



# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

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## Internship Portal

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### ABSTRACT

An internship enables you to gain first-hand exposure of working in the real world. It also allows students to harness the skill, knowledge, and theoretical practice they learnt in university. Internships provide a nice learning curve for students with little experience of the professional world. Internships provide students numerous perks: They gain experience, develop skills, make connections, strengthen their resumes, learn about a field, and assess their interests and abilities. Before Internship Portal students have to travel to various places to find interns, which takes a lot of their time and energy. This project shall enable the college students to apply for internship through a web portal. Through this interface the students shall be able to view the available positions for internship. It is a simple user interface which has two types of user's admin and student. The student shall be able to login into the system and apply for positions. The interface provides a grid view which displays the job name, description and the start and end date of projects. The student shall be able to search for a relevant job and apply for those positions.

Keywords:- Web Based System, Internship, Online, Database, Monitoring.

# Chapter 1 INTRODUCTION

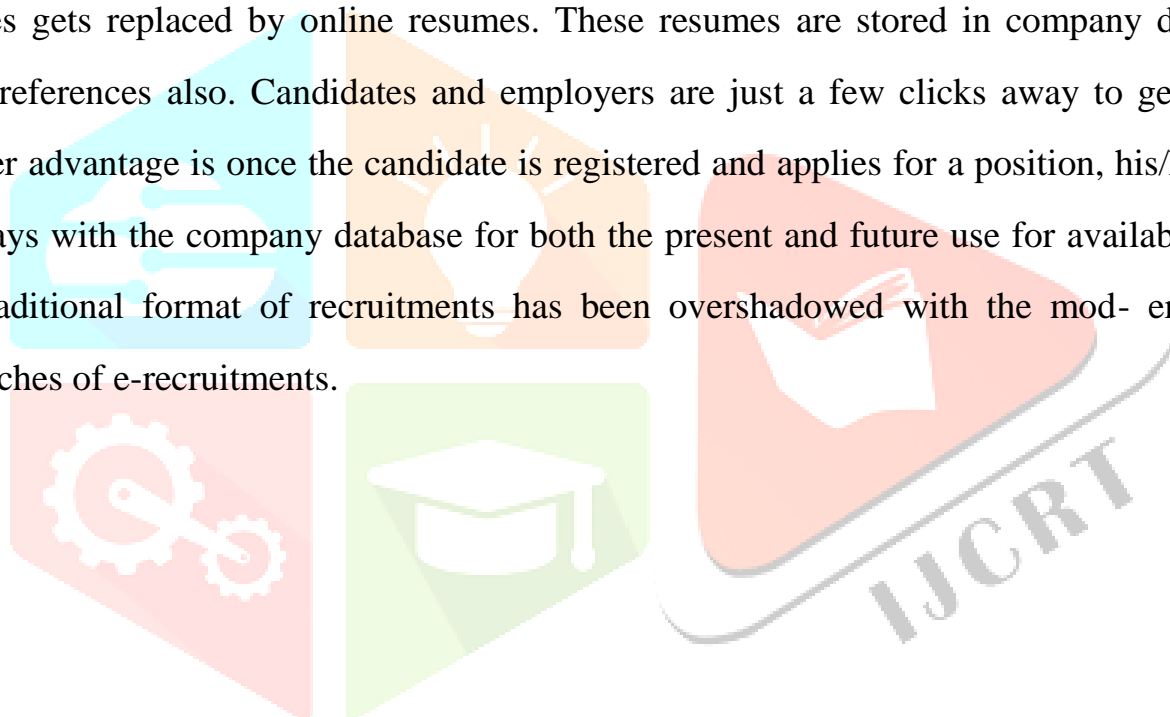
An internship is a period of work experience offered by an organization for a limited period of time. Once confined to medical graduates, the term is now used for a wide range of placements in businesses, non-profit organizations and government agencies. They are typically undertaken by students and graduates looking to gain relevant skills and experience in a particular field. Employers benefit from these placements because they often recruit employees from their best interns, who have known capabilities, thus saving time and money in the long run. Internships are usually arranged by third-party organizations which recruit interns on behalf of industry groups. Rules vary from country to country about when interns should be regarded as employees. The system can be open to exploitation by unscrupulous employers. Internships for professional careers are similar in some ways, but not as rigorous as apprenticeships for professions, trade, and vocational jobs. The lack of standardization and oversight leaves the term "internship" open to broad interpretation. Interns may be high school students, college and university students, or post-graduate adults. These positions may be paid or unpaid and are temporary. Typically, an internship consists of an exchange of services for experience between the intern and organization. The benefit of bringing an intern into full-time employment is that they are already familiar with the company, their position,

and they typically need little to no training. Internships provide current college students the ability to participate in a field of their choice to receive hands on learning about a particular future career, preparing them for full-time work following graduation.

## 1.1 Project Overview

Whether seeking the intern for the first time or re-entering after a break, intern search is a challenging task. But how about tools/applications, making this tedious process look friendly, systematic and easy to reach out, to students. Searching and landing up with a dream intern is a tedious process for a student and on the opposite hand, connecting with desirable candidates best fit for a job position is a challenging and important work for the student. This project is aimed at making such challenges much easier despite the geographic location of either the job seeker or the Company. “Internship Portal” is an online web application which is an internship search portal. It is a simple, efficient, convenient and systematic portal through which students and employers connect with each other. This portal enables candidates looking for jobs to register themselves with the website, look up for different jobs according to their qualifications and apply for those jobs conveniently. Student can also update their details entered during registration as well as their skill sets. On the other hand, employers can register to this portal and publish their jobs which would enable them to find the suitable candidates for their vacant positions. The Company can view the job applications and take necessary steps. Both companies’ registration and company job posting requires Admin approval to be a part of the internship search portal. Some of the existing and old-fashioned methods of recruitment involve advertisements in newspapers, posters, televisions, different job fairs, college career fairs etc. However, such processes are costly and time taking.

Handing over paper printed resumes, keeping a track of them, handling and processing them and then getting hold of the desirable candidate to be called for the interview it sounds like a lot of effort and hard work. With the evolution of the world of the Internet and rapid technological advancement, such efforts can be minimized. A internship search portal web application comes to rescue at this point where a lot of meaningful time can be saved as well as the cost of advertisements. The entire process of a job search or a candidate search is speeded up. Manual processes get replaced by automated processes. With internship search portals the trend of paper resumes gets replaced by online resumes. These resumes are stored in company databases for future references also. Candidates and employers are just a few clicks away to get connected. Another advantage is once the candidate is registered and applies for a position, his/her information stays with the company database for both the present and future use for available positions. The traditional format of recruitments has been overshadowed with the modern simplistic approaches of e-recruitments.



# Chapter 2 REVIEW OF LITERATURE

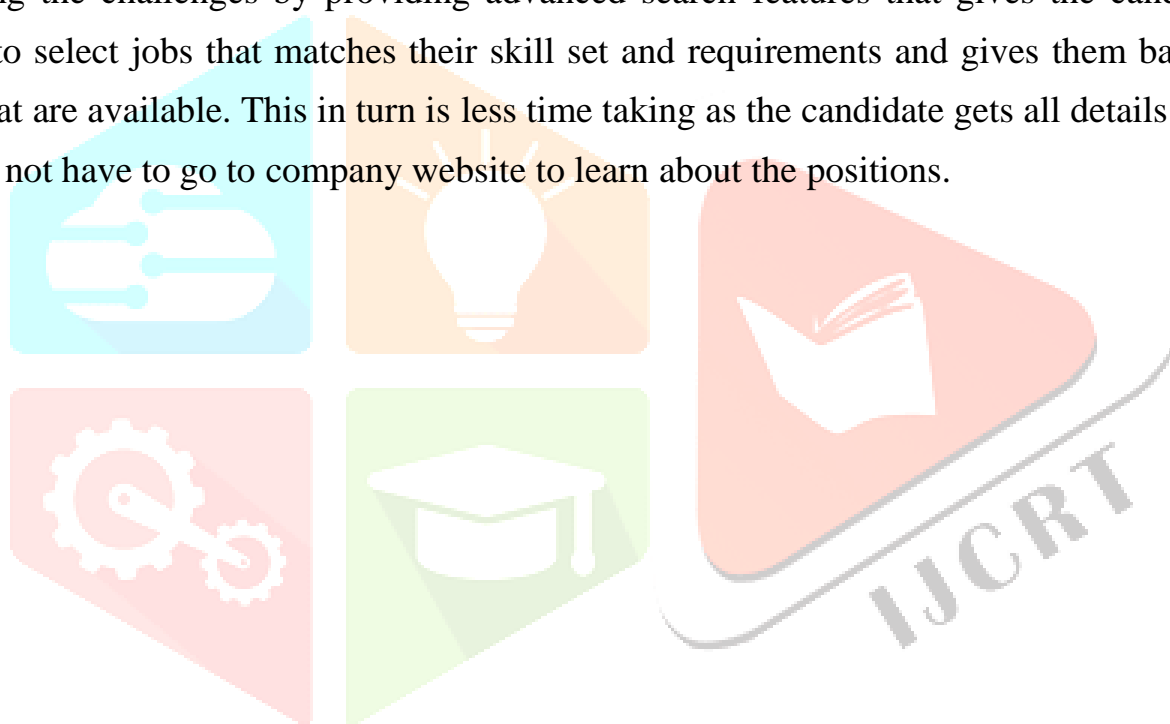
A literature survey is a text of a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Internship Portal have been proposed taking these papers into consideration. The Table 2.1 illustrates the literature survey done for this project.

