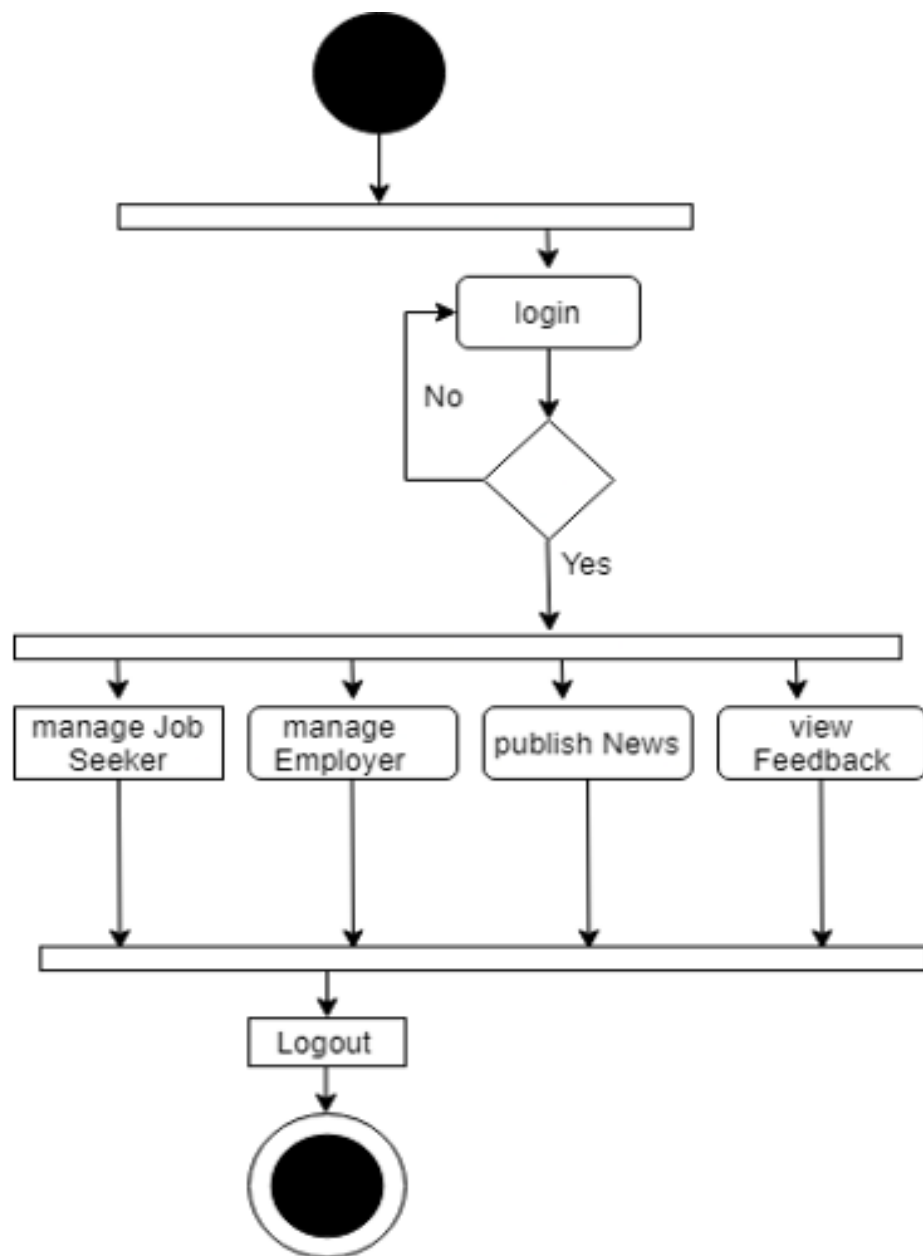


Fig 10: Activity diagram for Admin

CHAPTER FIVE

SYSTEM IMPLEMENTATION AND TESTING

5.1 Implementation and Overview

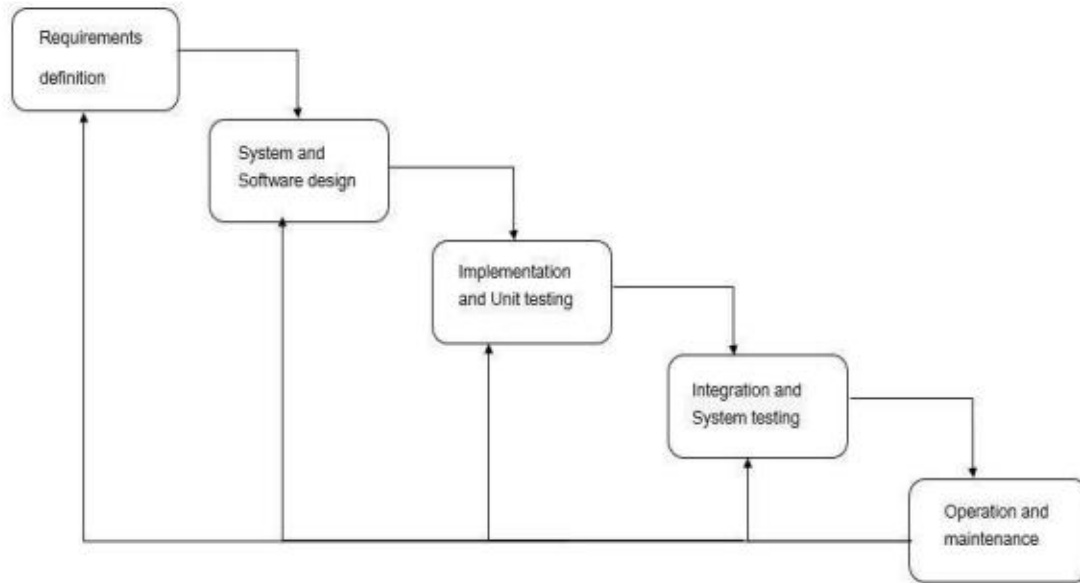


Fig 11: Waterfall model

The waterfall model is a classical model used in the system development life cycle to create a system with a linear and sequential approach. It is termed as waterfall because the model develops systematically from one phase to another in a downward fashion. This model is divided into different phases and the output of one phase is used as the input of the next phase. Every phase has to be completed before the next phase starts and there is no overlapping of the phases. For our project we used the Waterfall Model because our project is a medium scale project and all the requirements needed for our project were clearly known. Firstly, we analyzed the requirements for our project and then we designed our system. After this we moved to the implementation phase. Once we are done with the implementation phase, we will move towards the testing phase of the product. The ready product will be then deployed to the users and the maintenance will be done by the team with the passing time.

5.2 Tools Used

The coding phase of the software development life cycle is concerned with the development of code that will implement the design. Coding is the most valuable part of developing software. The code is written in a formal language called programming language. Coding usually involves front-end and back-end tools. A different front end and back-end tools used in the Online Job Portal System are finely discussed below.

5.2.1 Front End

The front end is the part of the system where normal users communicate with the system. The front end is related to the user interface. The front end consists of different coding tools where codes are written to develop the system. The Online Job Portal System uses the following front-end tools.

- **HTML**

