#### PLACEMENT PORTAL

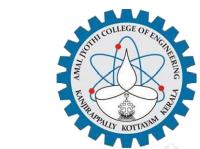
Project Report Submitted By

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Reg. No.:AJC20MCA-2006

In Partial fulfillment for the Award of the Degree Of

# MASTER OF COMPUTER APPLICATIONS (2 YEAR) (MCA) APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY



# AMAL JYOTHI COLLEGE OF ENGINEERING KANJIRAPPALLY

[Affiliated to APJ Abdul Kalam Technological University, Kerala. Approved by AICTE, Accredited by NAAC with 'A' grade. Koovappally, Kanjirappally, Kottayam, Kerala – 686518]

2020-2022

# DEPARTMENT OF COMPUTER APPLICATIONS AMAL JYOTHI COLLEGE OF ENGINEERING KANJIRAPPALLY



#### **CERTIFICATE**

This is to certify that the Project report, "PLACEMENT PORTAL" is the bonafide work of AKSA ANNA JOSE (Reg.No:AJC20MCA-2006) in partial fulfillment of the requirements for the award of the Degree of Master of Computer Applications under APJ Abdul Kalam Technological University during the year 2021-22.

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**DECLARATION** 

I here by declare that the project report "PLACEMENT PORTAL" is a bonafide

work done at Amal Jyothi College of Engineering, towards the partial fulfilment of

the requirements for the award of the Degree of Master of Computer Applications

(MCA) from APJ Abdul Kalam Technological University, during the academic year

2021-2022.

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AKSA ANNA JOSE

#### **ABSTRACT**

A web-based tool called placement cell is used by the college placement cell department. It is used to makes placement to students by college. The administrator manages the college officers and the companies. Admin can approve and deactivate a college as well as a corresponding company. Using this application a company can register in the portal as well as college and users. Company add new job and vacancy details, provide career oriented courses. Users view job vacancy details and apply for the job or make payment to the course.

The existing system is doing all the processes manually. The administrator should refer all the records kept for years ago to simply know details. The work that is done by human intervention. Humans should do all the work and manually stores the thousands of records of students and company.

To design and implement a web-based placement and which provides the up to date information of all students in a particular college. Online placement portal helps the colleges to overcome the difficulty in keeping records of hundreds and thousands of students. It helps in effective and timely utilization of the hardware and the software resources.

The home page contain various links such as sign up, sign in, contact us, about the portal. The administrator will create the users, company and the users will use the accounts created by the administrator. Admin can control the company and the users. When the user enters into respective page and can view the portal and company. This website is developed in windows platform.

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#### List of Abbreviation

IDE - Integrated Development Environment

HTML - Hyper Text Markup

CSS - Cascading Style Sheet

SQL - Structured Query Language

UML - Unified Modeling Language

# **CHAPTER 1**

# INTRODUCTION

#### 1.1 PROJECT OVERVIEW

The placement cell department of the college has a web-based program called Placement Portal. Both a company and a college can register for placement using this application. This website centrally stores the data, making it concurrently accessible to users. It oversees the database's historical data. New thing included in this project is that the users also have access to the web and they can view current drives of the company. And also, the college will manage all the academic details of the students. They have the right to accept and deactivate of the company, Maintain placed records. Students is not to take a direct role in this project. But company and college will do it.

#### 1.2 PROJECT SPECIFICATION

The proposed system is a website for placement cell in which company and college can do main functions instead of students. The system includes 5 modules. They are:

#### 1. Admin Module

Admin has the overall control of the system. Admin can accept and deactivate, Block & Unblock of the company and college.

#### 2. Company Module

They can add job vacancies, add course, provide career oriented courses and, Facilitate Payment to the course.

#### 3. College Module

Maintain placed records.

#### 4. Ordinary User Module

User can view company and make payment to the course and apply job.

#### 5. Gallery Module

Post selected candidate photo and company name, post selected date.

# **CHAPTER 2**

**SYSTEM STUDY** 

#### 2.1 INTRODUCTION

Data gathering, evaluation, problem-solving, and system modification recommendations are all steps in the process of system analysis. It is a problem-solving process that demands open dialogue between system users and system developers. Any procedure for developing a system should start with a system analysis or research. The system is painstakingly reviewed and evaluated. The system analyst acts as an interrogator and examines the workings of the current system in great detail. The system's input is identified, and the system as a whole is viewed. It is possible to connect the various processes to the companies' outputs.

