#### ACKNOWLEDGEMENT

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Also, we are thankful to ER. Nisha Karki, Head Of Department(HOD) of Information Technology Department of Aryan School Of Engineering for providing resources helpful for our project.

We would like to express our deep gratitude to our Teachers and friends for their support and help to implement impower our ideas. The discussions with them on various topics of our works have been very helpful for us to enrich our knowledge and conception regarding the work.

#### **ABSTRACT**

Following is a project report submitted in the partial fulfilment of the degree of Bachelor of Information Technology on the topic NepJobs(an online jobsite). Here, the detail of the previous system and the possible amendments made in our project regarding them are stated first and then the changes in the form of new project is developed. The contents that are included in the later part of project report are; Background and introduction of the project (NepJobs), Existing area of possibilities, possible amendments, Introduction, advantages, benefits and significance of developed website, cost for the products, most of the outcomes and some methodologies used to gather the relative information about the previous system and the possibility of success of the project. To keep pace with new technology and tactics, NepJobs is an web based program that is designed to give easy and direct access(contact) with the employers and get a chance of being employed(hired) for the job seekers. The whole process is completely online. Which helps us to faster searching and sorting. PHP/MYSQL, CSS, JavaScript, Photoshop, Laravel Framework, Paint etc will be used to achieve the project because of its flexibility. MY SQL Server will be used as the database management system.

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## LIST OF ABBREVIATION:

SL	Abbrev	Full Name
1	OJSP	Online Job Seeker Portal
2	OS	Operating System
3	IDE	Integrated Development Environment
4	CSS	Cascading Style Sheets
5	RDBMS	Relational Database Management System
6	SQL	Structured Query Language
8	SDLC	Software Development Life Cycle
9	DFD	Data Flow Diagrams
10	ERD	Entity Relationship Diagram

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#### **CHAPTER ONE:**

#### 1.0. INRODUCTION AND PROJECT BACKGROUND:

### 1.1. INTRODUCTION TO NEPJOBS:

Job Search Portal is a web application, which serves jobseekers to find available job vacancies and Employers to identify eligible job seekers with the prospect of selecting the most qualified candidates. The only way to select best-qualified candidate is to have a pool of eligible applicants, which is possible by drawing the interest of individuals in the market. Job search portals best serve this purpose. E-recruitment has become the standard means for employers and job seekers to meet their respective objectives. The traditional methods for recruitment includes Job fairs, , Employee referrals, advertising in the newspapers, televisions etc. With the advancement in technology and growth of internet usage, the e-recruitment has revolutionized the way organizations hire and candidates search for jobs. With the Online Job search portals, the recruitment process is speeded up at every stage from job postings, to receiving applications from candidates, interviewing process. The cost of searching/posting jobs will be much less compared to the traditional way of advertising. Job search portal stands as an effective means for Employers to outline the job vacancies, responsibilities and qualifications to attract jobseekers. Using the portal jobseekers can extensively search for jobs in companies, organizations and regions they may otherwise have not learnt. In addition, candidates/Employers can write a review about an organization, which might help them to change the way things are done.

Job sites are one of the sources through which job seekers search for the jobs. The major activities that are carried out through the online mode for the job search is automated easily through the use of this website without any difficulty. The NepJobs script website helps in accomplishing this task. The reliability on this website can be more without any difficulty. The job seekers can update their resumes with great ease and without any difficulty. In order to access this application both the employee and the employer need to register through the use of username, email, password and other necessary details after verified by the admin of the website. Above all this the admin of the website has the full power over the website and also the job seekers as well as the employers(companies).

#### 1.2. STATEMENT OF OBJECTIVES:

### 1.2.1. SPECIFIC OBJECTIVE:

For Generally, the proponents "aims to design, develop, and implement a Job searching site for job seekers and employers" speed up employee hiring processes such as posting vacancies, receiving resumes and application from job seekers, selection of the best applicant, interviews and final hiring etc.

### 1.2.2. GENERAL OBJECTIVES:

- The purpose of designing the online job portal is to give the job seekers a platform for finding a right and a satisfactory job according to their qualification. It also connects the job seekers with the major agencies.
- ➤ The NepJobs Portal System developed provides the members with jobs information, online applying for jobs and many other facilities. The basic area of coverage of the project is given as under.
  - Job Seekers Area
  - Recruiters Area
  - Administrator's Panel

## 1.3. MODULES OF NepJobs WITH FEATURES:

In general, NebJobs is composite of three main modules with other basic modules. The major three modules of NepJobs are as listed below:

- Admin Module:
- Job Seekers Module
- Employers(Companies) Module

### 1.3.1 SPECIFIC FEATURES OF ALL MODULES:

#### 1.3.1.1 Admin Module Features

- Admin users
- Manage JAdmin Features
- Admin users
- Manage Jobs
- Manage Companies
- Manage Seekers
- Manage Content Pages
- Manage SEO
- Manage FAQ
- Manage Testimonials
- Manage Site Languages
- Manage locations
- Countries
- Countries Detail
- States
- Cities
- Manage Employer Packages
- Manage Seeker Packages

•	Manage Site Settings		
•	Manage Companies		
•	Manage Seekers		
•	Manage Content Pages		
•	Manage SEO		
•	Manage FAQ		
•	Manage locations		
	o Countries		
	o Countries Detail		
	o States		
	o Cities		
•	Manage Employer Packages		
•	Manage Seeker Packages		
•	Manage Site Settings		
•	Manage Job Attributes		
	<ul> <li>Language Levels</li> </ul>		
	o Career Levels		
	o Functional Areas		
	o Genders		
	o Industries		
	<ul> <li>Job Experiences</li> </ul>		
	<ul> <li>Job Skills</li> </ul>		
	<ul> <li>Job Titles</li> </ul>		
	<ul><li>Job Types</li></ul>		
	<ul> <li>Job Shifts</li> </ul>		
	<ul> <li>Degree Levels</li> </ul>		

