CHAPTER 1

INTRODUCTION

1.1 ABOUT THE PROJECT

Today many organizations are conducting online examinations world wide successfully. online examination system is very useful for companies and students to prepare an exam. This system will help in making the tedious task of conducting examination a lot easier. Online exam can be conduct any time. Being an integrated online examination system it well reduce paper work.

This system have four modules, they are admin, college, company and student. It is a web based application through the internet. The working is using network. Admin can control the overall functions such as add, view companies, colleges and students. In this system, exams are conducted by the companies. The main function of the college is register students for online exam and add the students for examinations posted by the companies for their vacancies. At first, companies add vacancies and conduct the exams in the specific posts. The colleges can assign students for the exam. Students can be login with their email and password. Student is given a limited time to answer the questions and after the time expiry view the result.

CHAPTER 2

SYSTEM REQUIREMENTS

2.1 HARDWARE REQUIREMENTS

2.1.1 Computer

Most current computers and laptop have high enough specification to be used to create a website. The most important specification to check on the computer would be the size of the RAM, which should be over 2GB, though more is better. This will ensure that the computers runs quickly and smoothly, even with heavy programs such as website editors or photos editor.

2.1.2 Processing Power (Processor)

The power of CPU is a fundamental system requirement for any software. Most software running on x86 architecture define processing power as the model and the clock speed of the CPU. Many other features of a CPU that influences its speed and power like bus speed, cache, and MIPS are often ignored.

2.1.3 Memory (RAM)

All the software runs on the RAM of the computer.so memory is another important requirement. Not only the IDEs but all the software including OS is working on the RAM.so we need at least 1GB or more RAM space. For the smooth running of the software. And also to increase the speed of working.

2.1.4 Secondary storage (Hard Disk)

We know that the all primary memory including RAM are volatile memory so that the data stored in the RAM lost when the power gone. So that we need a permanent storage for data permanently. And all the software including IDEs are also installed in Hard Disk. So for doing this project we need at least 32GB of Hard Disk space.

2.1.5 Other Peripherals

So in this project we creating a web based project so that reason we must need a network interface to access the system to the internet.

Hardware	requirements
Hard Disk	**32 GB space or higher**
RAM	**1 GB or**
Processor	**1.00 Gigahertz Processor**

2.2 SOFTWARE REQUIREMENTS

2.2.1 Operating System(OS)

Without OS the computer does not work. For this project we can adopt any OS such as windows or linux. Only condition is that in case of windows it must be windows 7 or higher. In case of Linux it must be Ubuntu 12.04 or Linux mint 17.01.

2.2.2 Adobe Dreamweaver

Adobe Dreamweaver software is the ideal tool for web designers, coders and application developers for all levels. Adobe Dreamweaver is available on Microsoft windows 7, windows 8 and others.

2.2.3 Browsers

For running as well as for testing we need all the latest web browsers. It includes Google Chrome 23, Opera 16, Safari 8.0, Firefox 23 etc. They must be latest for ensuring the compatibility of the web application in different browsers.

2.2.4 Servers

At the time of creation of this application we use local host. For making our system as local host we need a server. For this purpose, we use the WAMP server or the XAMPP server.

Software	Requirements
Operating system	**Any Os**
IDE	**Dream Weaver 8**
Browsers	**Opera16, Chrome23 Firefox 23 or higher**
Server	**Wamp Server 2.5 / xampp server**

2.3 TECHNOLOGIES USED

2.3.1 HTML –Basic and Advanced

Hyper Text Markup Language (HTML) is the standard markup language for creating web pages and web applications. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. HTML elements are the building blocks of the HTML pages.

2.3.2 CSS

Cascading style sheets(CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of webpages and user interfaces written in HTML and XHTML.CSS is designed primarily to enable the separation of document content from document presentation, including aspects such as the layout, colors, and fonts.