## 2.1 Existing System

The existing systems enables students to search through print media like poster advertisements, newspapers and visual media like television or company websites for opportunities. This is a tedious task as it takes a lot of time and energy to search for the right job position, learn about the position and about the company. Search for proper match of skill set is challenging. Students can also find internship through job fairs where they must first make it possible to attend the fairs which might be sometimes impossible with their schedules and if they visit the fairs they must hand over paper printed resumes. The more the number of candidates the more the number of papers for the company which is a lot of manual effort. The same goes for employers who are looking for candidates who are best fitted for their job positions. They must constantly advertise, go to a lot of job fairs which still doesn't guarantee the best way to select from a large pool of candidates. Such conventional and outdated systems are replaced by several well featured national job search portals like LinkedIn, Glassdoor, Internmatch.com etc. All these job search and advertisement portals aims at e-recruitment by providing several simple and

useful features to students and employers making job search and candidate selection a much time saving and easier process.

With the advancement of technology students are relying greatly on Online Internship Search Portals. Taking motivation from the conventional systems and their drawbacks and inspiration from the existing job search portals, We decided to develop “Internship Portal”. In the proposed system we are trying to develop an online job search web application that reduces challenges for students to find a desired and suitable job according to their qualification. We aim at reducing the challenges by providing advanced search features that gives the candidate ample scope to select jobs that matches their skill set and requirements and gives them back the exact jobs that are available. This in turn is less time taking as the candidate gets all details in one place and do not have to go to company website to learn about the positions.



## 2.2 Literature Review

A Juhana, worked on an e-Portfolio field, in which students can upload files and out-come of students' work in the internship. The files uploaded to e-portfolio can come in various types; the extension types acceptable to upload are: .jpg, .jpeg, .doc, .xls, .ppt, .pdf, .mp4, etc. There are parts in e-Portfolio that should be comprehended by the users, students in particular, include types of buttons to upload files, e-Portfolio page to display the uploaded files, and comment field as a means of communication among students, lecturers, and internship supervisors. [1]

Nur Idawati binti Enzai, worked on making an industrial training course that must be taken by their Electrical Engineering students which follows five semester program at Universiti Teknologi MARA (UiTM). Made a Web-Based System of Internship Management that can computerize the whole process of the practical training and make it accessible online. The portal allows internship eligibility checking, registration, visit schedule and monitoring of industrial internship program at Universiti Teknologi MARA (UiTM). [2]

Wojciech Zabierowski, The project codename is Atma Groupware and its goal is to create a groupware system available entirely through web browser as a set of dynamic web pages. Web browser applications have advantage in this kind of systems, because client's operating system, hardware configuration, physical location etc. is usually not an issue in such case. Atma Groupware was designed with improvements in areas of communication, management, knowledge availability and progress tracking in mind. Another goal was to evaluate Ruby programming language and Ruby on Rails web application framework as a tool for creating such solutions [3]

Dr. Ram Joshi, had proposed a software for the training and placement cell of a college for the students and the institute management for the purpose of proper placement and training of the students of the institute. It will help the students to provide their profiles to the training and placement cell of the institute, update their respective profiles with their gradual approach towards course end. [4]

Table 2.1: Literature Survey

Sr No.	Year	Author	Title	Publication	Proposed Work	Research Gaps
1	2017	A Juhana, A G Abdullah, M Somantri, D Zakaria, N Amelia, W Arasid	E-Portfolio Web-based for Students Internship Program Activities .	ICIEVE	E-Portfolio System.	Research is limited to students.
2	2017	Nur Idawati binti Enzai, Fadhli Dzul Hilmi bin Mohd Fauzi, Nik Nur-shaadah binti Nik Dzulkefli	Development of Internship Monitoring and Supervising Web-Based System.	IEEE	Industrial Training course for thier stream.	This system was only used by electrical department.
3	2009	Wojciech Zabierowski, Grzegorz Gałeczowski, Sumaiya Nas-rin Rayta, Andrzej Napieralski	Web-based Project Management System.	CADSM	The whole purpose of this software is for aiding in teamwork.	Research is limited to some fixed projects.
4	2017	Dr. Ram Joshi, Mrinal Chaudhari, Pratiksha Gaikwad, Savani Kadam, Sheetal Kanthale	Training and Placement Portal.	IRJET	This software is for the training and placement cell in the college.	participation of students.



# Chapter 3 PROPOSED SYSTEM

This chapter includes a brief description of the proposed system and it also explores the different modules involved along with the various models through which this system is understood and represented.

## 3.1 Requirement Analysis

In the software development life cycle (SDLC), Requirement analysis is the first step of major importance. The entire concentration is on gathering the functional and the non-functional requirements for the product to be developed and estimating the feasibility of those attributes. Through requirement gathering we ensure that we are setting project goals and objectives much earlier. Complete understanding of the requirements leads to the successful development of the software. If we don't do this step, then however hard we work we will never arrive at the desired final product. This is most crucial as without knowing the exact requirements the final output can never be achieved as desired.

### **Functional Requirements:**

Functional Requirements describes what the system should do, i.e. it must indicate the services provided for the users. The functional requirements of this system are shown as follows: Intern sign in, Intern sign up, Intern can view all available jobs, Intern can upload resume, Intern can view all applied jobs, Admin login, Admin can post jobs, Admin can see all approved jobs, Admin can download resumes uploaded.

## **Non-Functional Requirements :**

Non-functional requirements are the constraints that must also be adhered to during the development. They limit what resources can be used and set bounds on aspects of the software's quality. The non-functional requirements are divided into several groups: The first group of categories reflects the five of the most important qualities attributes

### **1. Usability**

- **Graphical User Interface:** The system shall provide a uniform look between all the pages. The system shall provide use of icons and nav bar.

### **2. Reliability**

- **Back-end Internal Computers:** The system shall provide storage of all databases on redundant computers. The system shall provide for replication of databases.

### **4. Security**

- **Data Transfer:** The system shall use secure data storage for all the entries that include any input and output information of every user. No any user can view data of another user or any of the user's confidential information.
- **Data Storage:** The web application shall never display a user's password. It shall always be echoed with special characters representing the typed characters. The system's back-end database will store all the data. The system's back-end servers shall only be accessible to authenticated users.

### **5. Interfaces**

- **User Interfaces:** User interface includes various forms and pages. The main page consist of Login page. The interface of the sysytem will visualize the features and also the functionalities listed in this document for these system as included below but not limited to Textbox menu for various option selection. The user interface shall be implemented using any tool or software package like PHP, CSS, DBMS etc.
- **Hardware Interfaces:** Since the web application must run over the WiFi, all the hardware shall require to connect WiFi will be hardware interface for the system.

- Software Interfaces: For database storage we used Xampp Software and ApacheTomcat Server.

## 3.2 System Requirements

This section will provide the user the required specification of the hardware and the software components on which the proposed system is to be implemented.

### 3.2.1 Hardware Requirements

This subsection will provide the minimum requirements that must be fulfilled by the hardware components. The hardware requirements are as follows :-

- 100 GB free Hard Disk
- Windows 7 or latest version
- 8 GB RAM
- Intel core i5
- Processor Speed: 2.50 GHz
- Wifi Router

### 3.2.2 Software Requirements

This subsection will provide the versions of software applications that must be installed. The software requirements are as follows :-

- IDE/Text Editor: Sublime Text, Atom
- Database: MySQL
- Front End: HTML5, CSS
- Browser: Preferable Google Chrome or Mozilla Firefox

### 3.3 System Architecture

Figure 3.1 shows us the system architecture which includes: Student: Where system will allow students to register and login into the portal. System will take students personal information to build their profile which will help them to get their desired job. There is a built-in function in the portal where students can search for the job that are in the list of jobs provided by the admin. When students are applying for the job it will be stored in application buffer for temporary purpose. After submitting it is going to be stored in list of applications which be displayed on admin side. Admin: Selection criteria will be provided to admin by companies. Admin will sort the list of criteria that are provided by the companies and stored in list of jobs which are displayed on student side. Admin will transfer the list of application to the companies and wait for their approval. Once the companies give the approval admin will notify the student regarding their selection.

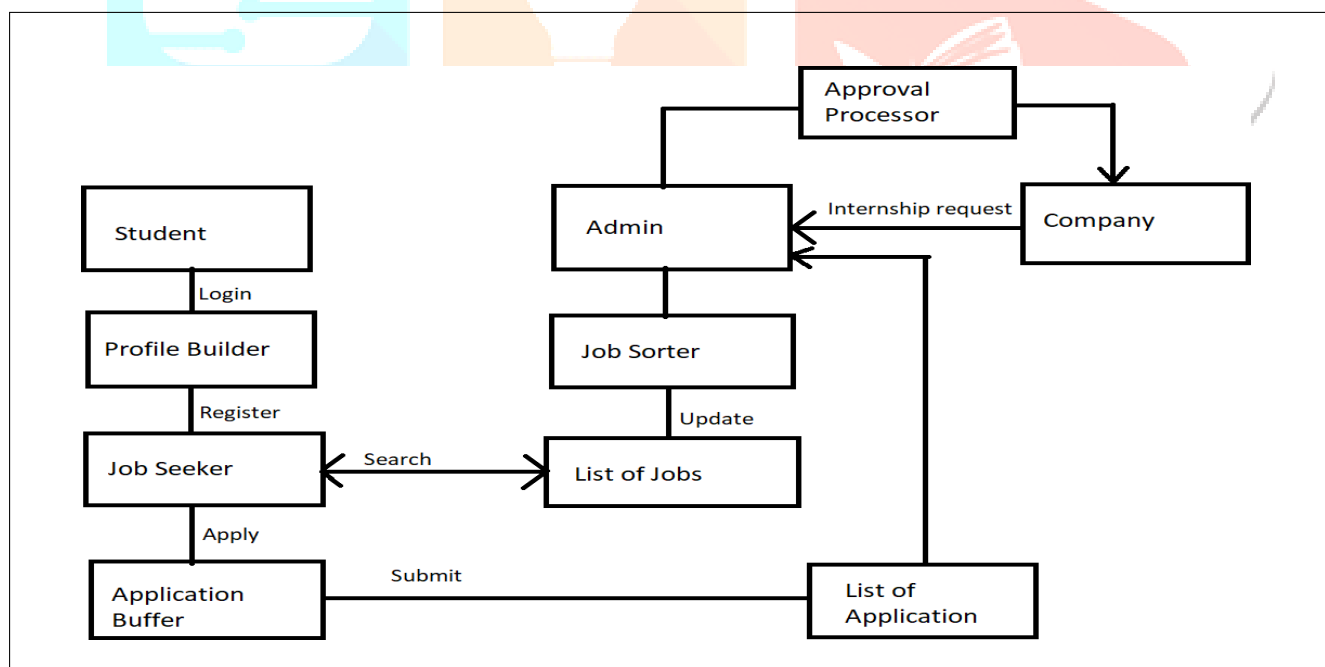


Figure 3.1: System Architecture

### 3.4 Gantt Chart

A number of activities need to be scheduled and followed to complete the project smoothly. The gantt chart at a glance provides information regarding the activities and their schedule visually. The first being topic selection and requirements gathering took more time than expected. In the next few months analysis of the requirements of the proposed system along with the literature survey. After the initial few months, we started preparing the dataset which was really challenging. After a brief break period, we started coding our module with the help of HTML and PHP. The next few months have been given for the website designing and collection of static data for the website, along with the appropriate minor changes to the code. After that, we began the testing of our model with the help of various test cases and making changes to overcome the problems occurred. Next, we worked on publishing paper and in few weeks it was achieved. Final working prototype was ready by the end of March. Figure 3.2 represents gantt chart for this proposed system.