- Degree Types
- o Major Subjects
- Result Types
- Marital Statuses
- Ownership Types
- o Salary Periods

### 1.3.1.2 Job Seeker Module Features

- Free Registration
- Created Profile
- Edit profile
- Create Online Resume
  - Add Projects
  - Add Experience
  - Add Education
  - Add Skills
  - o Add Languages
- Upload Multiple Resume
- Apply on Jobs
- Search Jobs
- Manage Applied Jobs
- Mark Job as Favourite
- View Favourite Jobs
- Filter Jobs
- View Companies to Following list
- View Followings
- Send Message to Candidates

• View Messages

## **1.3.1.3** Employers Module Features

- Free Registration
- Created Profile
- Edit profile
- Employer Packages
- Post Jobs
- Manage Posted Jobs
- Edit or Delete Jobs
- Manage Applied Candidates
- Shortlist Candidates
- Manage Shortlised candidates
- Search Resume
- Filter Resume
- View Candidates Profile
- Download Resumes
- View Followers
- Send Message to Candidates
- View Messages from Candidates

## 1.4. ADVANTAGES OF THE NepJobs:

All the features of each module resemble the advantages that are provided by the project NepJobs. However, some of the significant features are listed below:

- Filter, Search facility for job seekers according to their required vacancy.
- > Sending resume saves effort, time and cost of job seeker
- ➤ All vacancies are available on a single interface
- ➤ Job seeker can set privacy level for different companies
- ➤ Job seeker can save jobs according to their needs
- ➤ Most recent jobs are displayed on the home page
- Ease of posting job vacancy by employer
- ➤ Ease of filtering applications that fit into eligibility criteria by scanning the resumes
- Ease of communication between job seeker and employer by internal messaging
- Easy generated reports

#### **CHAPTER TWO:**

### 2.0. LITETRATURE REVIEW:

Technology is constantly changing. Society as we know it depends on this fact that which we take for granted today would have been the stuff of science fiction as little as fifty years ago. In around fifty years of time, we will doubtless be excited, perturbed and baffled by yet more new developments. In the early years of the twenty first century, it is computers and the Interne that have captured the public imagination and found their way into not just the working environments, but increasingly into the domestic spaces.

Here, in the context of online jobsites in Nepal we have come up with some relevant findings which are followed by later statements. According to the Central Bureau of Statistics 2014, a total of 4,000,200 people in Nepal is not getting jobs that match their skills and qualifications. The survey also reveals that 40,000 to 50,000 people who have a Bachelor's degree are still unemployed. These figures affirm that finding a job of choice is not as easy it looks in Nepal. However, there are some ways that can help you to deal with this problem. And in this digital era, the best way you can approach to resolve this problem, at least to some extent, is through the internet; to be specific through online job portals [1].

In the past few years, many Nepali online job portals have helped countless people to gain employment. I went through almost all of them and have compiled a list of the best Nepali job portals that have a good credence in the market and useful features onboard. Here is the list of the five best Nepali job portals that you can use to start your next job hunt.

MeroJob is one of the largest online job portals in Nepal. It is also the most popular one. The site came into existence and started its journey back in 2008. The site is updated on daily basis and it provides you information about thousands of jobs. It has nifty features to help you find jobs that you want. It claims to have more than 250,000 registered job seekers and also asserts to have partnered with 10,500 plus organizations [2].

JobsNepal established 17 years ago in 2000 is the most mature job portal in Nepal. It is also one of the popular job portals in Nepal that provide thousands of job listings. It is the close competitor to MeroJob. Besides, listing job vacancy details on the site, it also acts as a staffing firm. It helps organizations in recruiting the right employees for their

organization in a short period of time. It claims to have more than 8,000 companies registered companies, 5,000+ daily visitors and a comprehensive database of 25,000+ candidates.

KantipurJob, this job portal is not as old as JobsNepal or MeorJob yet is growing at a good pace. It is very active and updated daily. It provides a comprehensive list of jobs vacancies in Nepal. To help the job seekers to be a better candidate, the site also provides some career resources which you can find here on this link. The site also has a very useful feature called Job Alert. With this feature, you can receive a list of jobs that matches your profile.

RamroJob is one of the leading job portals in Nepal. Whilst the site is in Beta phase, it is a good source to find information about the recent job vacancies in Nepal. The site is well maintained and updated daily. The site also provides a digital list of jobs published in national daily newspapers. The site has a dedicated section for it where you can find the details of all the jobs published in the popular national daily newspapers. It also facilitates you to filter the jobs from the list by selecting a particular newspaper.

Kumari Jobs, this site is also one of the new and growing job portals where you can find thousands of job vacancies. The site is a subsidiary of First Job Nepal Pvt. Ltd, a Kathmandu-based human resource consulting firm operating since 2014.I must say that the design of the site looks better than any others jobs portals. The site is clean and has an easy navigation to ease its user to click through the pages. The site has divided the jobs into 60+ categories. So, you can find the job of your choice with less hardship. You don't have to drill down the macro categories to find the jobs. Like RamroJob, this site also provides a list of jobs published in popular national daily newspapers. The site also suggests a list of similar jobs based on the jobs you had visited earlier on the site. [3]

In the scenario of the assignment, we are required to develop a web-based application on Job Portal Management System. In this time of recession where everyone, is either experienced or fresher, is in search for a job. This job portal can prove to be very helpful since it allows users of different profile to upload their CVs, search job on the basis of their qualification. Every user can access through user id and apply for multiple jobs at a time.