2.3.3 Bootstrap

Bootstrap is a free and open-source front-end web framework for designing websites and web applications. It contains HTML and CSS based design templates for typography, forms, buttons, navigation and other interface components, as well as optional java script extensions. Unlike many web frame works, it concerns itself with front-end development only.

2.3.4 JavaScript

JavaScript is a high-level, dynamic, un-typed, and interpreted programming language. It has been standardized in the ECMA script language specification. Alongside HTML and CSS, it is one of the three core technologies of world wide web

content production; the majority of websites employ it and it is supported by all modern web browsers without plug-ins. JavaScript is prototype based with first-class functions, making it a multi-paradigm language, supporting object oriented, imperative, and functional programming styles. It has an API for working with text, arrays, dates and regular expressions, but does not include any I/O, such as networking, storage, or graphic facilities, relying for these upon the host environment in which it is embedded.

2.3.5 Ajax

Ajax (also AJAX short for Asynchronous JavaScript and XML) is a set of web-development techniques using many web technologies on the client-side to create asynchronous web applications with Ajax, web applications can send data to and retrieve from a server asynchronously (in the background) without interfering with the display and behavior of the existing page. Ajax is not a technologies, but a group of technologies.

2.3.6 MySQL

MySQL (officially pronounced as “My S-Q-L”) is an open source relational database management system(RDBMS). Its name is a combination of “My”, the name of co-founder Michael Widenius’s daughter, and “SQL”, the abbreviation for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for profit firm, the Swedish company MySQL AB, now owned by Oracle corporation. For proprietary use, several paid editions are available, and offer additional functionality.

2.3.8 PHP

PHP is a powerful server-side scripting language for creating dynamic and interactive websites. PHP is the widely-used, free, and efficient alternative to

competitors such as Microsoft's ASP. PHP is perfectly suited for web development and can be embedded directly into the HTML code.

2.4 DATABASE

2.4.1 MySQL 5 Database

MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed, and supported by MySQL AB, which is Swedish company. MySQL is becoming so popular because of many good reasons:

- MySQL is released under an open-source license. So you have nothing to pay to use it.
- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of well-known SQL data language.
- MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, java, etc.
- MySQL works very quickly and works well even with large data sets.
- MySQL is very friendly to PHP, the most appreciated language for web development.
- MySQL support large databases, up to fifty million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of eight million Tera Bytes(TB).
- MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

CHAPTER 3

PROBLEM DEFINITION AND PROPOSAL

3.1 INTRODUCTION

The purpose of this project is to provide a web application for a university. This online examination is for campus placement. The intended user of the application are college, company and student. Now a days the campus interviews in the institutions are takes place manually and they select the students by conducting aptitude tests manually. By using this web application, we can solve the problems of time management and paper works.

It is mainly focused on a university. The university adds the institutions under their university. The colleges register the students of their institution. Company can add their vacancy, conduct examinations in the specific colleges online. Students attend examinations, and it provides ready result for the students.

This web application eases all the activities of the institution, company communications such as campus interviews and related works. The students can know the vacancies of the all companies. The aptitude test of the companies are makes it online and thereby it reduces the time of companies, colleges and students. By using this application we will get fast and easier management of these activities and it avoids the chances of errors.

3.2 EXISTING SYSTEM

There are many different types of exams are available today. But the whole process of assigning test and evaluating their scores after the test was done manually till date. Processing the test paper i.e checking and distributing respective scores used to take time when the software was not installed. To current system is very time consuming. The chances of paper leakage are more in current system as compared to proposed system. Result processing takes more time as it is done manually.

Written examination have lots of preparation to cover before exam starting, they are reservation of the appropriate accommodation, getting up the accommodation to the required standards, procedures to ensure that students are allocated to desks in a random order, provision of information and materials to the invigilators responsible in each Examination rooms etc.

There is no existing systems like web application for campus interviews, or any other placement cell or to a university. By using this project the companies can get students or employees for their companies.