HTML (Hypertext Markup Language) is the most basic building block of the Web. It defines the meaning and structure of web content. "Hypertext" refers to links that connect web pages to one another, either within a single website or between websites. Links are a fundamental aspect of the Web. By uploading content to the Internet and linking it to pages created by other people, you become an active participant in the World Wide Web.

- **CSS**

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enabling the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

5.2.2 Back End

Back end is the part of the system that normal users don't want to know about. Back end possesses a database. The following tools are contained in the back end of the Online Job Portal System.

- **PHP**

PHP is an acronym for “Hypertext Preprocessor” and is a server-side programming language used for web development. It is a widely used, open-source scripting language. The PHP language has its roots in C and C++ so it is easy to learn and manipulate. PHP can run on both UNIX and Windows servers. In the development of this job portal system, PHP was chosen because it is dynamic, cheap and easy to set up, secure, fast, reliable and can interact with many different relational database management systems (DBMS).

- **MYSQL**

MySQL is one the world's most popular open-source database management systems. It is a free-to-use, opensource database that enables users to create databases and perform various forms of data manipulations and database administration. MySQL was chosen for the development of this system because of its advanced features like the following;

- Data Security
- On-Demand Scalability
- High Performance
- Complete workflow control
- Easy to learn and use

5.3 Operating System

To build an Online Job Portal System we used the following operating system.

- **Windows 10**

Microsoft Windows is a group of several graphical operating system families, all of which are developed, marketed and sold by Microsoft. Each family caters to a certain sector of the computing industry.