#### 2.1. COMPARISION:

Although, there are not very much space for improvement in any of the current online jobsites in Nepal we thought that there are still some areas where we can bring improvement with our project. This does not mean that our project is going to be any better than any of current portals or even on the equal level. The main idea of us getting involved in this project is to carry on with what is trending. The fields that we thought and tried to make improvements in the current services can be as follows:

- Addition of multiple categories for jobs resembling the current availabilities.
- Helping people find jobs being specific to not only to functional areas, industries
  or skill but location. Yes, they can now be able to search jobs on the locations
  that are feasible to them. Jobs can be specific to state and city.
- Not only this the website can be launched in an international level as it is not limited to one country jobs from multiple countries with all their functional and industrial areas can be posted by the employers and the seekers can apply to jobs that they are feasible with.
- The seekers are also able to post the details of the multiple projects they were linked with in the past in our website.

Note: However, we made some changes to the current sites, we are still way behind from them as we do not have our own application and our website is not fully responsive in current scenario. That means we have lots of things to improve to get close to those sites(applications) and get past them.

### **CHAPTER THREE:**

### 3.0. METHODOLGY USED FOR DEVELOPMENT

### 3.1 METHODOLOGY FOR WEBSITE DEVELOPMENT:

The waterfall model is a sequential design process, often used in software development processes, in which progress is seen as flowing steadily downwards (like a cascade of waterfall) through the phases of Conception, Initiation, Analysis, Design, Construction, Testing, Production/Implementation, and Maintenance.

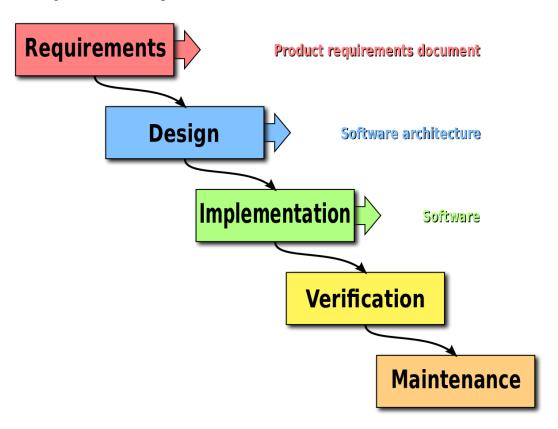


Figure I: SDLC (Waterfall Model)

#### **WATERFALL MODEL:**

The name of this model is justified by the diagrammatic representation which resembles a cascade of waterfall. It consists with intuitive set of phases. It has 6 phases:

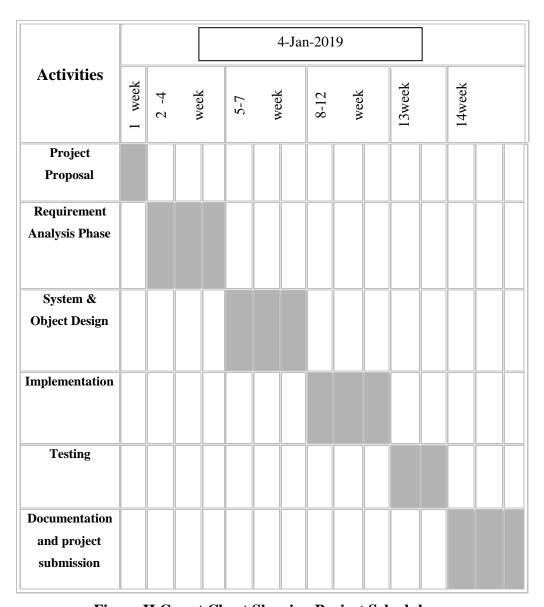
- > Requirements
- > Design
- > Implementation
- Verification
- ➤ Maintenance

The different phases starting from feasibility study to integration and testing phase & delivery is known as developmental pan. At the end of developmental part, product is to be delivered to customer and maintenance commences after that. An activity that's spans all phases of any software development is project management. Even though conveniently omitted in the life cycle diagram, project management nevertheless is an important activity in the life cycle and deals with the managing the effort at all stages of product development and maintenance [4].

#### REFERENCE TO THE PROJECT:

Here, the main reason of implementing water fall model of SDLC other than any other SDLC model is that all the requirements for the final project outcome was known previously after all the research works and planning were done. The main requirement was only making some amendments in the current system which had possibilities for improvement.

# **3.2. SCHEDULE FOR PROJECT : (Gannt Chart):**



**Figure II Gannt Chart Showing Project Schedule:** 

#### **CHAPTER FOUR:**

### 4.0. SYSTEM ANALYSIS AND DESIGN:

### 4.1. SYSTEM ANALYSIS:

#### 4.1.1. FEASIBILITY STUDY

Feasibility studies aim to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats as presented by the environment, the resources required to carry through, and ultimately the prospects for success. In its simplest terms, the two criteria to judge feasibility are cost required and value to be attained.

Feasibility Study: The feasibility study of a project can be ascertained in terms of technical and economic factors or both. A feasibility study is documented with a report showing all the ramifications of the project. Five common factors of Feasibility Study: The acronym TELOS refers to the five areas of feasibility - Technical, Economic, Legal, Operational, and Scheduling.

### **Technical Feasibility:**

Technological feasibility is carried out to determine whether the company has the capability, in terms of software, hardware, personnel and expertise, to handle the completion of the project. Since we are using Laravel framework with PHP and MYSQL Server, technically our project is feasible.