3.3 PROPOSED SYSTEM

The Online Examination system is a web based application. This softwareis particularly used to conduct online exams like recruitments exams for companies. Can be used anywhere any time as it is a web based application (User location doesn't matter).No restriction that examiner has to be present when the candidate takes the test. The system aims at reducing costs associated with conducting exams over a period of time and archiving total automation of examination system-related tasks like registration, publication of results, which leads to a very high degree of system efficiency. By including all the activities in a single web application, we have the following advantages:

1. All functions perform in a single web application
2. Easy coordination of all the information
3. Maintenance and controlling become easy
4. Quick result of the examinations

3.4 FEASIBLITY STUDY

The overall scope of the feasibility study was to provide sufficient information to allow a decision to be made as to whether the Online Examination for Placement should proceed and so on, its relative priority in the context of the other existing campus activity systems.

3.4.1 Operational Feasibility

Operational feasibility assesses the extent to which required software performs a serious if steps to solve business problems and user requirements. This feasibility is depended on human resources (software development team) and involves visualizing whether the software will operate after it is developed and be operative once it is installed. Operational feasibility also performs the following tasks.

- Determines whether the problems anticipated in user requirements are of high priority.
- Determines whether the solution suggested by the software development team is acceptable.
- Analyzes whether users will adapt to a new software.
- Determines whether the organization is satisfied by the alternative solutions proposed by the software development team.

3.4.2 Technical Feasibility

Technical feasibility assesses the current resources (such as hardware and software) and technology, which are required to accomplish user requirements in the software with in the allocated time and budget. For this, the software development team ascertains whether the current resources and technology can be upgraded or added in the software to accomplish specified user requirements. Technical feasibility also performs the following task.

- Analyzes the technical skills and capabilities of the software development team members.
- Determines whether the relevant technology is stable and established
- Ascertains that the technology chosen for software development has a large number of users so that they can be consulted when problems arise or improvements are required.

3.4.3 Economical Feasibility

Economic feasibility determines whether the require software is capable of generating financial gains for an organization. It involves the cost incurred on the software development team, estimates cost of hardware and software, cost of performing feasibility study, and so on. For this, it is essential activities required to carry out software development. In addition, it is necessary to consider the benefits that can be achieved by developing the software. Software is said to be economically feasible if it focus on the issues listed below.

- Cost incurred on software development to produce long-term gains for an organization.
- Cost required to conduct full software investigation (such as requirements elicitation and requirements analysis)

- Cost of hardware, software, development team, and training.

CHAPTER 4

FUNCTIONAL DESCRIPTION

4.1 INTRODUCTION

ONLINE EXAMINATION FOR PLACEMENT is a web application which manages all the activities and communications among colleges and companies. This web application has four modules, admin, college, company and student. The admin panel is only accessible for admin. Admin controls the overall activities of the web application. The college register students and assign the willing candidates for the examinations of requested companies. The company module can publish their vacancies, conduct examinations in specific institutions and can choose the students as their employees by evaluating the result. The student module have to attend exams, send feedback etc.

4.1.1 Admin panel functions

- College registration
  - Add college
  - List colleges
  - Modify college details
  - Delete college
  - View request status
  - Exam history
- Company registration
  - Add company
  - List company

- Modify company details
- Delete company
- View vacancy
- Exam details
- View feedbacks

- Student
  - Student List
  - View result
- Notification
  - Send notification
  - List notifications
  - Update notification
  - Delete notifications
- Password
  - Change password

4.1.2 College module functions

- Department
  - Add department
  - View departments
  - Edit department
- View companies
  - List companies
  - Send request
  - View vacancies
- Student registration
  - Register student
  - List students
  - Modify student

- Delete student

- Exam
  - Assign student
  - View selected students
  - View result
  - View exam history