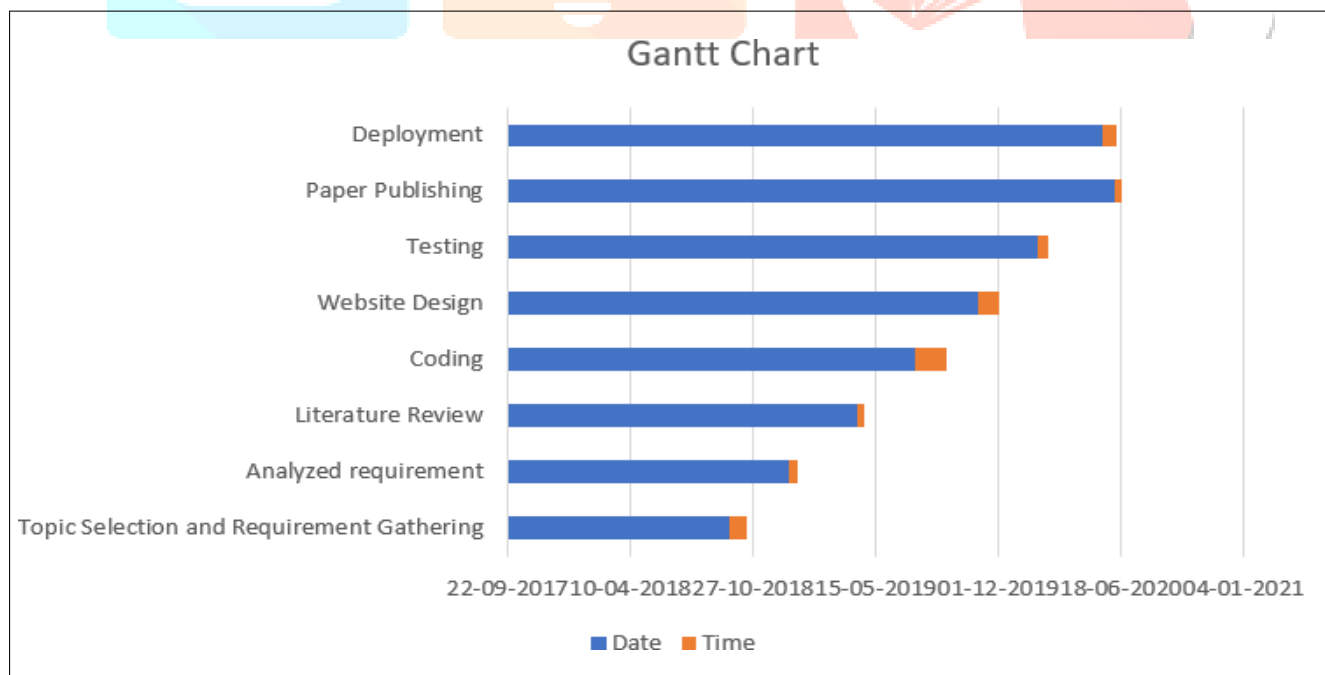


Figure 3.2: Gantt Chart

### 3.5 Data Model and Description

Data Model describes the relationship and association among data which includes Entity Relationship Model.

#### 3.5.1 Entity Relationship Model

Figure 3.3 shows the Entity Relationship(ER) Diagram of the proposed system. The Entity Relationship diagram is the data modeling technique that is illustrating entities in the system which are users, system and the database.

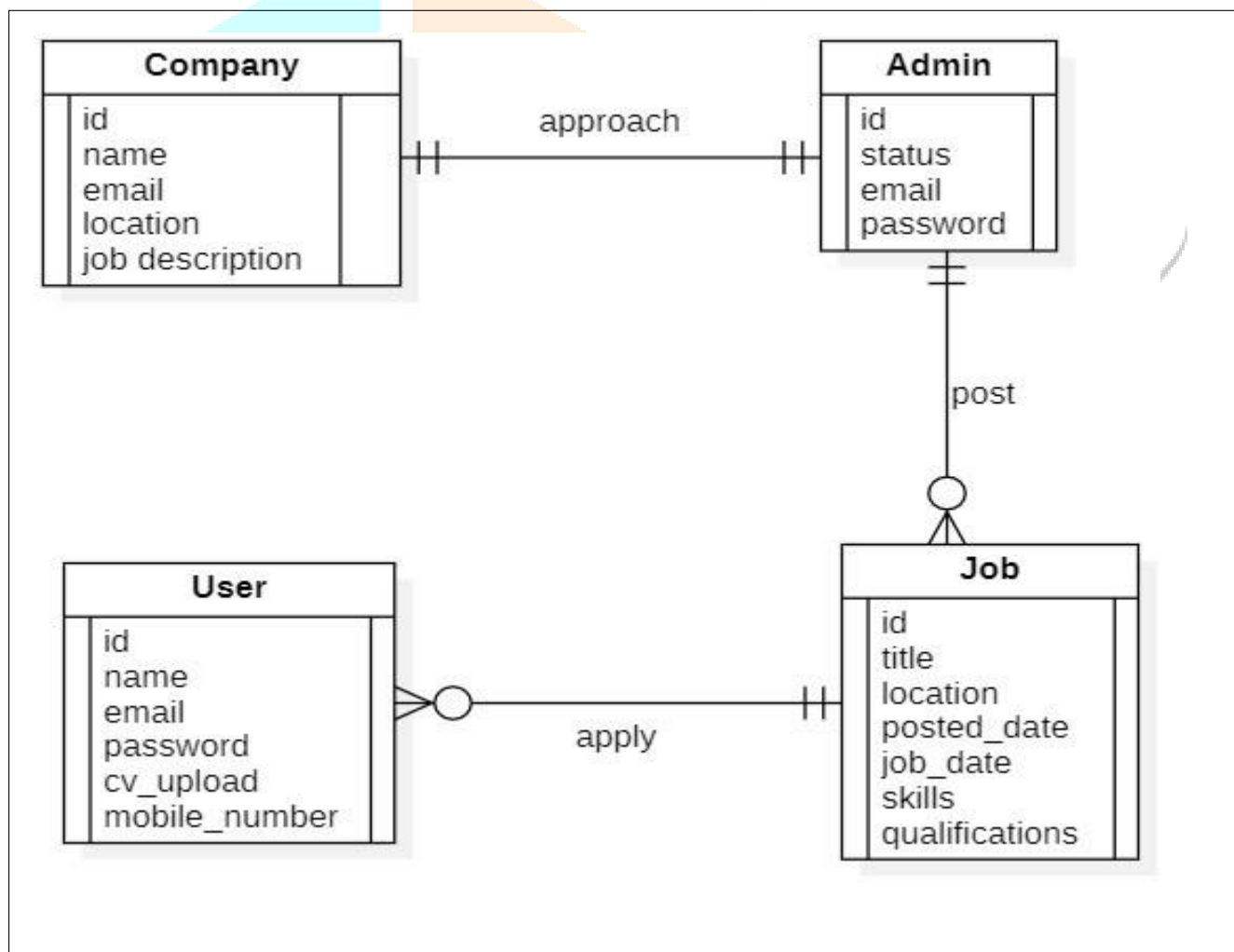


Figure 3.3: Entity Relationship Diagram

### 3.6 Fundamental Model

Fundamental model of the project gives overall idea about the project. How the entities are related to each other, what are the attributes of the entities, how the data flows between the entities is shown by the fundamental model.

#### 3.6.1 Data Flow Model DFD LEVEL 0

Figure 3.4 denotes the Level 0 Data Flow Diagram of the proposed system. It is also known as the context diagram. It contains one process node which is Internship Portal. There are three external entities student, admin and company. Arrows going to and fro these entities and the process shows the actions between them.