5.4Testing

Testing is a process of executing a program with the intent of finding bugs that makes the application fail to meet the expected behavior. Regardless of the development methodology, the ultimate goal of testing is to make sure that what is created does what it is supposed to do. Testing plays a critical role for assuring quality and reliability of the software.

We have included testing as a part of the development process. The test cases should be designed with maximum possibilities of finding the errors or bugs. Various levels of testing are as follows.

5.4.1Testing levels

System testing:

System testing is performed on a completely integrated system to see if it meets the requirements.

5.4.2Test Cases

A test case is a set of rules or conditions to check if the system or one of its features works in accordance with the requirement. It is a document with a set of details which includes, set of test data, expected results, actual results, environment information and so on. We have designed and executed a few test cases to check if the application meets the functional requirements.

Below are the test cases for Online Job Recommendation System application.

TEST MODULE	TEST CASE	EXPECTED RESULT	TEST RESULT
ADMIN	Provide valid login credentials	User successfully logged in and directed to the admin dashboard page	PASS
ADMIN	Enters invalid login credentials	Displays Error message	PASS
ADMIN	Upon successful login, click on the 'Manage Employer tab.	Display the list of employers whose account registration is to be verified	PASS
ADMIN	Upon successful login,	Display the list of seekers whose account registration is to be verified	PASS

	click on the 'Manage Job Seeker' tab.		
ADMIN	Upon successful login, click on the 'Publish Notices' tab.	Can publish new news and edit and delete existing news	PASS
ADMIN	Upon successful login, click on the 'Feedback' tab.	Can view the feedbacks send by employers and seekers	PASS
EMPLOYER	Provide details for registration	Employer registration successfully submitted	PASS
EMPLOYER	Upon successful login, click on 'Manage Jobs' tab	Employer posts jobs with the required details and view the details of all the posted jobs	PASS
EMPLOYER	Upon successful login, click on 'Walking Interview' tab	Employers post job vacancies that has to be attended physically and also can view the list of previously posted jobs	PASS
EMPLOYER	Upon successful login, click on 'Profile' tab	Can view as well as edit information about themselves	PASS
EMPLOYER	Upon successful login, click on 'Application' tab	Can view the list of applications send by applicants or seeker for a particular jobs as well as can reply all later message to the applicant	PASS
JOBSEEKER	Provide details for registration	Job Seeker registration successfully submitted	PASS
JOBSEEKER	Enters invalid login credentials	Enters invalid login credentials	PASS
JOBSEEKER	Upon successful login, click on ' Profile' tab	List details of jobseeker	PASS

JOBSEEKER	Upon successful login, click on 'Search Jobs' tab	Can search for different job vacancies that are available and also view status of previously applied jobs	PASS
JOBSEEKER	Upon successful login, click on 'Walking Interview' tab	Can view the list of vacancies which should be attended physically	PASS
JOBSEEKER	Upon successful login, click on 'Education' tab	Can add their educational degrees	PASS
JOBSEEKER	Upon successful login, click on 'Feedback' tab	Can send feedbacks to administrator	PASS

Table 2-UnitTest Cases for application

Test Objectives: Successfully submits the Job application

TEST CONDITION	INPUT SPECIFICATION	OUTPUT SPECIFICATION	PASS/FAIL
The user is currently on the Jobs page	User clicks on the 'Apply' tab against a job post	Prompts a message as "Successfully applied to this job"	PASS

Table3-Test Case for applying jobs

Test Objectives: User checks for applied jobs.

TEST CONDITION	INPUT SPECIFICATION	OUTPUT SPECIFICATION	PASS/FAIL
The job seeker is currently logged into their account	The job seeker clicks on search job tab	Lists all the jobs that are applied	PASS

Table 4-Test Case for listing all jobs

CHAPTER SIX

FUTURE WORK AND CONCLUSION

6.1 Future Work

This project fulfills the primary requirements of the job seekers and employers. It can be extended in several ways. It can provide recommendations and email updates for new job postings based on the job seeker's search history. Since the job seekers might be interested in building a strong resume, it can provide tips and information for the same. It can also provide templates for building the Resumes which might interest most applicants. The mobile application is developed fulfilling the functionalities of job seekers, it can be extended to support functionalities of Employers as well.