4.1.3 Company module functions

- Vacancy
  - Add vacancy
  - List vacancies
  - Update vacancy
  - Delete vacancy
- Exam
  - Add exam
  - View exams
  - Delete Exam
- Question
  - Add question
  - View question
  - Modify question
  - Delete question
  - Assign question
  - View assigned questions
- Student
  - View selected students
  - Generate password
  - View result
  - Send mail

- View feedbacks

- Requests
  - View requests
  - Accept/Reject request

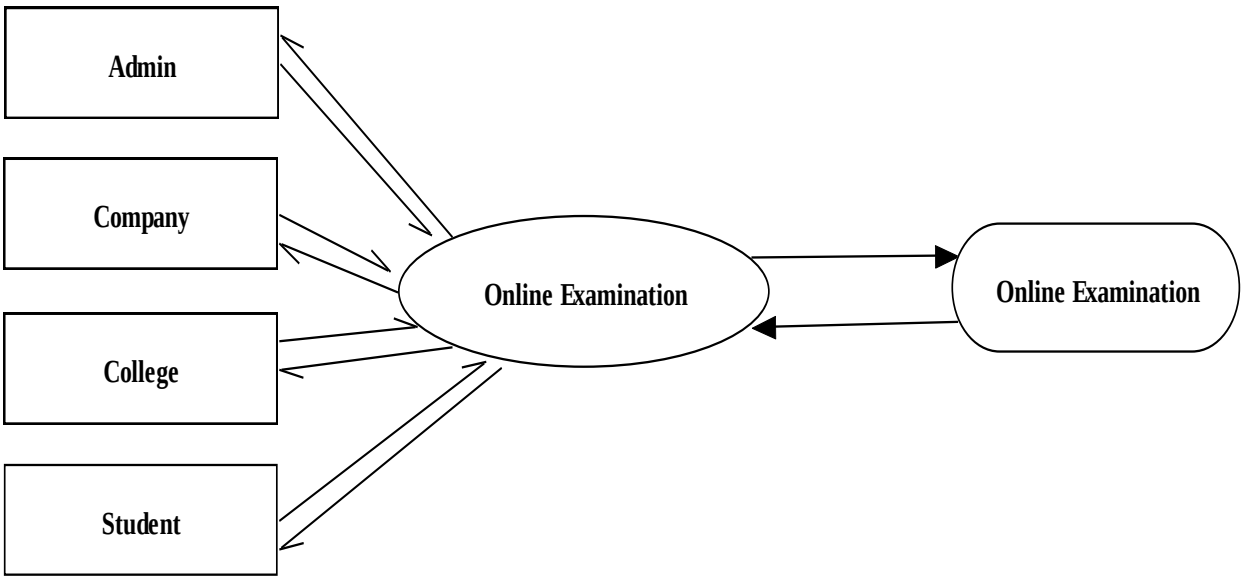
4.1.4 Student module

- Profile
  - View profile
  - Change password
- Exam
  - Exam login
  - Attend exam
  - View result
  - Exam history
- Feedback
  - Send feedback
- Company
  - View companies
  - View vacancies