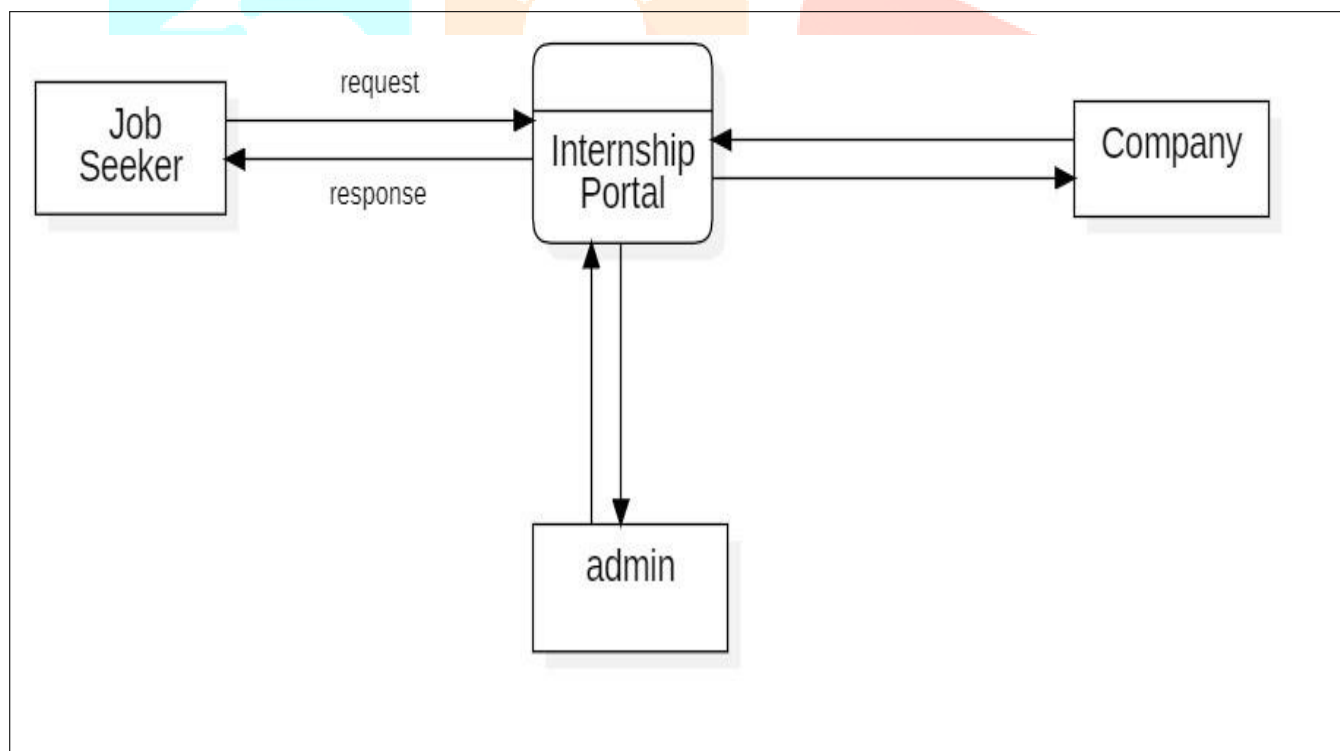


Figure 3.4: DFD-Level 0

### DFD LEVEL 1

Figure 3.5 shows the Level 1 Data Flow Diagram of the proposed system. It is exactly the same as the Level 0 DFD, but much simplified. It breaks down the main processes into subprocesses that can then be analyzed and improved on a more intimate level. We can think of a level 1 DFD as an “exploded view” of the context diagram. The Level1 DFD shows how the system is divided into sub-systems i.e. collect dataset, enter testing dataset, applying algorithm on training and testing dataset, compare training and testing dataset, calculate output, display output, and which together provide all of the functionality of the system as a whole.

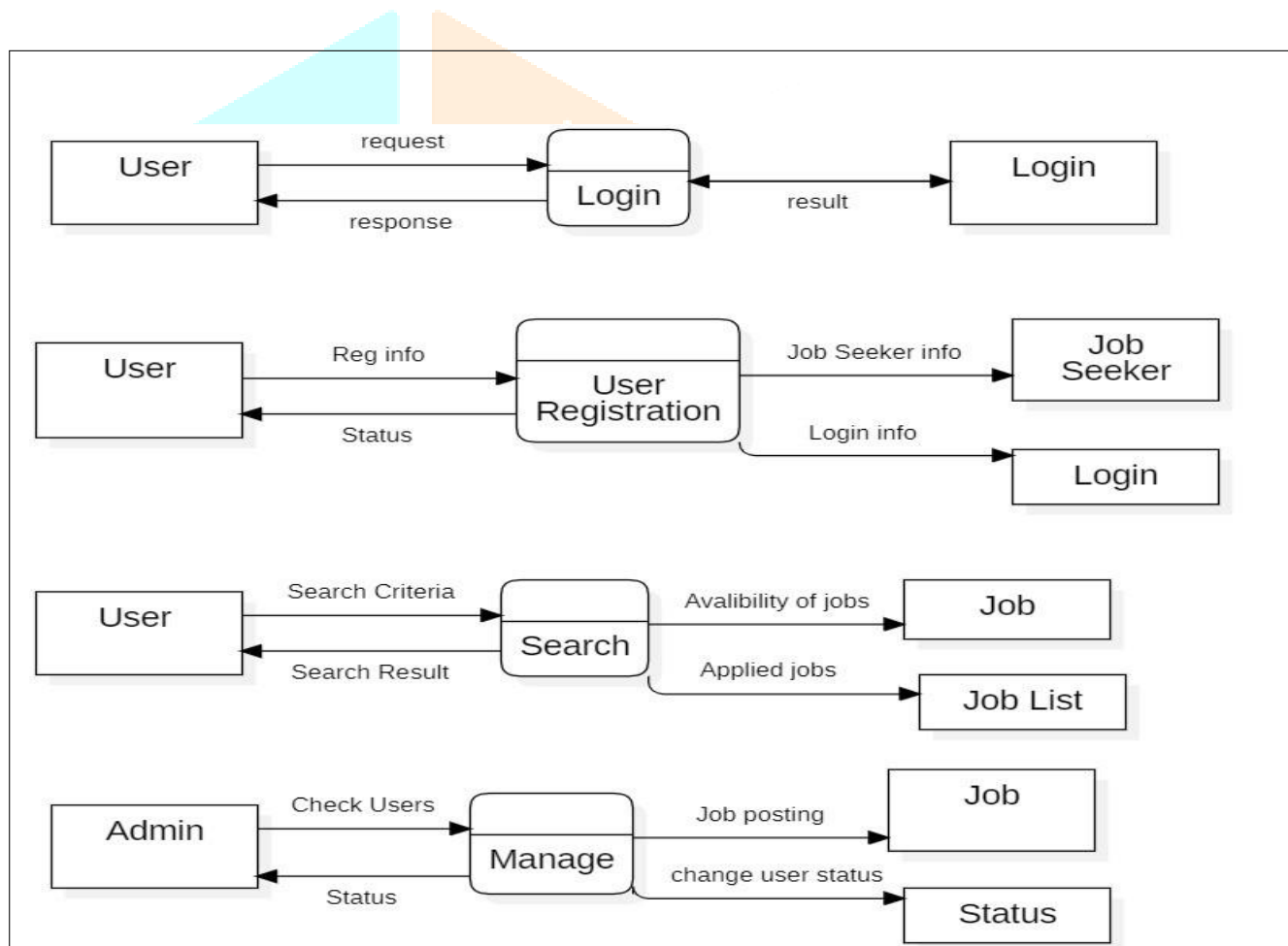


Figure 3.5: DFD-Level 1



### 3.7 Use Case Diagram

Figure 3.6 denotes the Use Case Diagram of the proposed system. While understanding only the static nature of a system is insufficient, Use-Case diagrams helps to give the dynamic view of the system. Use Case diagrams models the system and the subsystems of an application. There are some external and internal factors that marks the dynamic nature of the Use Case diagram. We call them actors. While Use case diagrams can be considered as a high-level requirement analysis of the system, they give a clear notion of the actors and their roles (use cases) and hence is an important pictorial representation to understand system specifications early in the project. Use case diagrams are a clear visualization of actors (the internal or external factors), their roles (use cases) and relationship amongst these actors and their roles.