In this system, Cosine Similarity is calculated using the term frequency of each term in job seeker biodata. But Term frequency suffers from critical problems as all the terms are considered equally important. In fact, Certain terms have little or no selective power in determining relevance. And also terms which appear very few in number have higher probability in determining the relevance. So, to overcome this problem we have to scale down the term weight of the terms with high collection frequency. For this we can use TF-IDF weighting instead of term frequency which can improve the outcome of our system.

6.2 Conclusion

The major goal of this project is to provide a web-based system where Job Seekers can find the relevant jobs based on their profile specifications and employers can manage and select the right candidate for their jobs by viewing their profile and resumes.

It is a web-based application developed using Html, Css, Js, Bootstrap for its front end , Php for its backend and Mysql for databases.

People are unable to get access to job opportunities due to inefficient distribution of information on job offers but now the Internet has made a huge impact on knowledge management and information dissemination all over the world. It is expected to use less budget and less resources and can be easily access by every users because of its user friendly environments and also the

system is not so complex for users. Any person who has access to the Internet can access information anywhere in the world. This system aims and objective is to provide a platform where recruiters and job seekers can communicate.

The development and implementation of the system provides the following features;

- User authentication
- CV or resume upload
- Feedback mechanism
- Find relevant jobs

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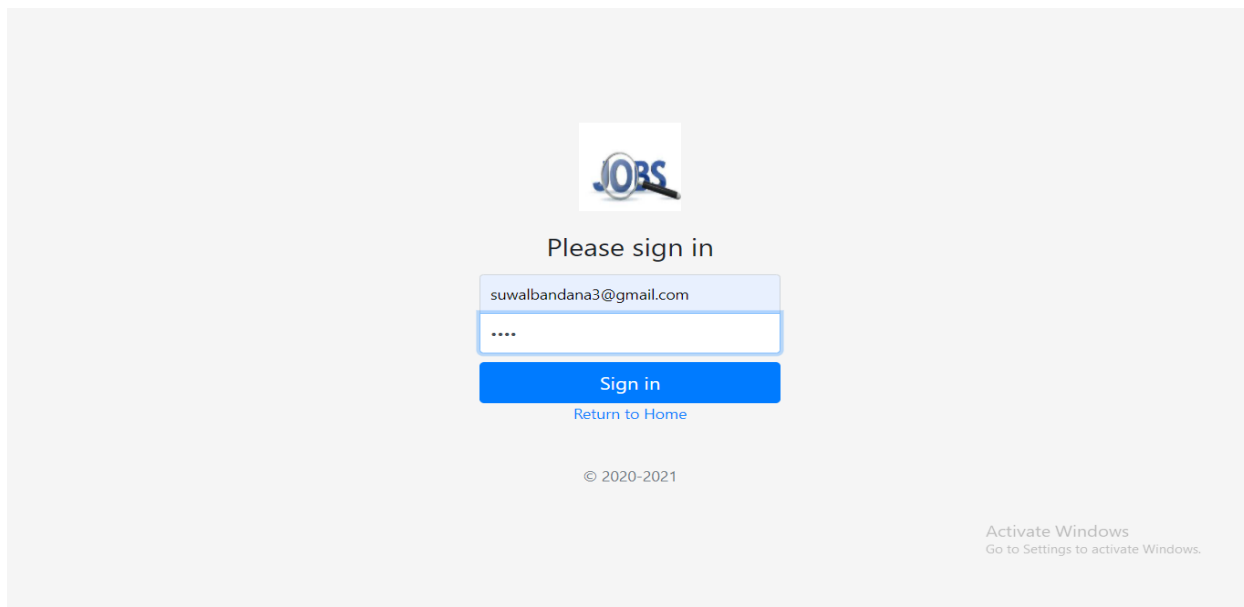
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Annex I: Snapshots