#### **Economic Feasibility:**

Economic analysis is the most frequently used method for evaluating the effectiveness of a new system. More commonly known as cost/benefit analysis, the procedure is to determine the benefits and savings that are expected from a candidate system and compare them with costs. If benefits outweigh costs, then the decision is made to design and implement the system. An entrepreneur must accurately weigh the cost versus benefits before taking an action. We found that economically our project is very feasible with less effort and expense and more possible positive outcomes.

#### Legal feasibility:

Determines whether the proposed system conflicts with legal requirements e.g. a data processing system must comply with the local Data Protection Acts. Although the payment system we have included are not legally approved by the government it is only for the demonstration purpose and will be replaced with the local payment methods and necessary API's.

### **Operational feasibility:**

Operational feasibility is a measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development.

### **Schedule feasibility:**

A project will fail if it takes too long to be completed before it is useful. Typically this means estimating how long the system will take to develop, and if it can be completed in a given time period using some methods like payback period. Schedule feasibility is a measure of how reasonable the project timetable is.

### **4.2. REQUIREMENT ANALYSIS AND SPECIFICATION:**

The goal of the requirement analysis and specification phase is to clearly understand the customer requirements and to systematically organize the requirements into a specification document. The main activities carried out during requirements analysis and specification phase are of two types as follows: Requirements gathering and analysis Requirements Specification The main purpose of the requirements analysis activity is to analyze the collected information to obtain a clear understanding of the product to be developed, with a view to removing all ambiguities, incompleteness, and inconsistencies from the initial customer perception of the problem. The SRS document is the final outcome of the requirements analysis and specification phase. There are 3 main types of problems in the requirements that the analyst needs to identify and resolve: Ambiguity Inconsistency Incompleteness. Other steps are discussed accordingly.

#### **System Requirements:**

The successful running of any project primarily depends upon hardware and software used in its compilation. The hardware used in the machine should be such that it supports the software that is to be mounted for assembling the project. This project deals with the hardware and software, which is available readily and easy on each and every machine given to the user.

#### • Hardware Requirements

- 300 MHz Pentium Processor
- 256 MB RAM
- 40 GB hard disk
- 1.44 MB Floppy Drive
- CD-ROM Drive
- 16-Bit color display, 640x480 resolution
- Printer
- Mouse

### • Software Requirements

- Windows Xp with Service Pack II
- PHP
- MY SQL Server

## The site has been developed using:

- Front end: HTML, CSS
- Back End: PHP, My SQL Server
- Framework: Laravel

NOTE: All the requirement(Both hardware and software) are result of assumptions and no real life testing or implementation had been carried out on those environments.

## 4.3 SYSTEM DESIGN.

## **4.3.1 USE CASE DIAGRAM:**

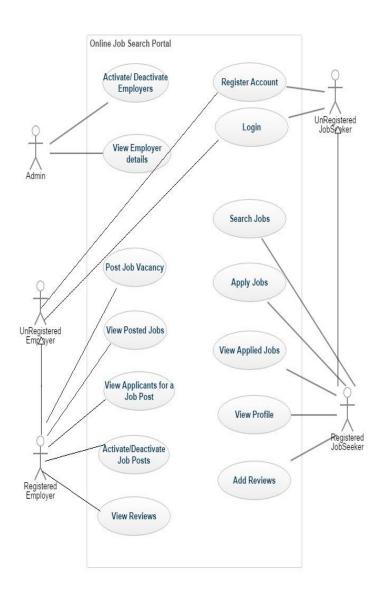


Figure III: Use Case Diagram

### **4.3.2 DFD DIAGRAM:**

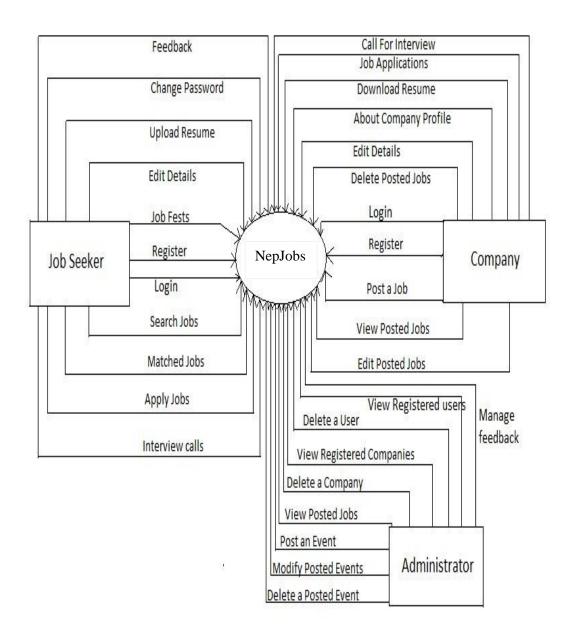


Figure IV: Level 0(Context-Level)

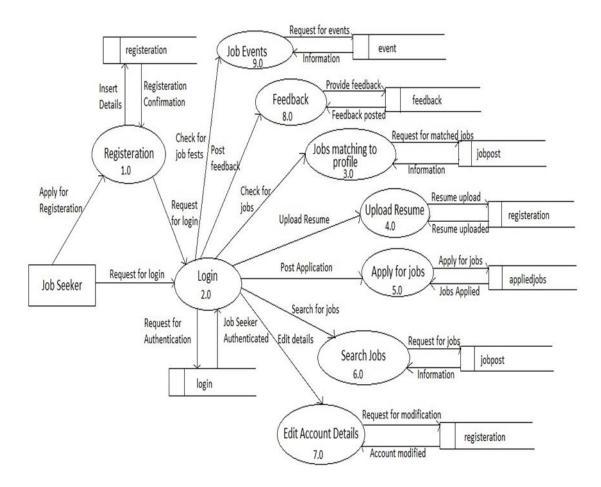


Figure V: Level 1(Seeker)