System analysis involves comprehending the problem, finding the significant and crucial variables, analyzing and synthesizing the numerous components, and choosing the best or, at the very least, most acceptable course of action. The procedure needs to be thoroughly investigated utilizing a range of methods, such as questionnaires and interviews. To draw a conclusion, it is necessary to carefully review the information acquired from numerous sources. We relate to the current system. A thorough analysis of the current system has now revealed problem areas. The designer now takes on the role of a problem- solver and works to find solutions to the problems the company is now facing. The solutions are presented as ideas. Following an analytical comparison of each idea to the existing system, the best one is selected. The proposal is made in order to get the user's consent. User requests are used to evaluate the proposal and make any necessary adjustments. The loop will end after the user is happy with the suggestion. In order to do additional research on the system, preliminary investigation involves acquiring and interpreting data. Many feasibility studies are conducted by it. From these studies, it is possible to determine an approximate estimate of the system activities, from which it is possible to make a decision regarding the methods to use for an efficient system study and analysis.

#### 2.2 EXISTING SYSTEM

All processes are carried out manually by the current system. All the effort and manual storage of the thousands of student and business records should be done by humans. The files weren't saved in a hierarchical fashion, which made sorting and finding difficult, and the records were kept in modified Access sheets. This is very time- and labor-intensive. When there are more users, the process becomes much more challenging.

The manual procedure requires more time, more paperwork, as well as time and money waste, and there is no guarantee that the effort will be worthwhile. The process begins with collecting student information via Google forms, after which each student is asked to register for each company in which they are interested by repeatedly entering the same information. Time and money are wasted, and a great deal of redundant data is gathered, making its management difficult and occasionally impossible. The current system must be changed in order to include the new information and make it more effective, adaptable, and secure. Users, businesses, and colleges can access the news system to view all information regarding the current drive.

#### 2.3 DRAWBACKS OF EXISTING SYSTEM

- Human effort is needed.
- It is challenging to keep crucial information up to date in books.
- More manual labour is needed to produce the necessary reports.
- Lot of man power wasted.
- Process is partially informal.

#### 2.4 PROPOSED SYSTEM

The suggested system is established to solve every drawback of the current system. It's necessary to have a system that is more user friendly and user usable form for the growth of their career after graduation.

Creating and implementing a web-based placement that gives current information on all students enrolled in a specific college, placement The portal aids institutions in overcoming the challenge of maintaining the records of thousands and hundreds of students. It aids in the efficient and timely use of hardware and software resources. Links to sign up, sign in, contact us, and information about the portal may be found on the home page.

Users and the company will use the accounts created by the administrator, who will also create the users. The administrator has control over both the business and the users. When a user accesses the appropriate page, they can view the portal and do more than just apply for jobs, view job openings, and enroll in the company's employment-oriented courses. They can also make payments. This website is developed in windows platform.

#### 2.5 ADVANTAGES OF THE PROPOSED SYSTEM

The system is relatively easy to implement and design. The system works in practically all settings and uses very little system resources. It has the following characteristics:

#### > Better security: -

Unauthorized access must be prevented in order for data to stay safe. Data protection means that they are shielded against different types of erasure. Security, integrity, privacy, and confidentiality are the four connected problemsthat make up the system security challenge. Security is maintained by requiring a username and password to sign in. As we use secured databases to maintain the papers, it will also ensure data security.

#### > Ensure data accuracy: -

Manual mistakes made when inputting user information during registration are eliminated by the suggested system.

#### > Better service: -

The strain of hard copy storage will be reduced by the product. Using fewer people and less time to complete the same activity is another option. Without any data loss, the data can be maintained for a longer time.

# **CHAPTER 3**

# REQUIREMENT ANALYSIS

#### 3.1 ANALYSIS OF FEASIBILITY

A feasibility study is used to examine whether a project will ultimately achieve the organization's goals given the amount of time, work, and resources put in it. A feasibility study helps the project's creator to foresee the project's prospective future and usefulness. A feasibility study's foundation is the system proposal's viability, which takes into account the system's impact on the organization, ability to meet user needs, and effective use of resources. In order to avoid this, a new application frequently goes under a feasibility review before being approved for development.