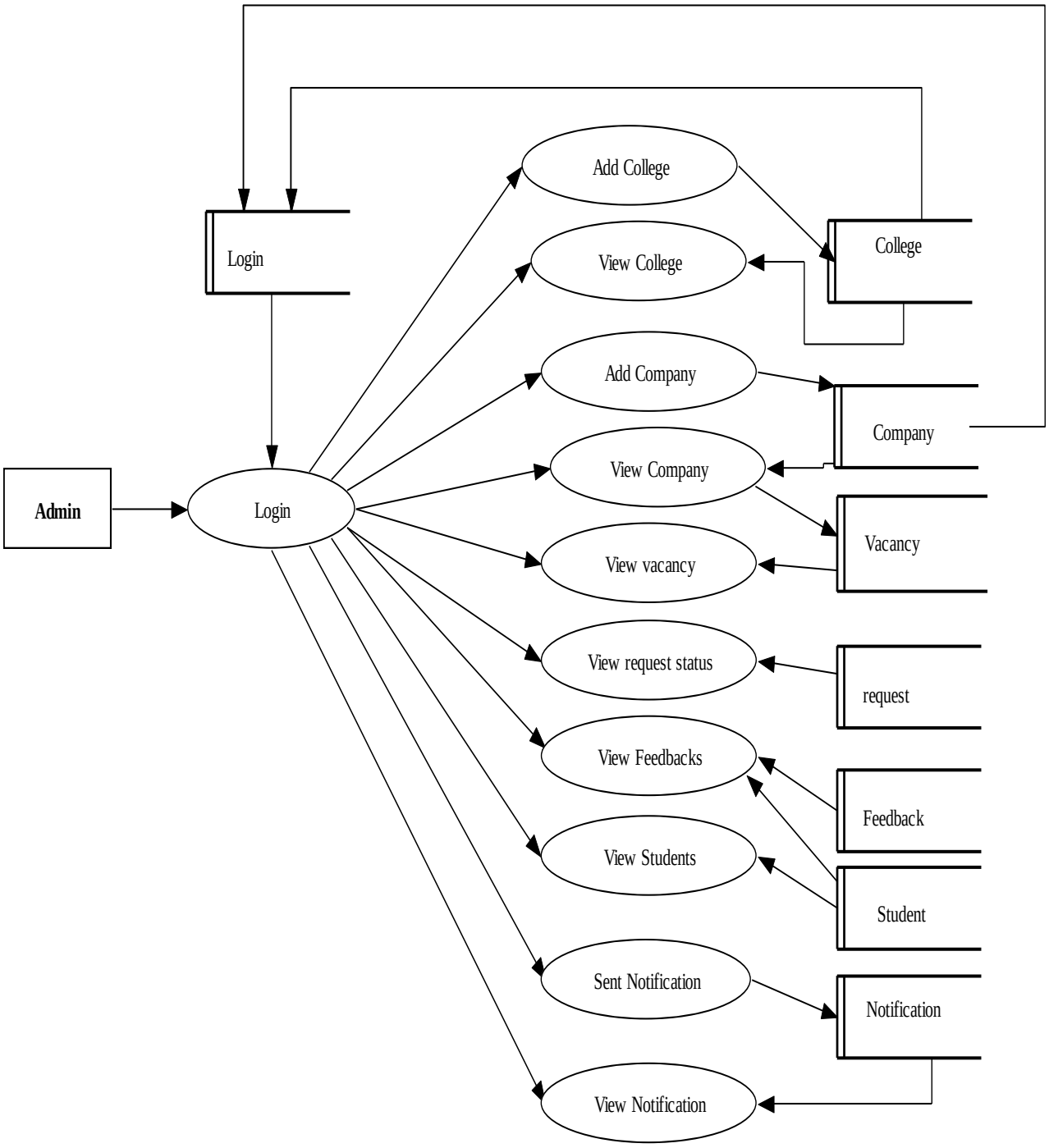
CHAPTER 5

DATA FLOW DIAGRAMS

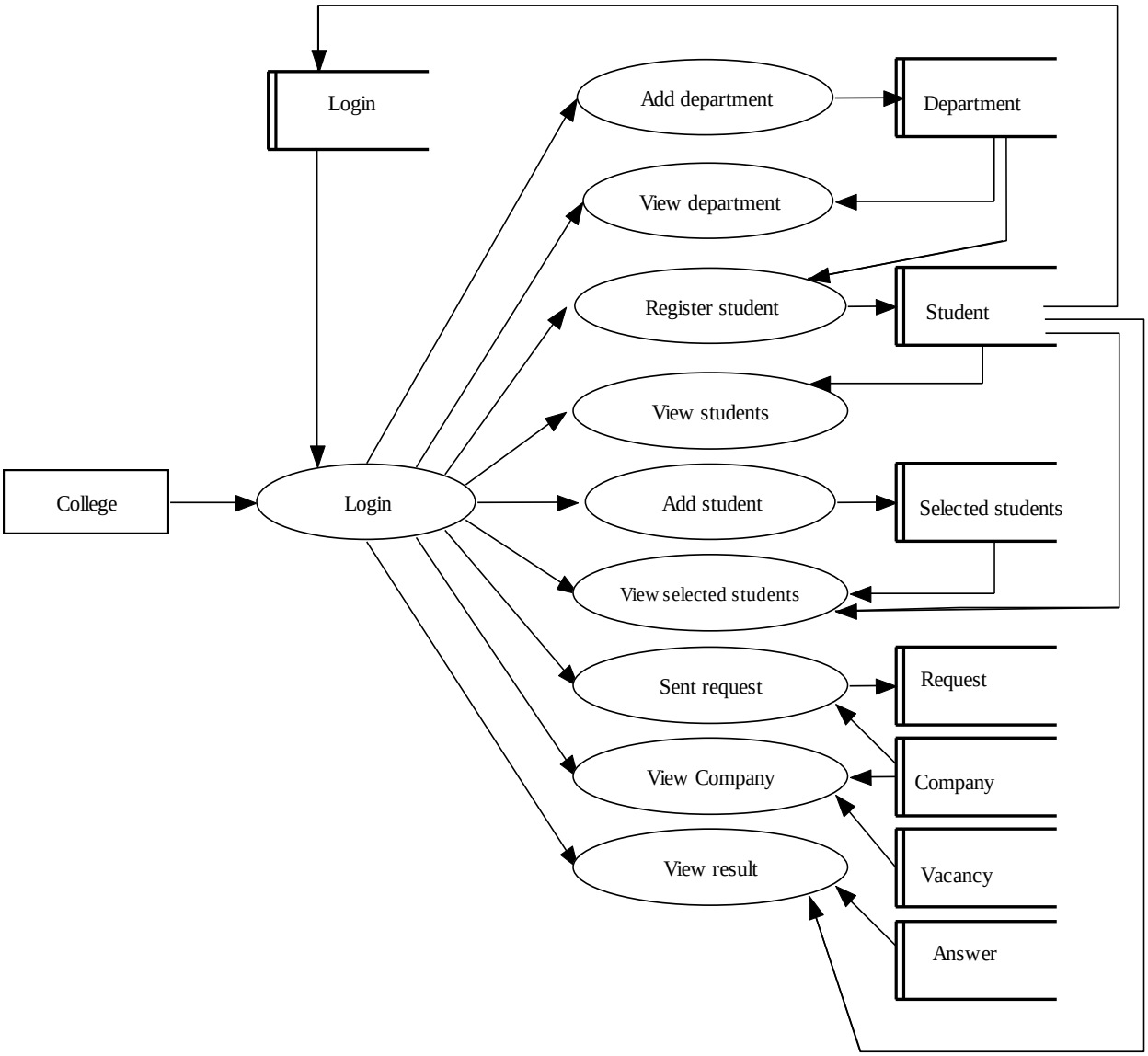
5.1 Level 0