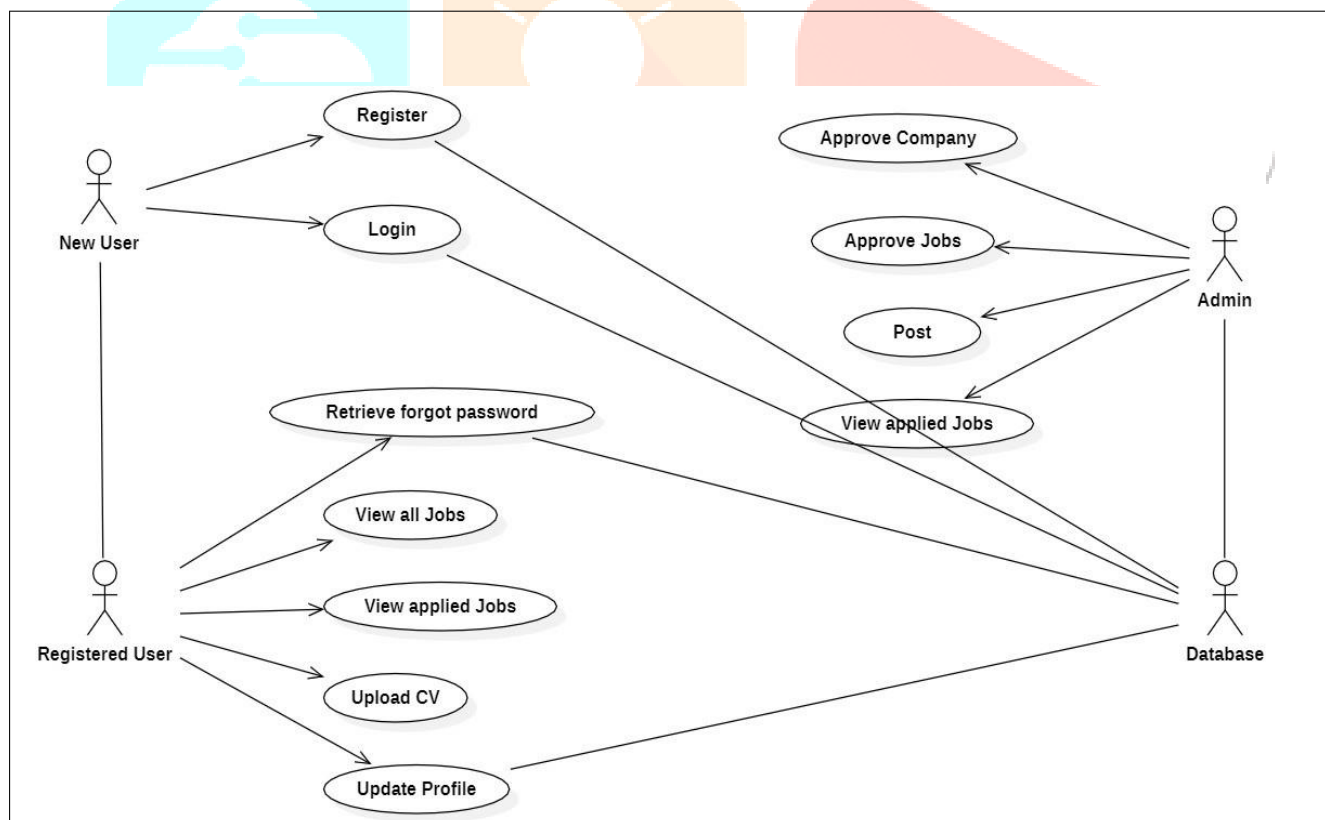


Figure 3.6: Use Case Diagram

### 3.8 Activity Diagram

Activity Diagram is also one important UML diagram that gives the flow of execution of the system. While not being exact flowcharts activity diagrams have some capabilities like branching or swim lanes or indicating parallel flows. It is a pictorial representation of the different activities of a system, giving the wholistic view. A concept of forking and joining is used inside the activity diagrams to show the activity of the different components of the system. A function performed by the system can be called an activity of the system. Once we make out a mental layout of the entire flow, we proceed in drawing the activity Diagram..

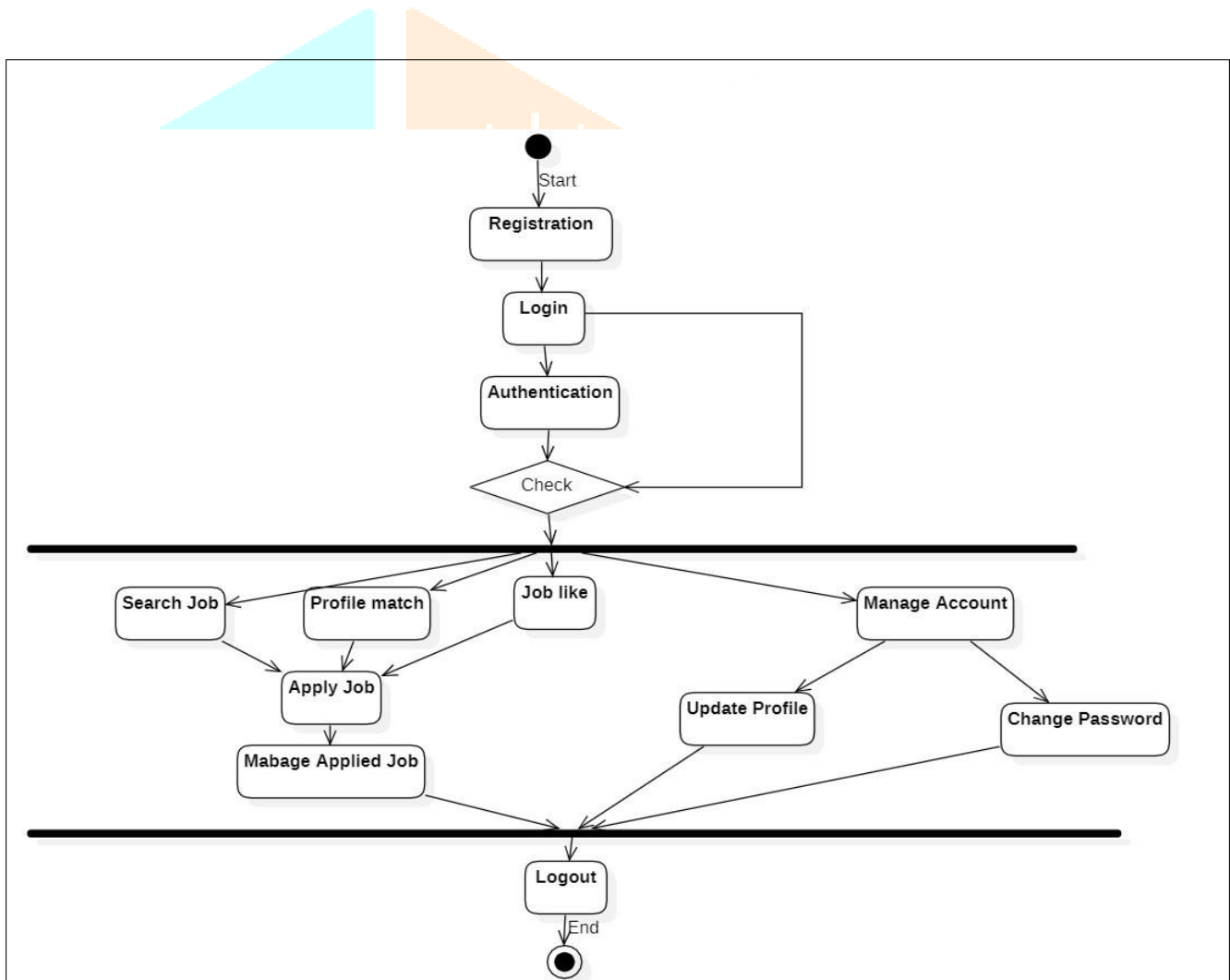


Figure 3.7: Activity Diagram

### 3.9 Sequence Diagram

The sequential flow of a system along with its sub system is pictorially represented by the sequence diagram. As the following diagram is an overall system sequence diagram, sequence diagrams can also be drawn at the modular level for every component in the system. Sequence diagrams emphasize more on the system requirements than on the system design. It focuses more on the sequence of messages delivered just after a sequence of activity occurs. Overall a sequence diagram helps in modelling and documenting.

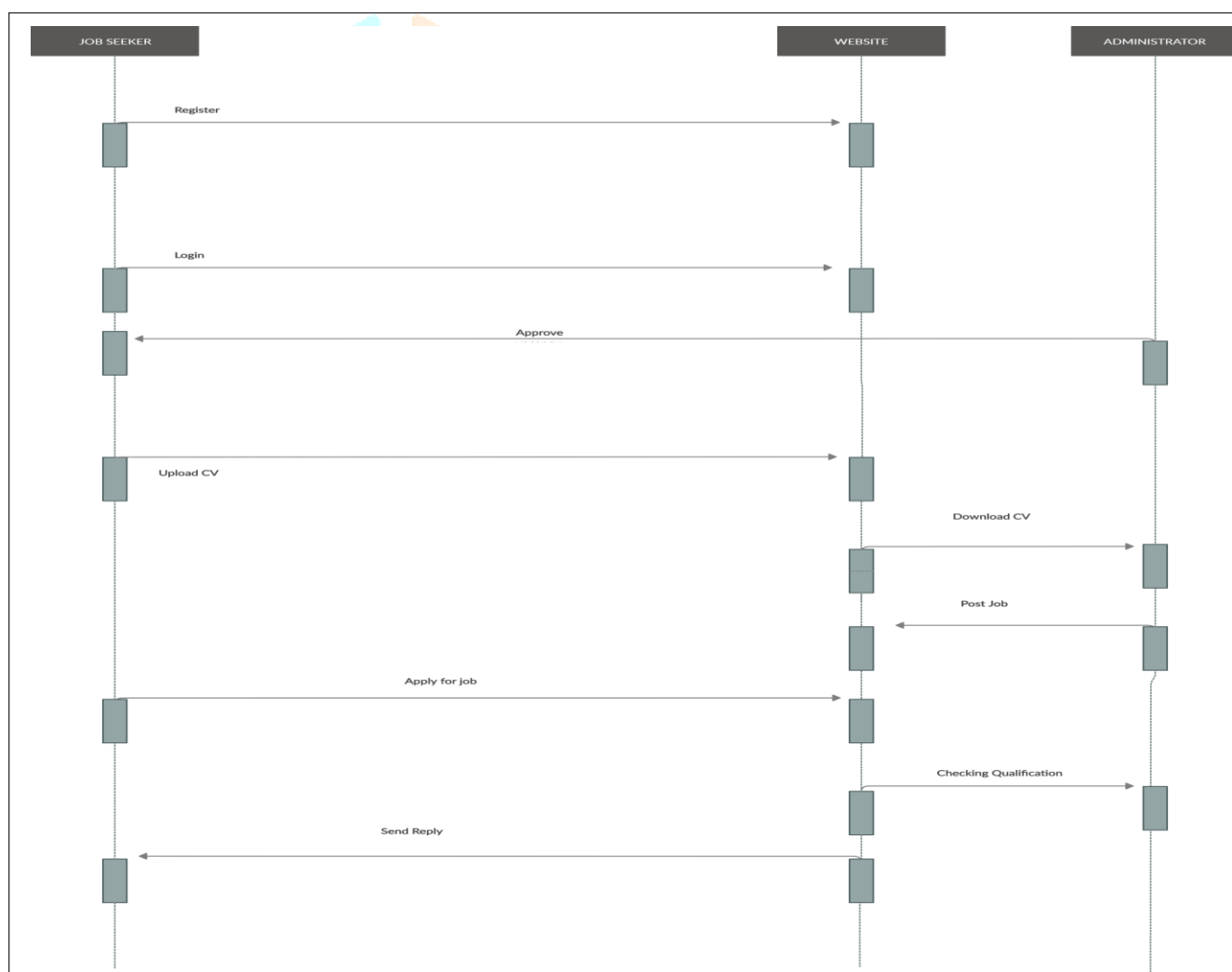


Figure 3.8: Sequence Diagram

### 3.10 Test Cases

Table 3.1 shows various test cases which were considered while implementing this project. In the software development life cycle, after the requirement analysis, feasibility study, design and coding phase, one of the phase of utmost importance is the testing phase. In this phase, we get to see if the expected and final outcomes are same with all the required specifications being maintained as per the requirement.