Annex Figure 1. Home page for Job Recommendation System



Annex Figure 2. Login page for admin

ADMIN PAGE		Sign out					
<div>Dashboard</div> <div>Employers</div> <div>Job Seeker</div> <div>Manage Job Seeker</div> <div>Manage Employer</div> <div>SAVED REPORTS</div> <div>FEEDBACK</div> <div>PUBLISH NEWS</div>		Dashboard / Employers					
Employer							
CompanyName	ContactPerson	Address	City	Email	Status	Deactivate	
Ainsoft Limited	Mr. Hari Krishna Acharya	Baikhu	Kathmandu	ingo@ainsoft.com	Confirm	Deactivate Employer	
Broadway Infosys	Ram Prasad	Duwakot	Bhaktapur	broadway@gmail.com	Confirm	Deactivate Employer	
Softtech Foundation	Manish Shah	Kamalbinayak	Bhaktapur	info@gmail.com	Confirm	Deactivate Employer	
Tekivortex	Dinesh Pandey	Pulchowk	Lalitpur	tekivortex@gmail.com	Confirm	Deactivate Employer	
Fusemachines Nepal	Rajesh Shah	Dillibazar	Kathmandu	fusemachine@gmail.com	Confirm	Deactivate Employer	
Centrix PVT LTD	Harish Shah	Tinkune	Kathmandu	centrix@gmail.com	Confirm	Deactivate Employer	
Sastodeal	Rajan Anjal	Sirutar	Bhaktapur	sd@gmail.com	Confirm	Deactivate Employer	
Digi Technologies	Rijan Basnet	New Baneshowr	Kathmandu	digitechnologies@gmail.com	Confirm	Deactivate Employer	
Biomed International	Bhusan Baniya	Ratnapark	Kathmandu	biomedint@gmail.com	Confirm	Deactivate Employer	
KPO & Company	James Dhital	Tinkune	Kathmandu	kpoc@gmail.com	Confirm	Deactivate Employer	
Century Commercial Bank Limited	KP Gurung	Kalanki	Kathmandu	century@gmail.com	Confirm	Deactivate Employer	
Perfect Active Solutions	Rabin Rijal	Lubhu	Lalitpur	perfect@gmail.com	Confirm	Deactivate Employer	
Global Academy of Tourism and Hospitality Education	Maniram Baskota	Gausala	Kathmandu	globalacademy@gmail.com	Confirm	Deactivate Employer	
Cosmic Electrical Engineering Associates	Anish Gautam	Sanepa	Lalitpur	ceea@gmail.com	Confirm	Deactivate Employer	
Idea Studio Nepal	Bimal Timalsina	Sinamangal	Kathmandu	ideastudio@gmail.com	Confirm	Deactivate Employer	
Veritacore	Bigyan Rai	Lamatar	Lalitpur	veritacore@gmail.com	Confirm	Deactivate Employer	
New Business Age	Mukesh Thapa	Thaba	Lalitpur	newbusiness@gmail.com	Confirm	Deactivate Employer	
M.G. Auto Nepal	Danish Gautam	Koteshowr	Kathmandu	mg@gmail.com	Confirm	Deactivate Employer	
WSP - Skills for Employment Programme	Sabin Bastola	Tikathali	Lalitpur	wsp@gmail.com	Confirm	Deactivate Employer	
Yeti Paints Nepal	Kabindra Lal dhakal	Kaleshwar	Lalitpur	yeti@gmail.com	Confirm	Deactivate Employer	

Annex Figure 3. Home page for admin

New here ?

Do not have account? Register Here!

REGISTER

Log In

Hari

...