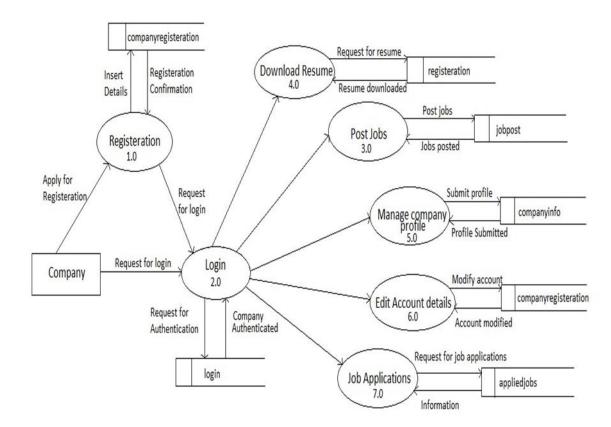


Figure VI: Level 1(Company)

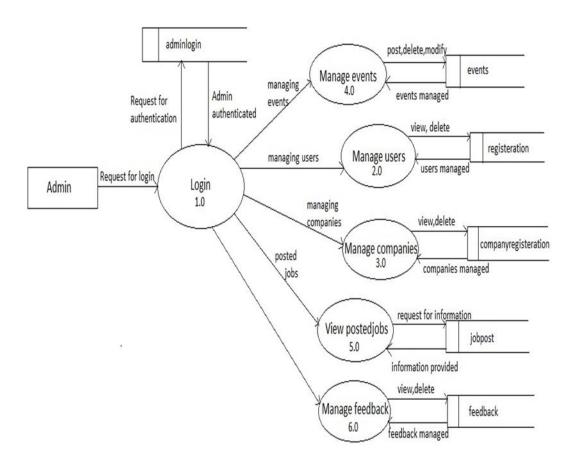
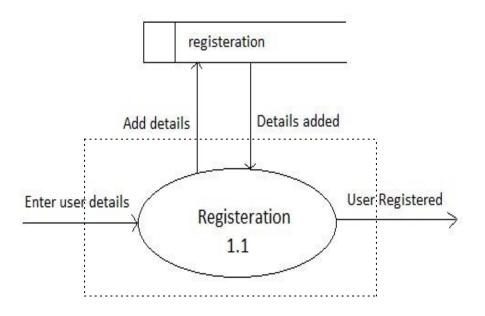
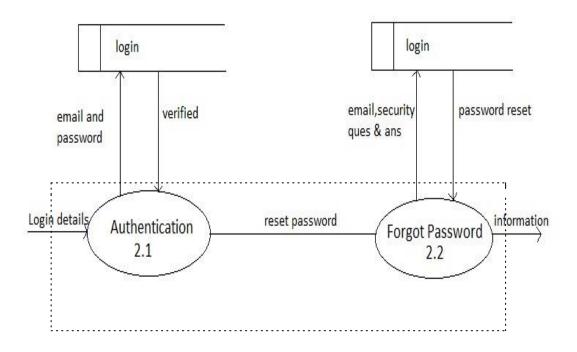
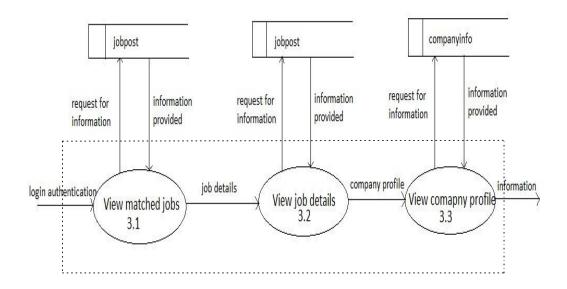


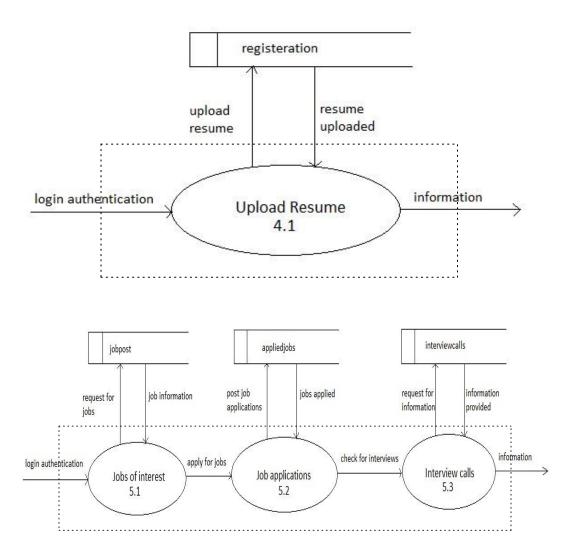
Figure VII: Level 1(Admin)

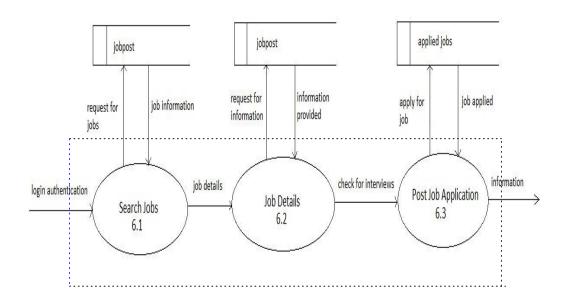
Figure VIII: Level 2 (User)