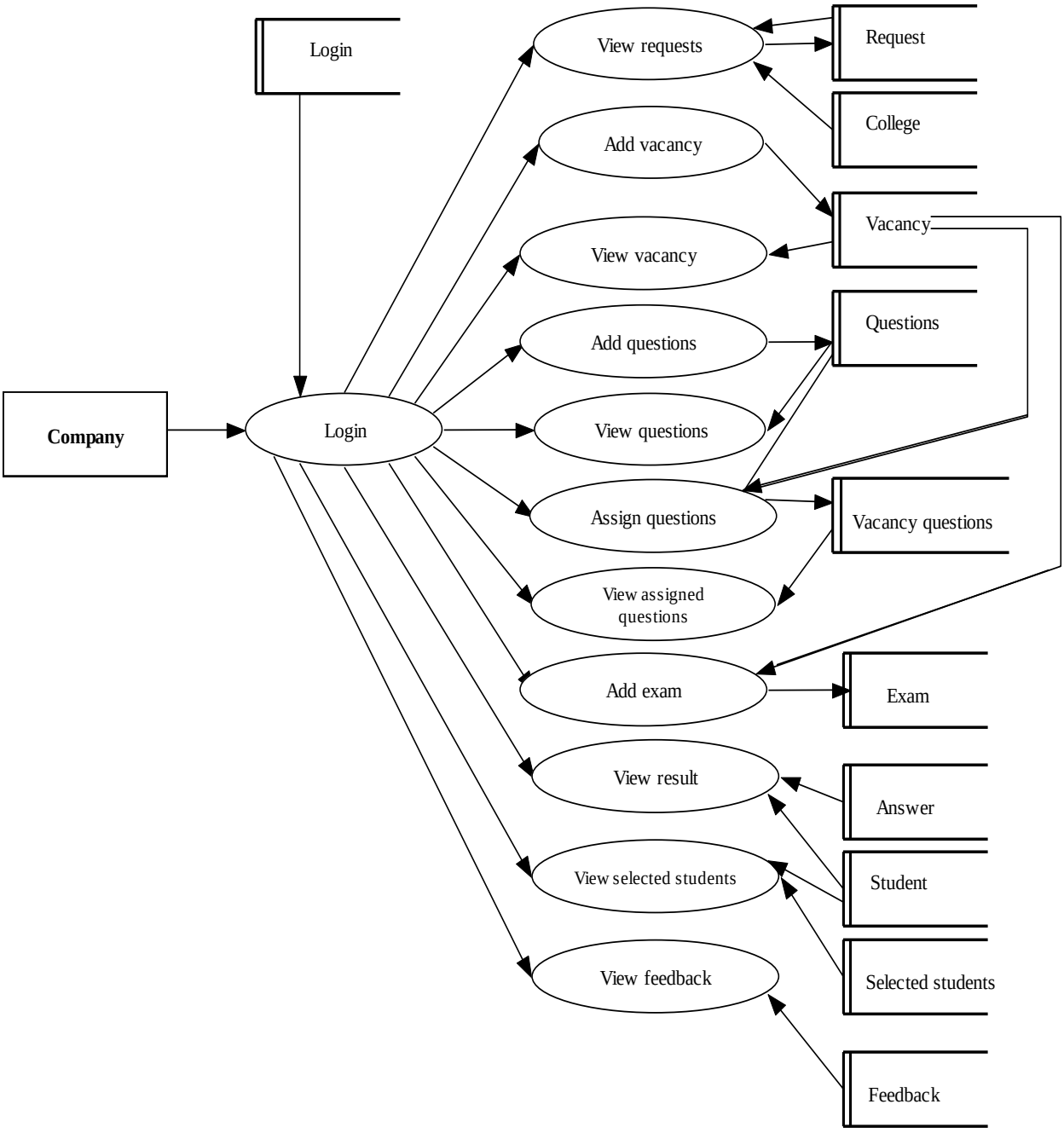
5.2 Level 1


Admin
Login
Login
Add College
View College
Add Company
View Company
View vacancy
View request status
View Feedbacks
View Students
Sent Notification
View Notification
College
Company
Vacancy
request
Feedback
Student
Notification