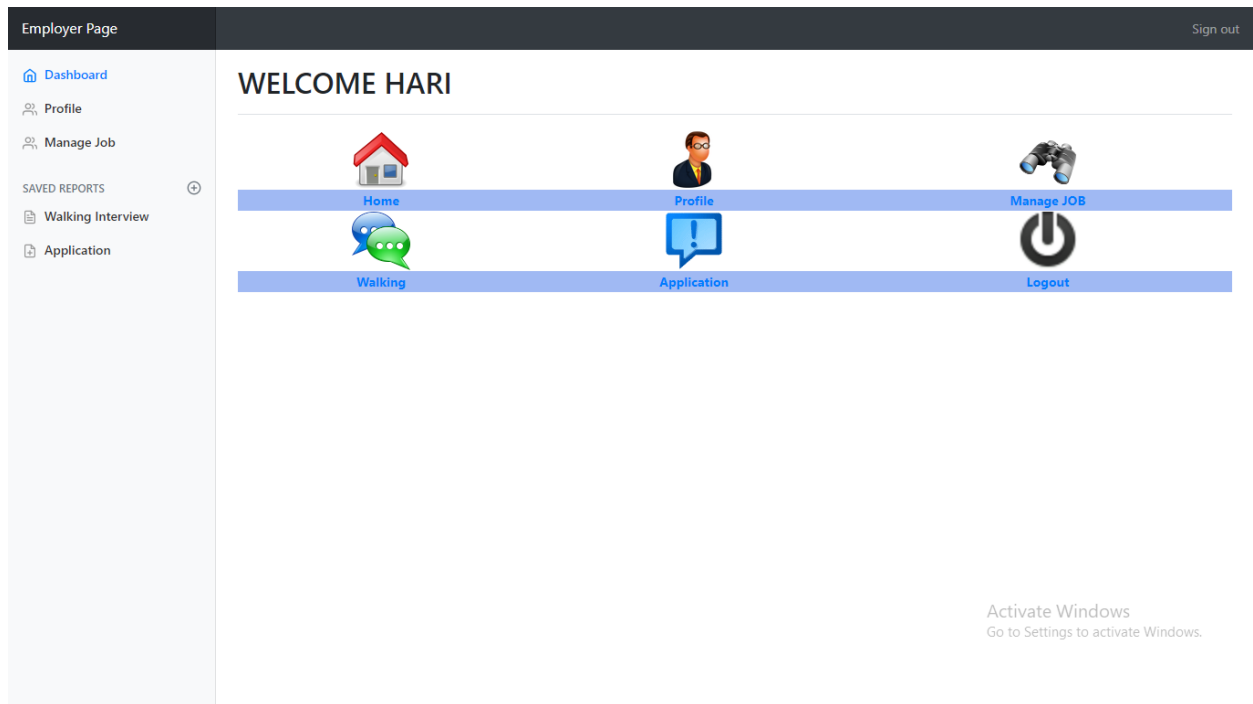
LOGIN

[forget Password?](#)
[Return Home](#)

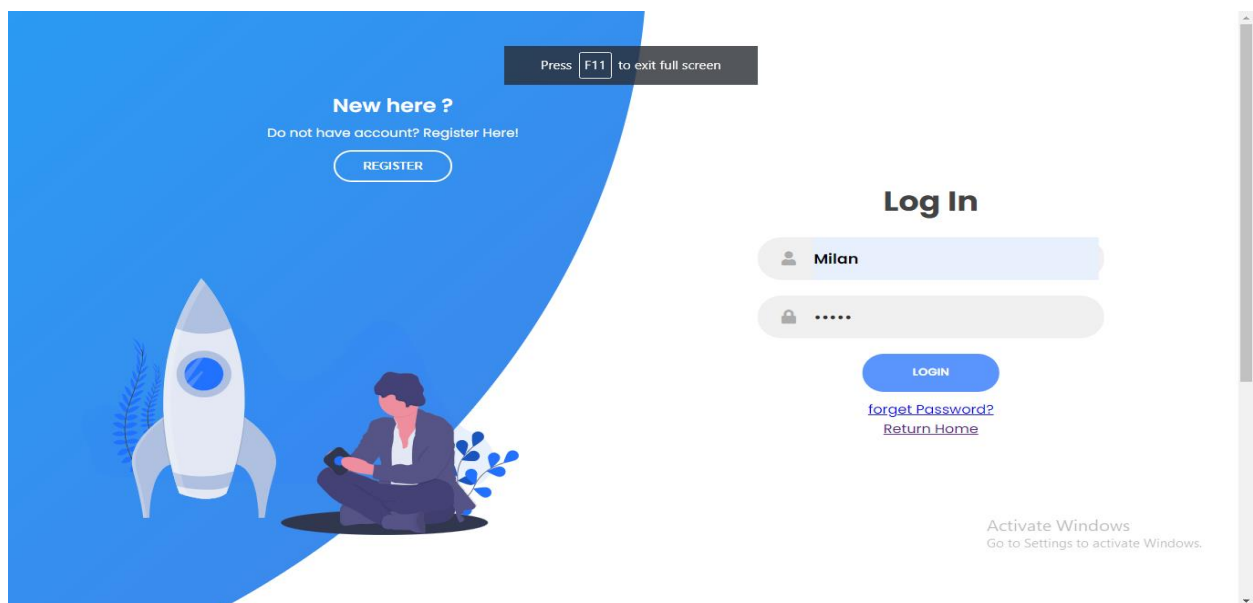
Activate Windows

Go to Settings to activate Windows.