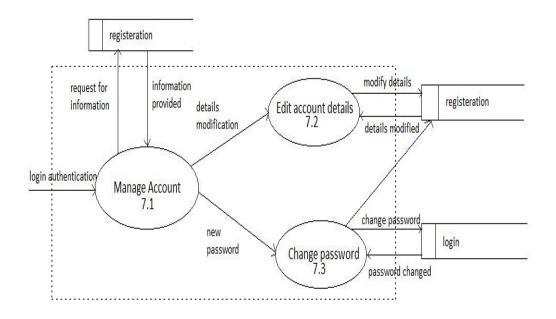


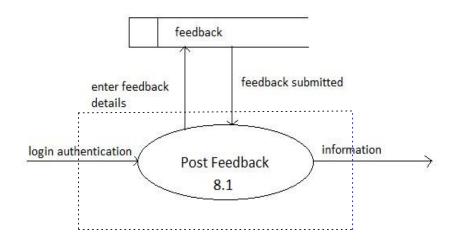












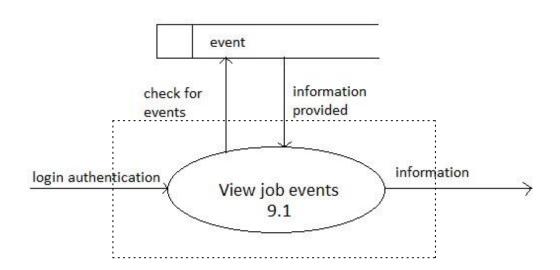
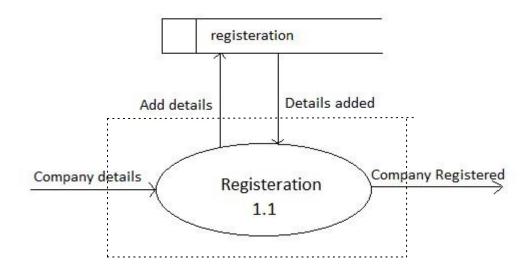
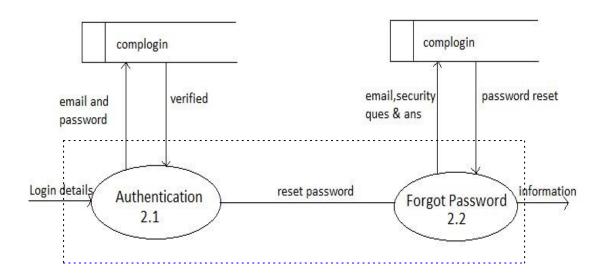
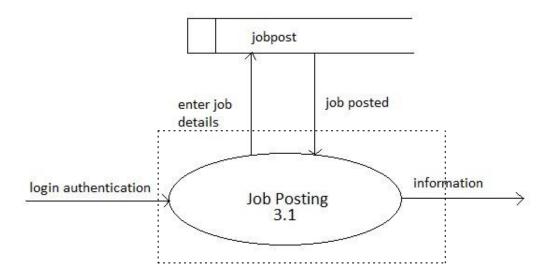
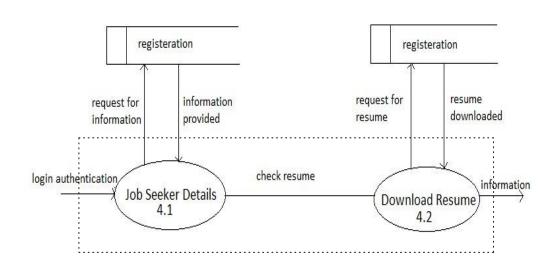


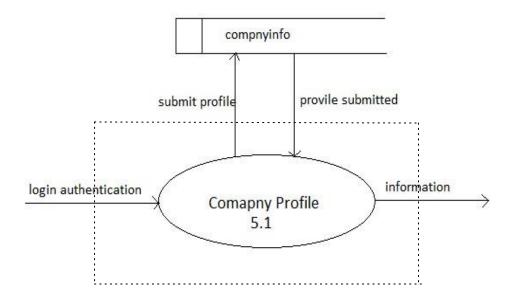
Figure IX: Level 2(Company)