The feasibility of the project is presented in the document, along with a list of several factors that were carefully taken into account during the project's feasibility study, including its technical, economic, and operational viability. These characteristics describe it: -

#### 3.1.1 Economical Feasibility

For the emergent system to function, cost and benefit studies are necessary. a set of standards to ensure that the project receiving the most attention is the onethat will produce the best outcomes the soonest. One of the variables is the cost of creating a brand-new system. During the initial investigation, the following were some of the significant financial queries:

- The expenses of doing a thorough system examination.
- the price of the hardware.
- The benefits of lower costs or fewer expensive mistakes.

The proposed system was created as part of a project, thus it doesn't involve any manual costs. The system may also be constructed affordably given that all of the necessary resources are already on hand.

The cost of the PLACEMENT PORTAL project was broken down into three categories: system costs, development costs, and hosting costs. All calculations indicate that the project was developed at a modest cost. As open source software was used to develop it entirely.

#### 3.1.2 Technical Feasibility

The system must first undergo a technical evaluation. The assessment of this viability must be based on an outline design of the system's requirements in terms of input, output, programs, and procedures. After identifying an outline system, the inquiry must next recommend the type of equipment, necessary steps for building the system, and methods of operating the system once it has been designed.

The following technical difficulties came up throughout the investigation:

- > Is the suggested technology compatible with the current technology?
- > Can the system extend if developed?

The project should be designed in such a way that the required performance and functionality are met while still adhering to the limits. The research makes use of cryptographic methods and a high resolution scanning gadget. Because newer versions of the same software still work with earlier versions, the system can continue be used even though the technology may become outdated after a while. The project is therefore only subject to a few limitations. The system was designed using PHP for the front end and a MySQL server for the back end, thus technically the project can be developed. The system was designed using PHP for the front end and a MySQL server for the back end, thus technically the project can be developed. The system used has an Intel i3 core processor, 4GB of RAM, and a 1TB hard drive.

#### 3.1.3 Behavioral Feasibility

The following inquiries are part of the suggested system:

- > Is there enough assistance for the users?
- > Will the suggested system harm anyone?

When created and implemented, the project would be advantageous since it achieves the goals. It is determined that the project is behaviorally feasible after thoroughly examining all behavioral factors.

#### 3.2 SYSTEM SPECIFICATION

#### 3.2.1 Hardware Specification

Processor - Intel corei3

RAM - 6 GB

Hard disk - 1 TB

#### 3.2.2 Software Specification

Front End - HTML

BackEnd - MYSQL

Client on PC- Windows 7 and above.

Technologies used - PHP, CSS, HTML5, JS, AJAX, J Query

#### 3.3 SOFTWARE DESCRIPTION

#### 3.3.1 PHP

An all-purpose programming language called PHP is also used for server-side scripting. For web development, PHP was developed. Currently, PHP is used by more than 244 million websites across 2.1 million web servers. Rasmus Ledorf created PHP in 1995, but today the PHP group provides the industry standard implementation. Usually PHP meant for personal Home page, but it is now an acronym for PHP: Hypertext Preprocessor, a recursive acronym. The PHP processor module on a web server translates PHP code to produce the web page that is displayed in the user's browser. However, due to usage restrictions on the term PHP, this renders it incompatible with the GNU General Public License (GPL). It has also advanced to include a command-line interface capability and may be used standalone. The majority of web servers allow for the free deployment of PHP, which can also be used independently as a shell on almost all platforms and operating systems.

#### 3.3.2 MySQL

MySQL, the most popular Open Source SQL database management system, was invented, distributed, and supported by Oracle Corporation. The website for MySQL has the most latest information on its software.

#### ➤ A database administration system is MySQL.

A database contains a structured collection of data. Examples could be basic shopping lists or the enormous amounts of data in a company network. To add, access, and process data stored in a database on a computer, you need a database management system like MySQL Server. Because computers are so good at handling enormous amounts of data, database management systems arefundamental to computing, whether they are used as standalone tools or as parts of other programs.