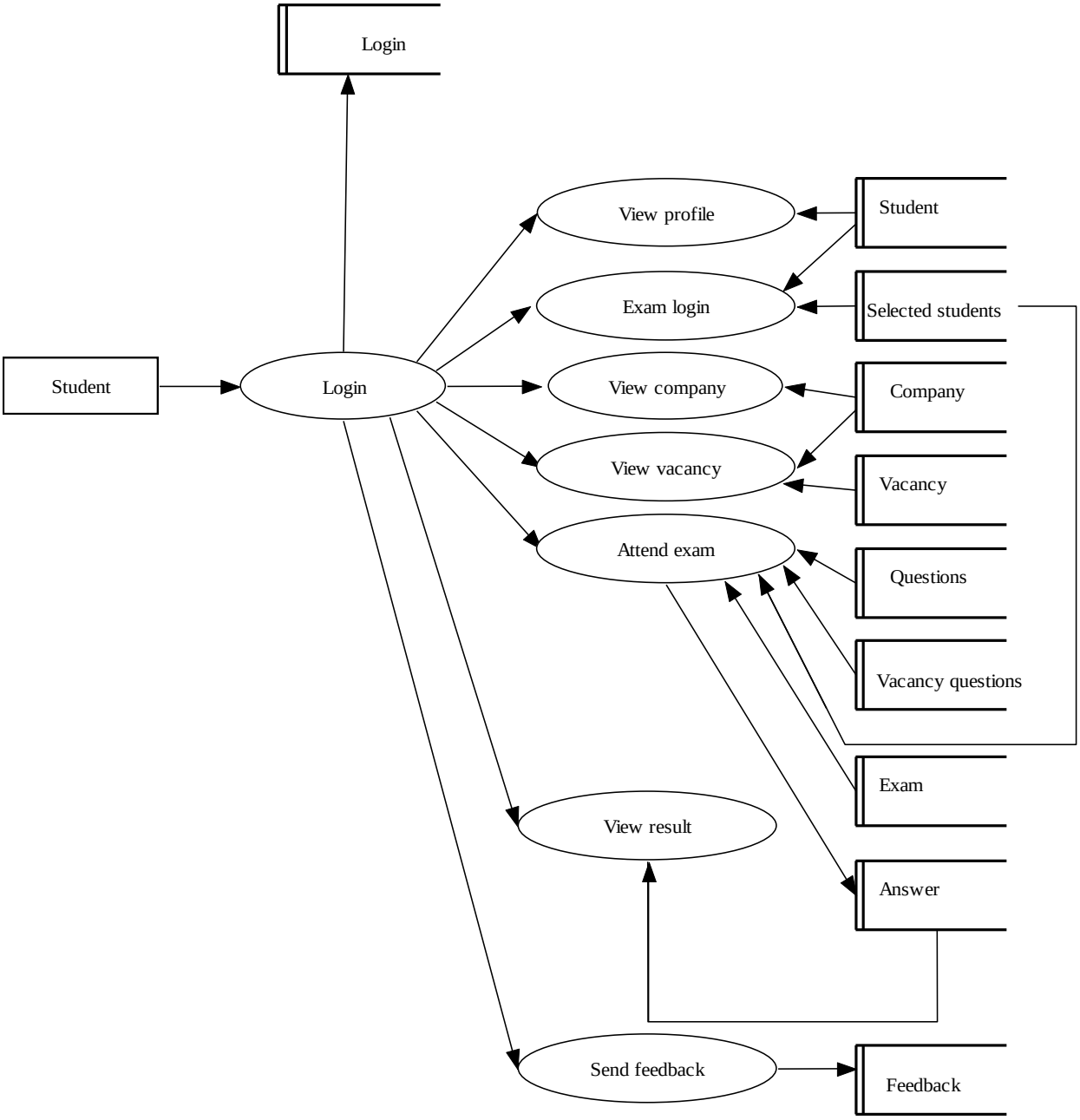
5.3 Level 2



5.4 Level 3


Login
View requests
Request
College
Add vacancy
Vacancy
View vacancy
Questions
Add questions
Company
Login
View questions
Assign questions
Vacancy questions
View assigned questions
Add exam
Exam
View result
Answer
View selected students
Student
Selected students
View feedback
Feedback

5.5 Level 4


Login
Student
Login
View profile
Exam login
View company
View vacancy
Attend exam
View result
Send feedback
Student
Selected students
Company
Vacancy
Questions
Vacancy questions
Exam
Answer
Feedback

CHAPTER 6

ER DIAGRAM