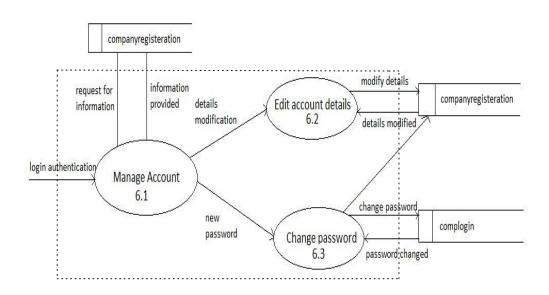












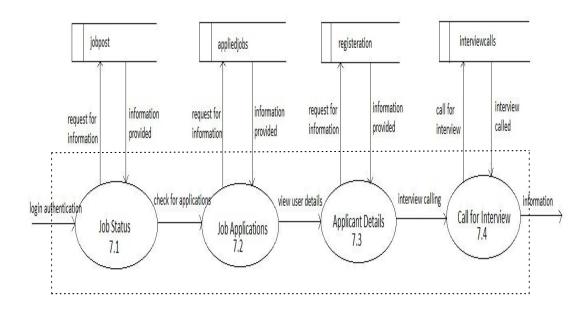
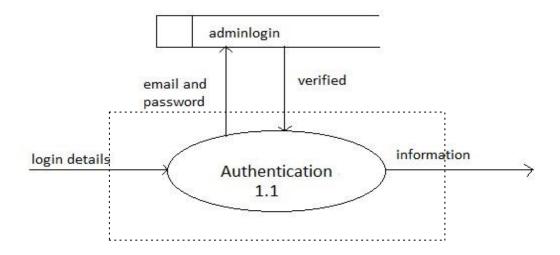
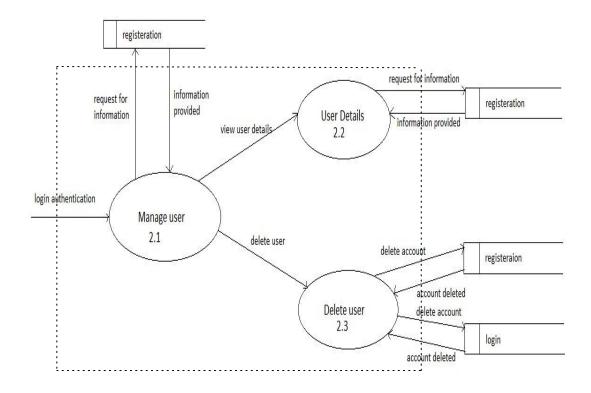
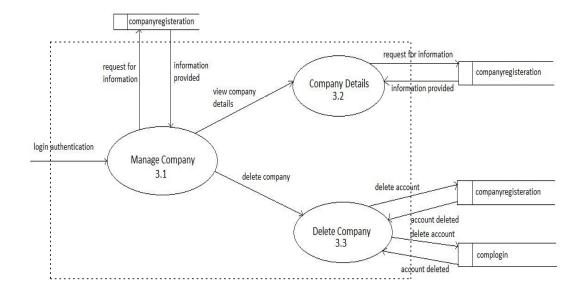
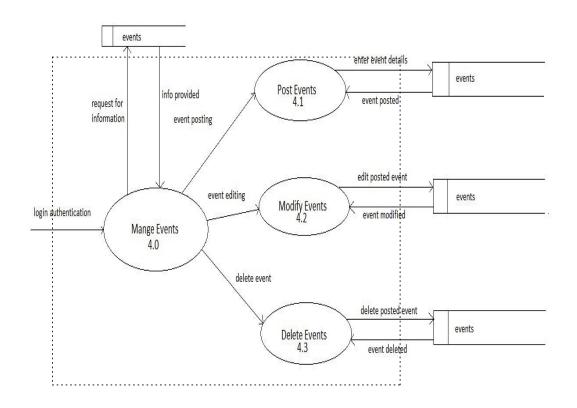


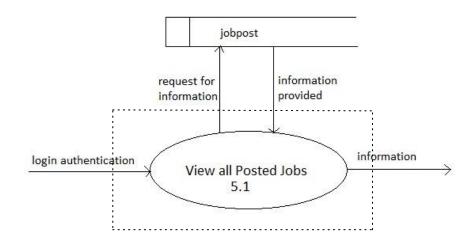
Figure X: Level 2 (Admin)

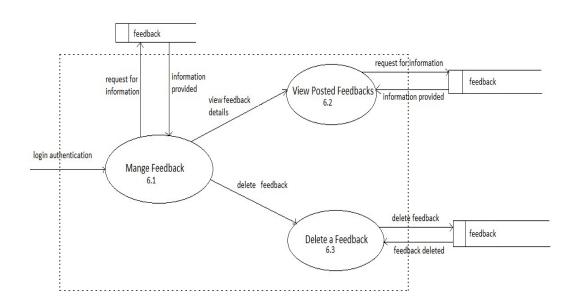












### 4.3.3. ER-DIAGRAM:

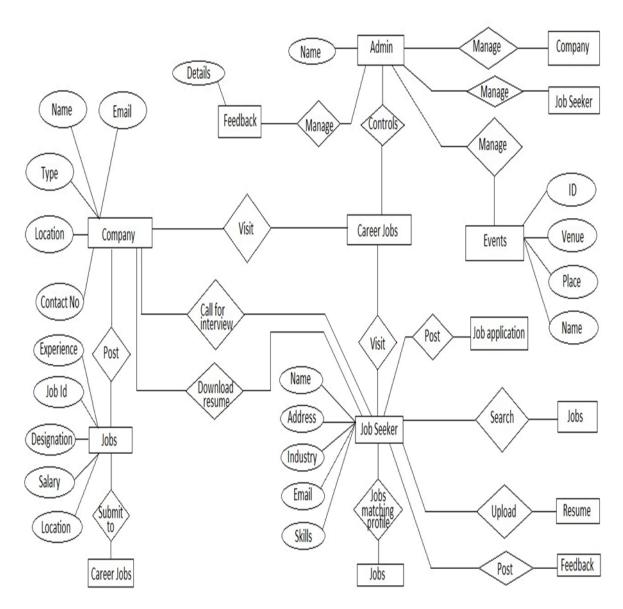
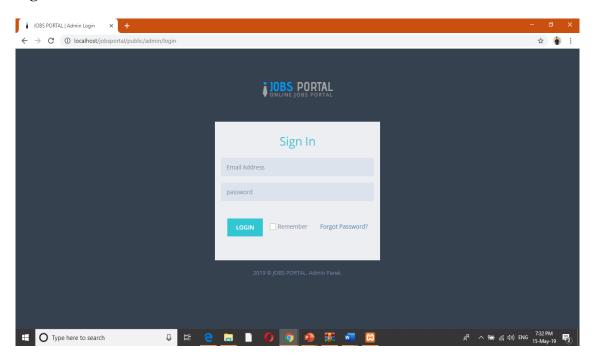