#### The databases used by MySQL are relational.

Instead than maintaining everything in one huge warehouse, a relational database maintains the data in individual tables. The database structures are organized using physically quick files. The logical model, which consists of objects like databases, tables, views, rows, and columns, provides a flexible programming environment. One-to-one, one-to-many, unique, required or optional, and "pointers" between separate tables are just a few examples of the rules you might design to regulate the relationships between different data fields. The database makes sure that your application never encounters inconsistent, duplicate, orphan, out-of-date, or missing data by abiding by these principles. SQL, or "Structured Query Language," is the abbreviation for MySQL. SQL is the most standardized language for accessing databases.

You might either explicitly enter SQL (for example, to generate reports), combine SQL statements into code written in another language, or use a language-specific API that hides the SQL syntax, depending on your programming environment. SQL is formally defined by the ANSI/ISO SQL Standard. The SQL standard, which has evolved since 1986, is available in several different variations. "SQL92," "SQL: 1999," and "SQL: 2003,"

respectively, are used in this document to designate references to the 1992, 1999, and 2003 editions of the standard. The latest edition of the SQL Standard is always meant when we use the phrase "the SQL standard."

#### > MySQL is an open source database system.

Anyone can use and modify software that is open source. By downloading the MySQL application for free from the Internet, anyone can use it. You have access to the source code and may examine and modify it as you see appropriate. The GPL (GNU General Public License), which outlines when you may and maynot use the MySQL software, governs how it is used. You can purchase a version with a commercial license from us if the GPL gives you pause or if you need to include MySQL code into a product meant for sale. More details are available in the MySQL Licensing Overview.

# > The scalability, dependability, and simplicity of use of the MySQL Database Server.

If that's what you're looking for, I recommend giving it a shot. When running alongside other programs, web servers, and other devices on a desktop or laptop, MySQL Server can function without much supervision. You can set up MySQL so that it utilizes the entire amount of RAM, CPU, and I/O on a systemthat is entirely used for MySQL.

#### ➤ Client/server or embedded systems can use MySQL Server.

The MySQL Database Software is a client/server system that includes a multi- threaded SQL server, a number of unique client programmes and libraries, administration tools, and a wide range of application programming interfaces (APIs). To develop a standalone solution that is easier to administer, faster, and smaller, we also provide MySQL Server as a multi-threaded embedded library that you can incorporate into your software.

### **CHAPTER 4**

### **SYSTEM DESIGN**

#### 4.1 INTRODUCTION

Any system or product that has been engineered must first go through the design process. An artistic process is design. Effective systems require a decent design. The process of utilizing various methodologies and ideas with the aim of thoroughly characterizing a process or a system to permit its physical realization is referred to as "design." It may be described as the process of using different methods and ideas in order to define a thing, a method, or a system in enough detail to make it possible for it to be physically realized matter what kind of development paradigm is employed, software design forms the technical core of the process of developing software.

The system design process leads to the development of the architectural detail required to build a system or product. Similar to any systematic technique, this program underwent the best design phase feasible, fine-tuning all efficiency, performance, and accuracy levels. During the design process, a document that is geared toward users is transformed into a document for programmers or database employees. The two phases of system design development are logical design and physical design.

#### **4.2 UML DIAGRAM**

Software system artefacts can be specified, visualized, built, and documented using the UML standard language. The Object Management Group (OMG) is the organization that developed UML, and the OMG received a draught of the UML 1.0 definition in January 1997.

The acronym for it is UML, or Unified Modeling Language. UML has some distinctive properties in contrast to other well-known programming languages like C++, Java, COBOL, etc. The graphical language UML is used to design software blueprints. The design, specification, construction, and documentation of software systems are all done using UML, a general-purpose visual modelling language. Although software systems are frequently represented using UML, it is not limited to this use. Modeling non-software systems is another area in which it is used. The manufacturing facility's process flow serves as an illustration. In spite of the fact that UML is not a programming language, tools that employ UML diagrams can produce code in a number of other languages. Direct connections exist between UML and object-oriented analysis and design. Despite the standardization.