Table 3.1: Test Cases

Test Case Id	Test Case Description	Pre-requisite	User Roles	Test Data	Expected Output	Actual Output	Test Status
1	Navigation Graphical User Interface	Click on the links	User	URL: http://localhost/ip/index.php	Appropriate page should be opened	Appropriate page displayed	Pass
2	Login, Password	Appropriate data should be entered	User	URL: http://localhost/ip/student/login.php	Login should be successful for Authorized user	Login successful for Authorized user	Pass
3	User end Registration form	Appropriate data should be entered	User	URL: http://localhost/ip/student/signup.php	User Account should be created	User Account Created	Pass
4	Adding details to database	Entered personal details by user	User	URL: http://localhost/ip/detail form.php	user details should be added to the database	detail is added	Pass
5	Adding a new job	Company requirements should be added	Admin	URL: http://localhost/ip/internship-details.php	Job posted successful	Job posted successfully	Pass
6	Approval of job	Gets permission from company	Admin	URL: http://localhost/ip/applied-jobs-admin.php	Approved status should be displayed	Displayed successful	Pass

## Chapter 4

# RESULT AND DISCUSSION

This chapter includes the snapshots of the actual outputs that were seen by the user and this chapter also contains the results of the proposed system.

### 4.1 Snapshots of Project

This section provides the snapshots of the proposed system and the outputs that are displayed to the user.

#### Homepage of the web application

Figure 4.1 shows the first look of the proposed system's web application.

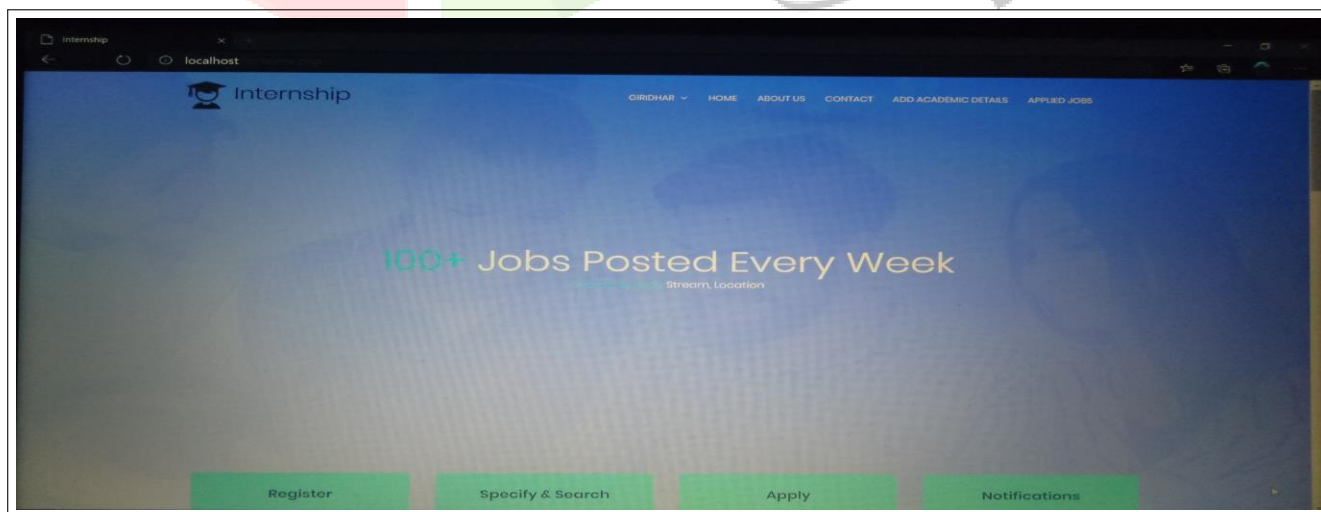


Figure 4.1: Home page

### New User Register Page

Figure 4.2 shows the output of the register page of the web application. Here the user will add their details regarding their username and password.

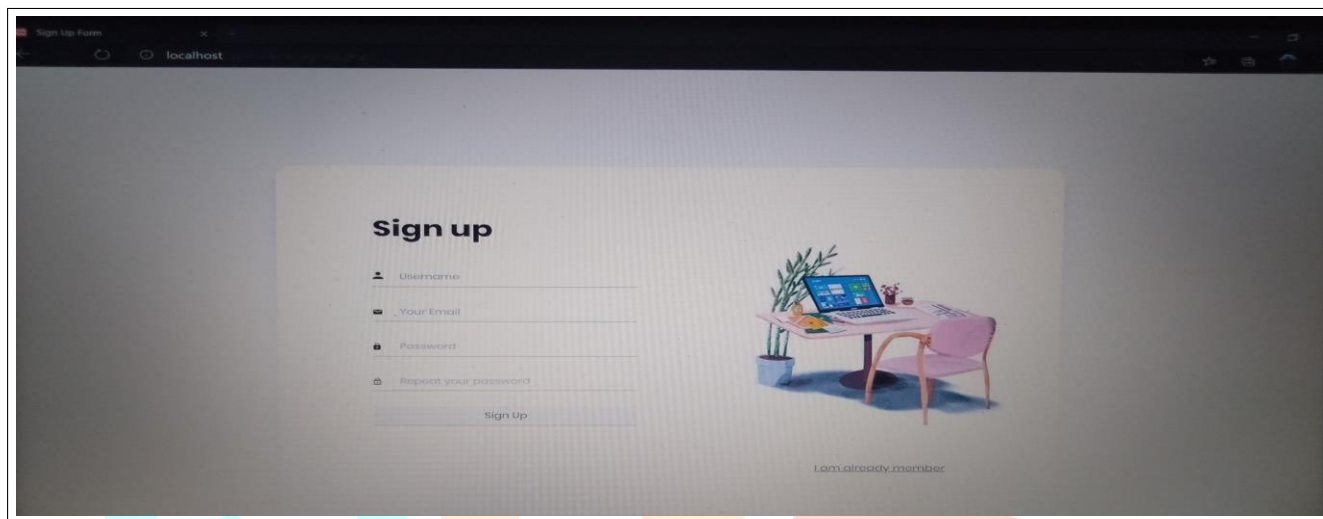
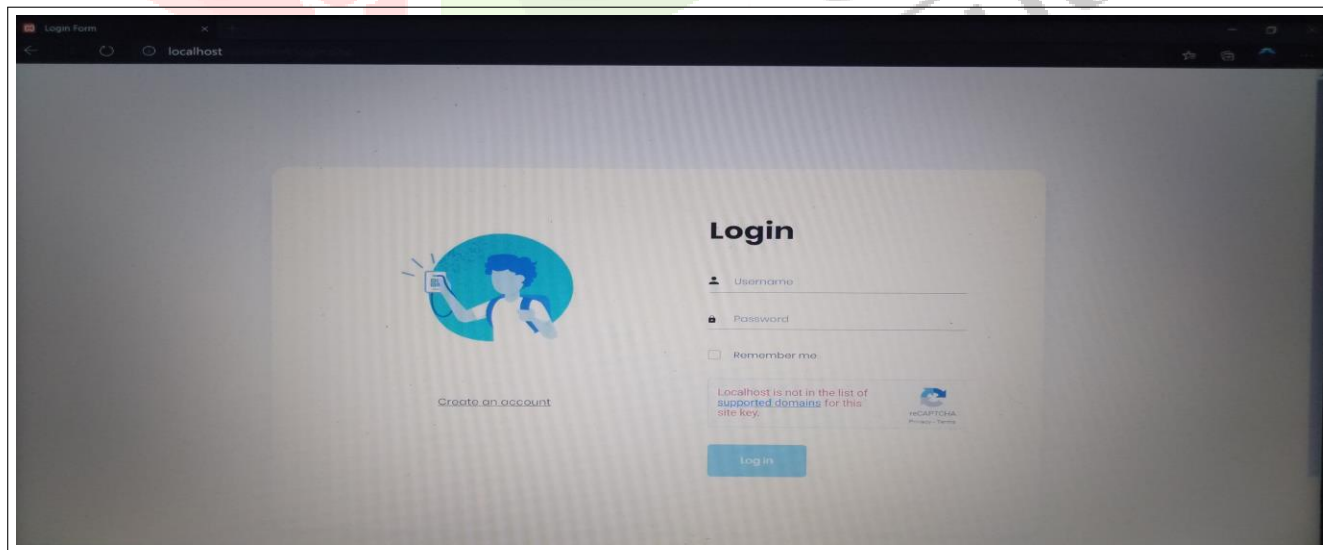


Figure 4.2: Register

### Login page

Figure 4.3 shows the login page where the user will enter his username and the password. The user will use this page to login everytime after the registration process is done.

Figure 4.3: Login



### User academic details

Figure 4.4 shows the page where the user will enter his personal academic details like his email, location, academic scores etc.