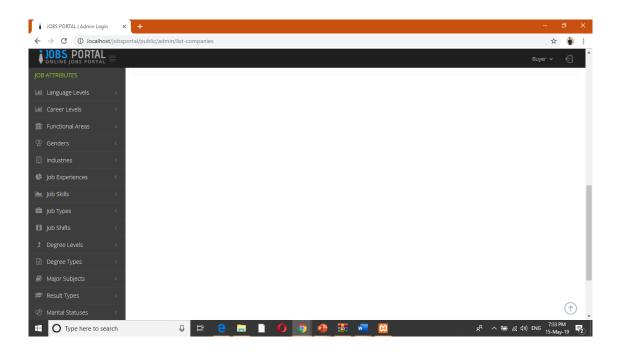
Figure XI: ER Diagram

### **CHAPTER FIVE:**

# **5.0. PROJECT OUTPUTS(SCREENSHOTS):**

### Figure XIII: Admin Side





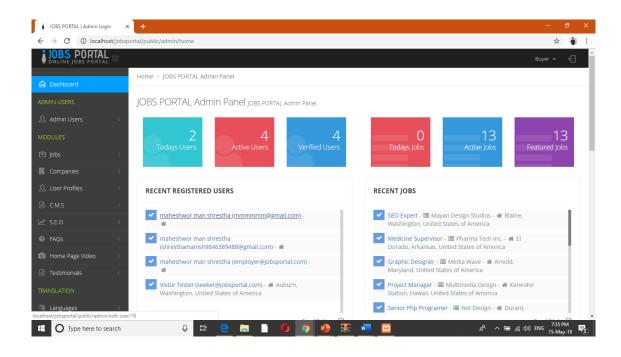
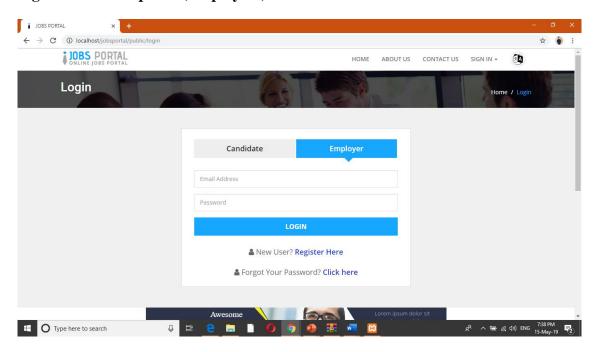


Figure XIV: Companies(Employers) Side:



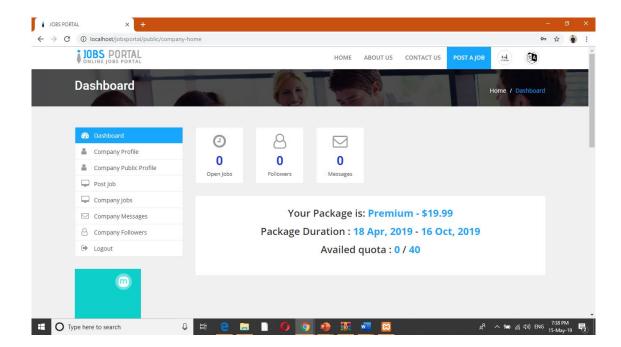
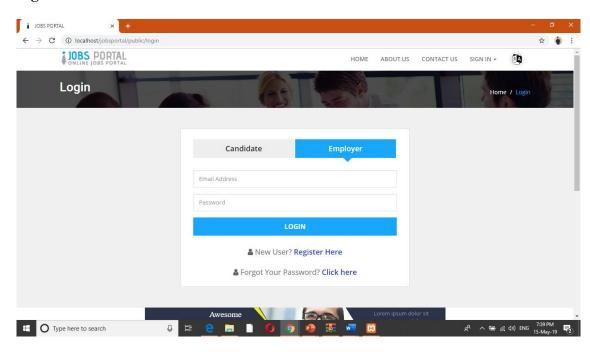
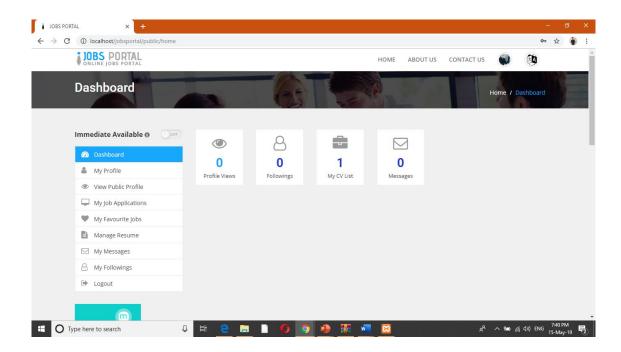


Figure XV: Seekers Side:





#### **CHAPTER SIX:**

#### 6.0. EPILOGUE:

Epilogue is a part of a speech or a document that resembles the final outcomes or the conclusions of the entire projects based on predefined criteria.

#### **6.1. LIMITATIONS:**

- Only a website. Means it does not serve as a application rather serves as a simple online platform.
- Limited to some programming languages for development based on the criteria provided by the university itself.

#### **6.2. CONCLUSION:**

We can conclude that the project NepJobs(online job portal) will be a project with a high success rate which will be able to deliver all the needs and requirements of employee (job seekers) as well as the employer (recruiter). Job seekers can easily find jobs completely related to their field and put an application online and confirm if they are feasible for the job and they are hired by the employers or not.

It was clearly known during the development of project that it is a completely dynamic project which has never ending possibilities for improvement irrespective with the platform used for its creation.

#### **6.3. FUTURE ENHANCEMENT:**

- Creating an application rather than just a website.
- Creating user friendly and fully responsive application.

### **CHAPTER SEVEN:**

### 7.0. REFERENCES:

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