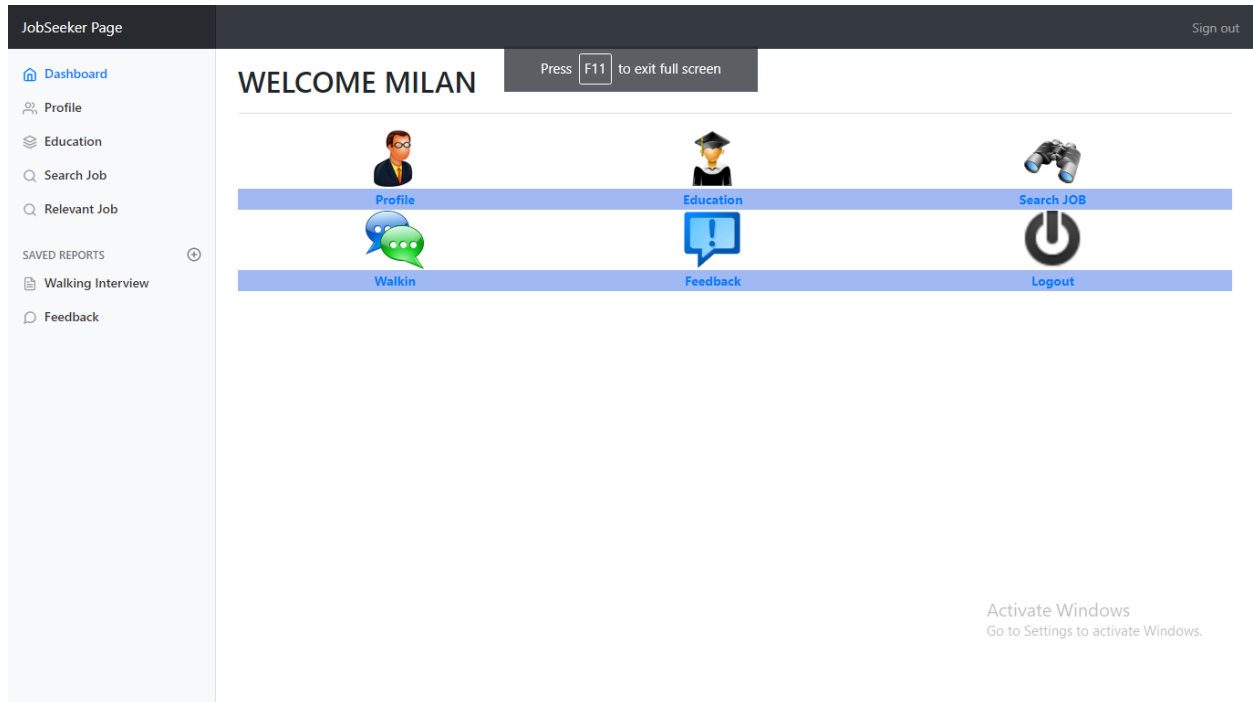
Annex Figure 4. Log in page for Employer