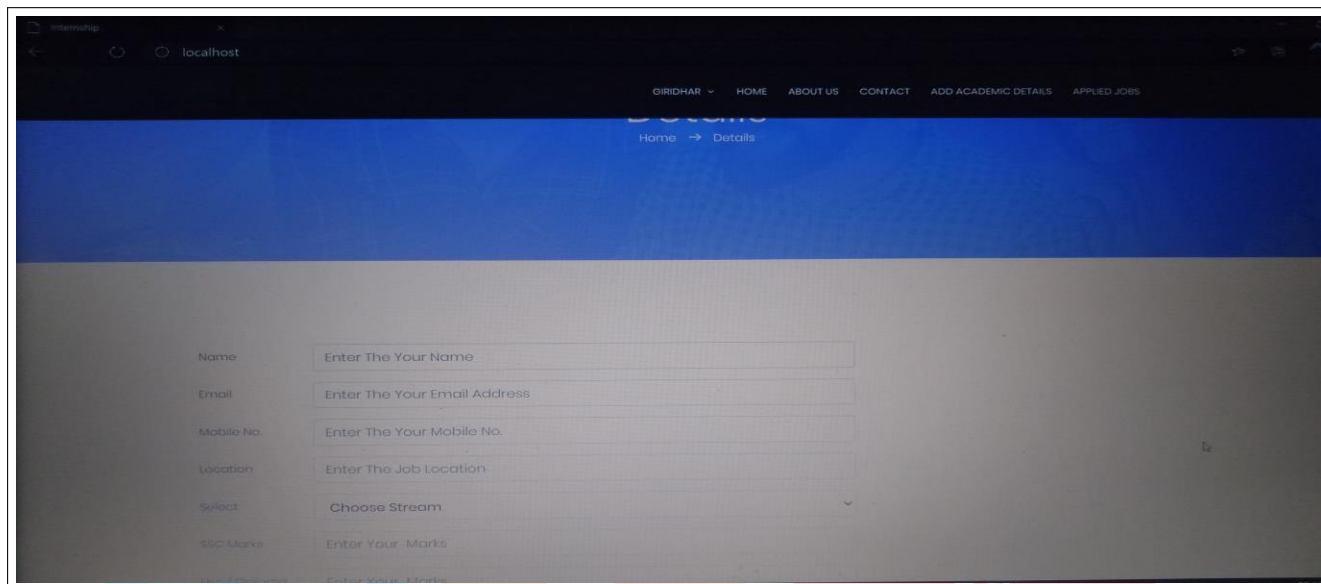


Figure 4.4: User academic details

### Applied Jobs

Figure 4.5 shows all the applied jobs by that particular intern. It also shows his status regarding job and after completing he will get a feedback option from where he can give his feedback about that company.

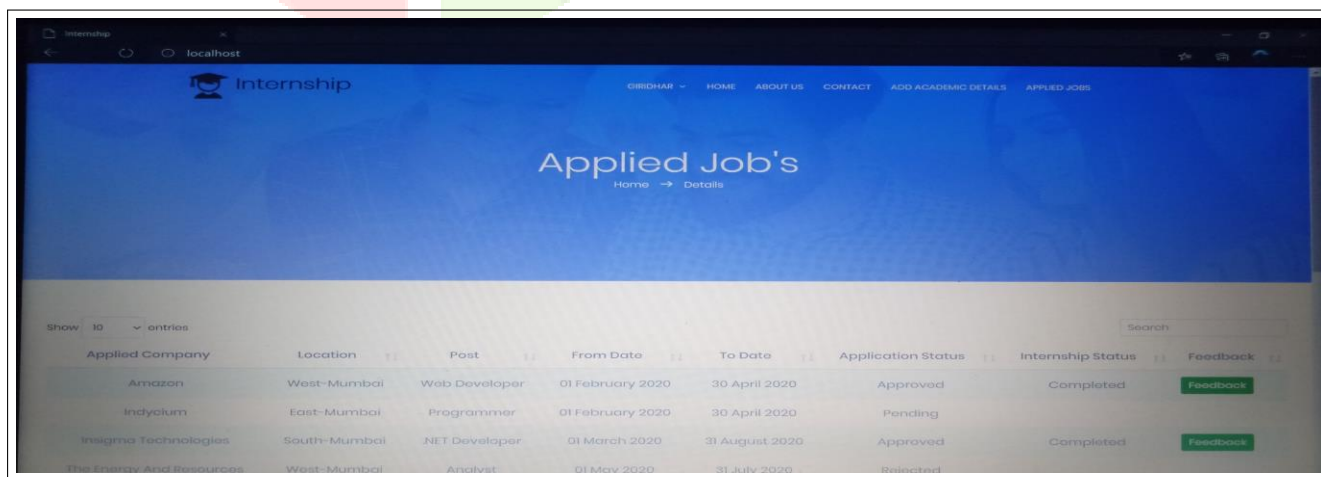


Figure 4.5: Applied Jobs

### Admin dashboard

Figure 4.6 shows the admin dashboard where admin can see all the important details at one glance, like number of interns applied, feedback, hired, pending etc.

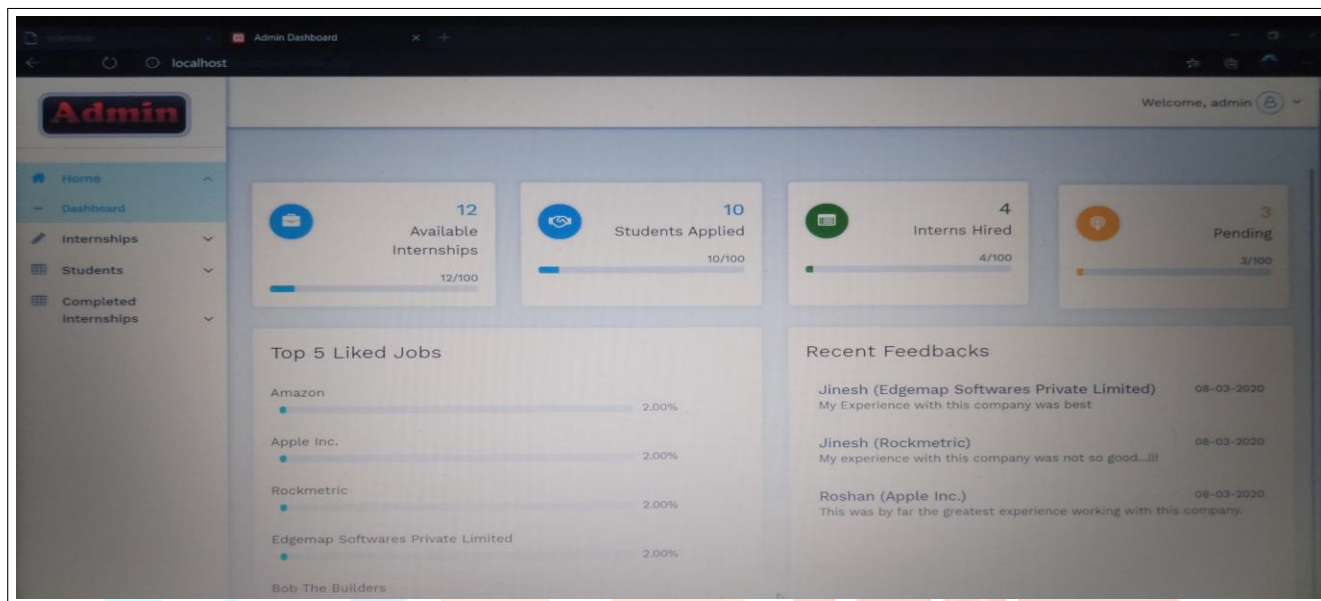


Figure 4.6: Admin dashboard

### Form

Figure 4.7 shows the form where admin fills all the detail regarding the job that he got from companies. This list of jobs will be displayed on user side where they can apply for it.

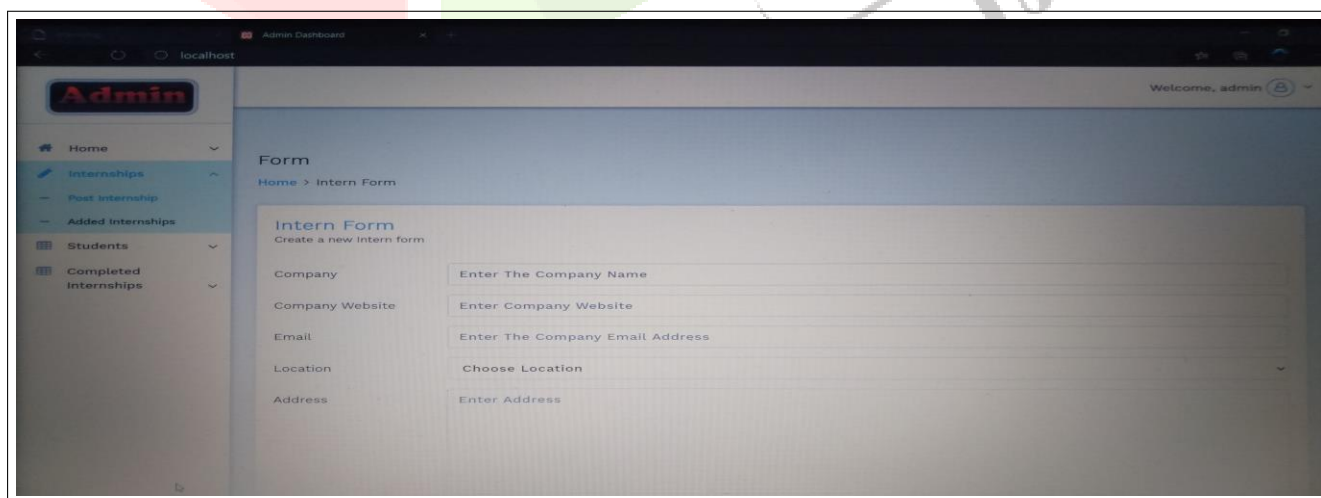


Figure 4.7: Form



## Internships

Figure 4.8 shows all the jobs that have been added by the admin. It also provides functionality where admin can change the status of the intern from pending to approved or rejected.

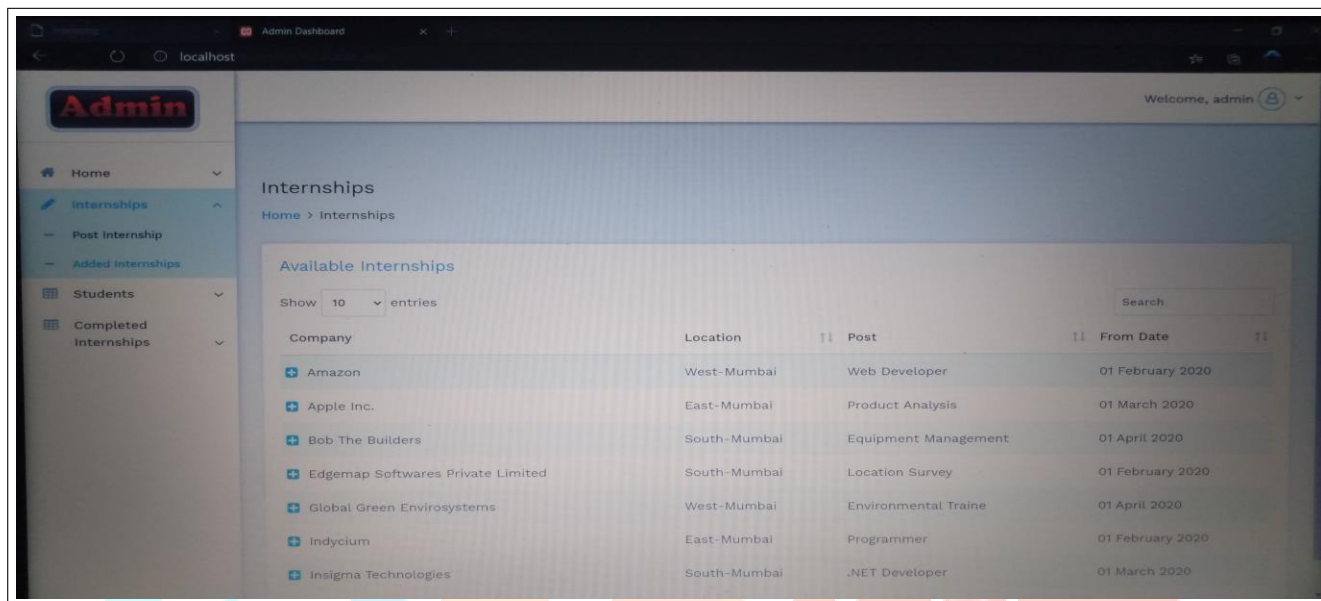


Figure 4.8: Internships

## Job list

Figure 4.9 shows the list of jobs that are provided by admin. This set of list is divided into three streams that is comps, civil and IT.

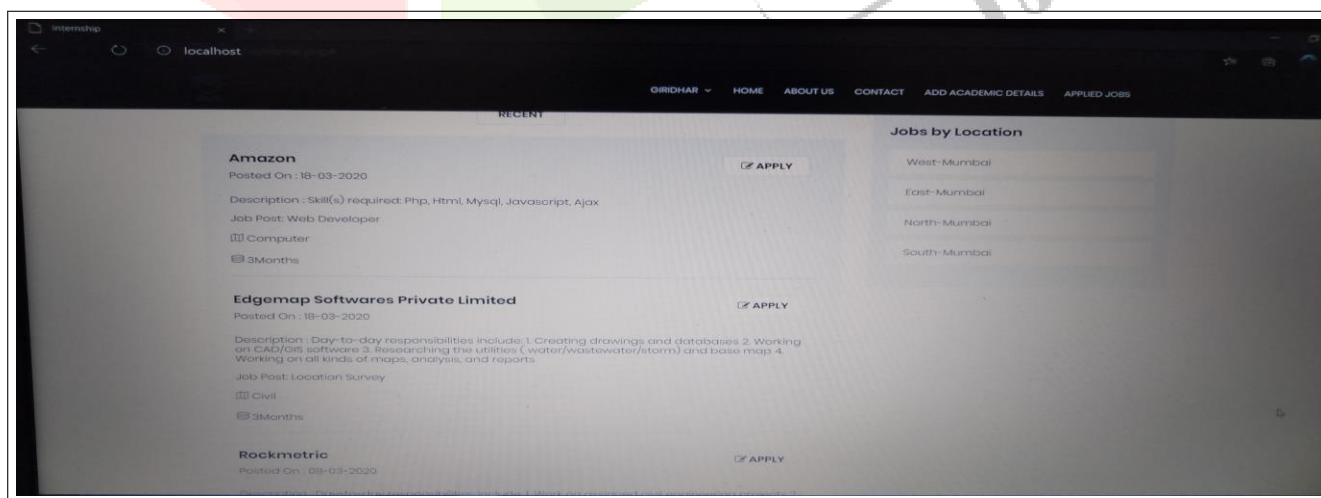


Figure 4.9: Job list

## 4.2 Result in Graph

This section provides a graphical representation of the actual outputs that are desired. These graphs also help users to easily understand the actual output and makes less complex to understand. Graphs or charts help people understand the data quickly.

### Graph

Figure 4.10 shows the graph of the fertility level of crops according to appropriate nutrients.

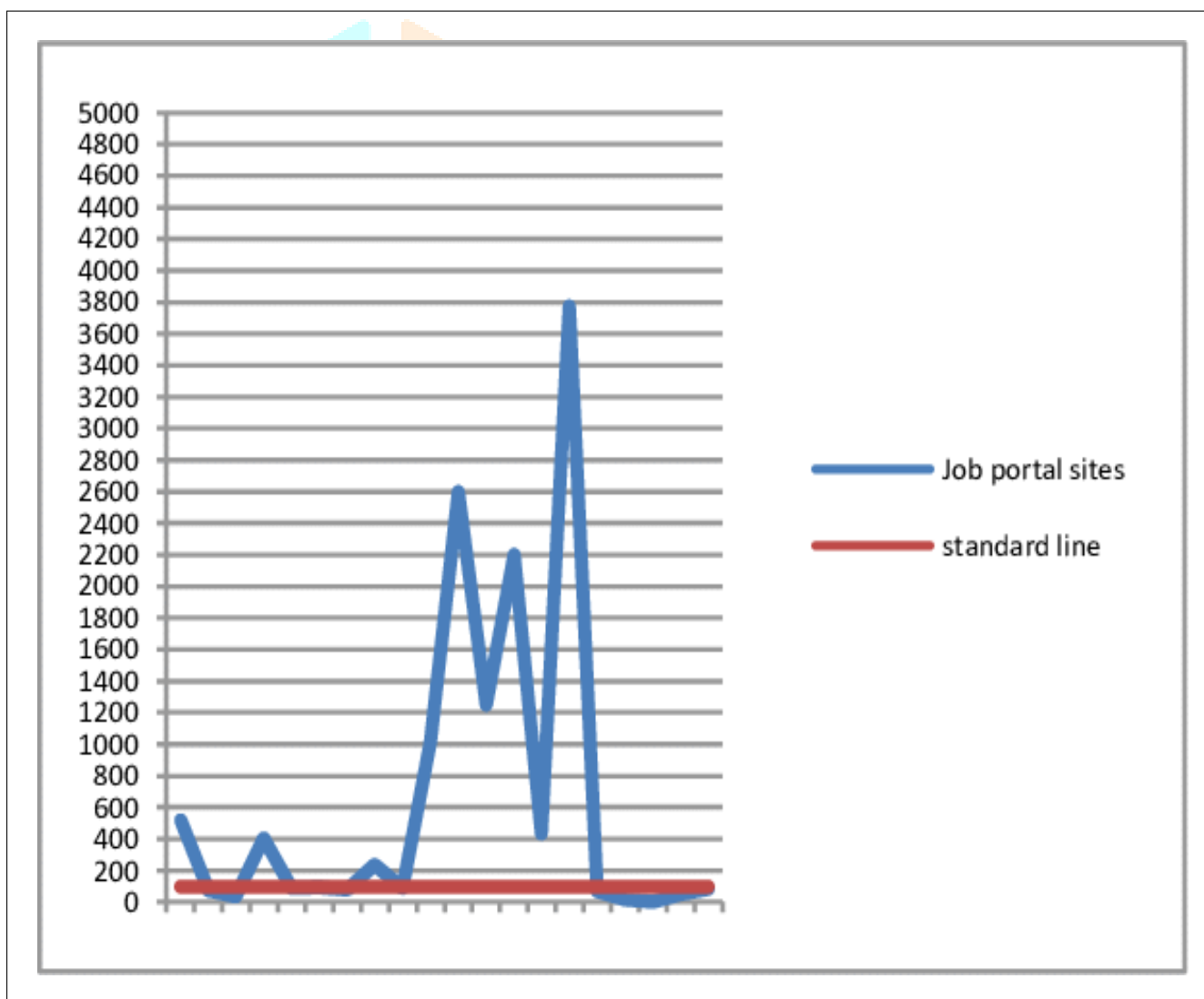


Figure 4.10: Graph

## Conclusion

Overcoming traditional methods of recruiting intern has brought a revolutionary change in the world of interviews and recruitment. While this application aims in giving a user- friendly experience to the users with a simple but logical front-end it has achieved so far its completion. This application also achieves certain functional capabilities with the latest technology stack used in the industries today. The testing results shows that the application is scalable and can handle decent load. Also, this application does not have any geographical constraints as anyone from any part of the world can get registered to the application and search for jobs or post jobs.

Developing this project with a primary goal of learning new technologies, we have got immense exposure in understanding technologies like html and php not only at the implementation level but also in understanding the background of such technologies. Some of the major challenges faced was in understanding the callback/promise concepts and implementing them in the application. To debug, test and run the application I have encountered many cutting-edge technologies and learnt about them. This invariably have enhanced my hands on knowledge with a broad spectrum of technologies which would come handy once we start facing the industry after our graduation.

# Appendix

## 1) StarUML

StarUML is an open source UML(Unified Modelling Language) modeling application. StarUML supports most of the diagrams like use case diagrams, activity diagrams, the sequence diagrams, class diagrams, etc. It is rich in feature set and formatting options. The digrams can be exported in jpg, jpeg and also in png formats. It provides various advancements than other modeling applications.

## 2) Xampp software

XAMPP stands for Cross-Platform (X), Apache (A), MariaDB (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing and deployment purposes.

URL:<https://filehippo.com/downloadxampp/>

## 3) Atom

Atom is a free and open-source text and source code editor for macOS, Linux, and Microsoft Windows with support for plug-ins written in Node.js, and embedded Git Control, developed by GitHub. Atom is a desktop application built using web technolo- gies.

URL:<https://atom.io/>

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