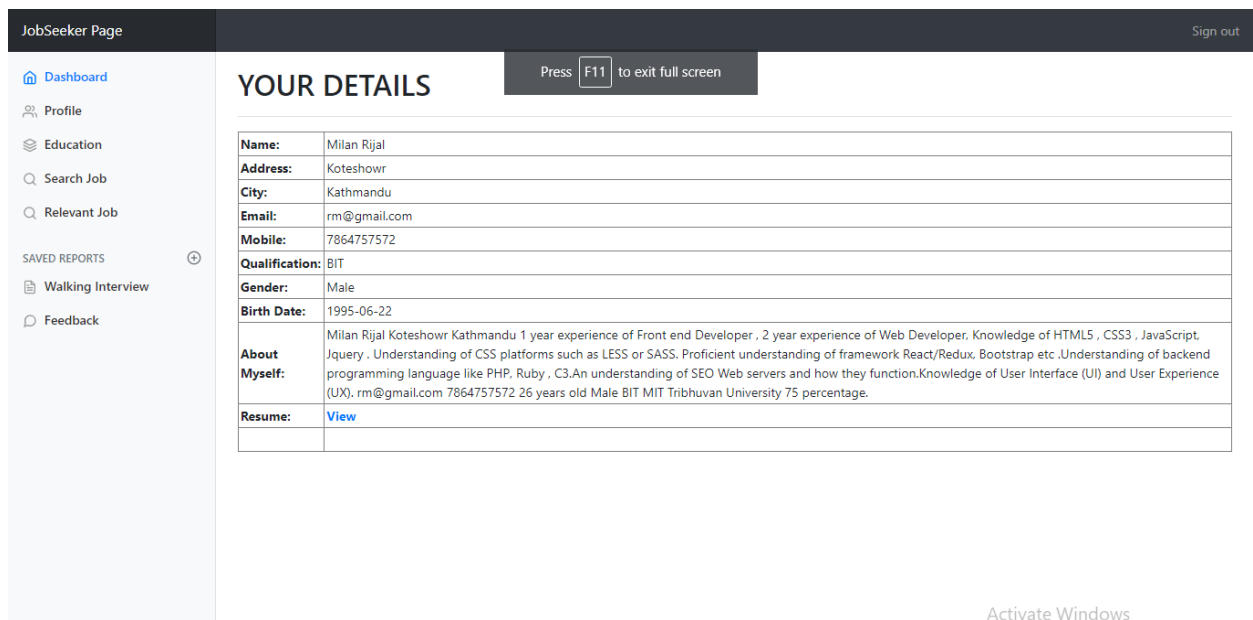
Annex Figure 5. Home page for employer



Annex Figure 6. Login page for job seeker



Annex Figure 7. Home page for job seeker



Annex Figure 8. Job seeker's Profile

JobSeeker Page

Sign out

Dashboard

Profile

Education

Search Job

Relevant Job

SAVED REPORTS

Walking Interview

Feedback

RELEVANT JOBS FOR YOU

JobId

8

CompanyName

Tekvortex

JobTitle

Front End Developer

Vacancy

3

Qualification

BIT , BSC CSIT , BCA or any Computer related field

Description

IT & Telecommunication > Web Developer/Web Designer

Job Specification

We are looking for a experienced Front End Developer who are willing to work at our company located at located at Pulchowk, Lalitpur and expand their knowledge. The candidate must be of age group 25-30. They must at least have degree of BIT , BSC CSIT , BCA or any Computer related field. Additional requirement include : Should have at least 2 years experience of front end developer

Skills required: HTML or HTML5 and CSS3 or CSS and JavaScript and jQuery . Should be familiar with framework like Bootstrap , Angular JS or React/Redux. Basic understanding of server-side CSS pre-processing platforms, such as LESS and SASS Good understanding of AJAX . Familiarity with tools such as as Gimp or Photoshop is a plus. Should have understanding SEO. At least Knowledge of one Backend programming language.

Apply For Job

JobId

9

CompanyName

SoftTech Foundation

JobTitle

Web Developer

Vacancy

2

Qualification

Bachelors In Computer Science Field like BCA, BIT , BSC CSIT

Description

Information Technology and Web Development

Job Specification

We are looking for a experienced Web Developer who are willing to work at our company located at located at Kamalbinayak , Bhaktapur and expand their knowledge. The candidate must be of age group 20-28. They must at least have degree of Bachelors In Computer Science Field like BCA, BIT , BSC CSIT. Additional requirement include : Should have at least 1 year experience as Web Developer. Knowledge of coding language like HTML ,HTML5, CSS , CSS3. Frontend web programing languages and skills such as JavaScript, Ajax and An understanding of SEO Web servers .

Apply For Job

JobId

10

CompanyName

Broadway Infosys

JobTitle

Sr. PHP Developer

Vacancy

2

Qualification

Bachelors In Computer Science

Description

Programmer/ Software Engineer, Software Architect.

Job Specification

We are looking for a experienced Sr. PHP Developer who are willing to work at our company located at located at Duwakot , Bhaktapur and expand their knowledge. The candidate must be of age group 25-30. They must at least have degree of Bachelors In Computer Science. Additional requirement include : At least multiple years of programming experience in PHP .Experience with Drupal desired and Laravel .knowledge of MySQL. Experience with APIs and Knowledge of HTML , CSS and Java Script.

Apply For Job

Activate Windows
Go to Settings to activate Windows.

Annex Figure 9. Recommended jobs for job seeker

Annex II: Questionnaire

1. Do you prefer applying for jobs online or physically visiting job houses?
2. What kind of job are you interested in?
3. What features do you expect in an online job site?