A standard set by OMG now exists for UML. A complete UML diagram portrays an entire system by utilizing all of its components and relationships. The most significant element of the entire process is the UML diagram's visual impact. To finish it off, all the additional components are used. UML includes the following eight diagram.

- Class diagram
- Object diagram
- Use case diagram
- Sequence diagram
- Activity diagram
- State chart diagram
- Deployment diagram
- Component diagram

#### 4.2.1 Use Case Diagram

An illustration of the interactions between system components is a use case diagram. A use case is a method for locating, defining, and organizing system needs. The word "system" in this context refers to a thing that is being built or operated, such as a website for mail-order service and product sales. Use case diagrams are used in UML (Unified Modeling Language), a standard language for modelling actual items and systems. Just a few examples of system objectives include planning the overall requirements, validating a hardware design, testing and debugging a software product that is still in development, creating an online help reference, or performing a task centred on customer service. Customer assistance, item ordering, and other scenarios are only a few examples of use cases in a product sales context.

- The players, who are typically people who are connected with the system and are characterized according to their roles. The border, which establishes the system of interest in connection to the environment around it.
- The actors within and around the system play the roles that are specified in the use cases.
- The connections between and among the actors and use cases.

To depict the functional specifications of a system, use case diagrams are created. We must follow these rules to create a successful use case diagram after identifying the aforementioned things.

- A use case naming is crucial. The name should be selected in away that makes it clear what functions are carried out.
- Give actors a name that fits them.
- Show dependencies and relationships in the diagram with clarity.
- As the diagram's primary function is to indicate the needs, avoid attempting to include all possible relationships.
- Use notes to further explain any necessary significant topics.

#### **Use Case Diagram**

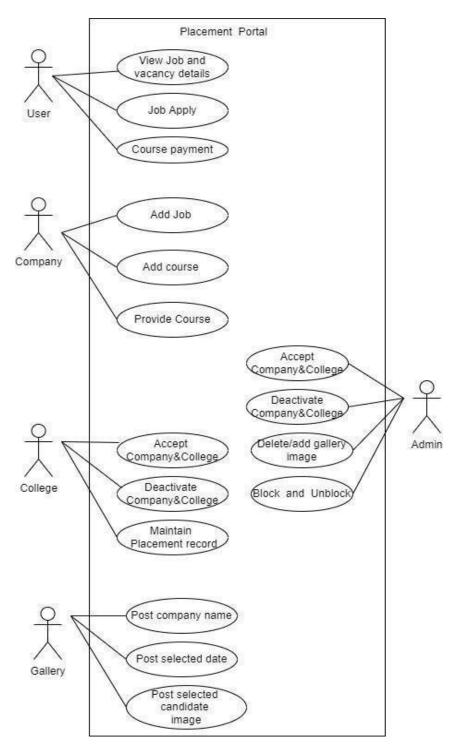


Fig.1: Use Case Diagram for Placement portal

#### 4.2.2 Sequence Diagram

A sequence diagram simply shows the order in which objects interact with one another sequentially, or when these interactions take place. An event diagram or an event scenario is another name for a sequence diagram. Sequence diagrams depict the steps taken by a system's parts. These diagrams are commonly used by business people and software engineers to describe and understand the requirements for both new and existing systems.

#### **Sequence Diagram Notations –**

- i. Actors A UML actor depicts a specific kind of role that an entity plays when interacting with the system and its objects. An actor is always outside the scope of the system that we are trying to describe in the UML diagram, andthis is a very important thing to keep in mind. The roles of external subjects and human users are just two examples of the many roles that actors play. In a UML diagram, we represent an actor using stick people notation. There could be more than one actor in a sequence diagram.
- ii. Lifelines A lifeline in a sequence diagram is a named object that designates a particular participant. Each episode in a sequence diagram is essentially represented by a lifeline. A sequence diagram starts at the top with the lifeline components.
- **Messages** Messages are used to represent communication between things. On the lifeline, the messages are displayed in chronological sequence. Arrows are used to represent messages. The essential elements of a sequence diagram are lifelines and messages. The following categories serve as a general breakdown of messages:

- Synchronous messages
- Asynchronous Messages
- Self-Message
- Found Message
- Lost Message

**iv.** Activation Bars –The box positioned on the lifeline is called the activation bar. It is applied to show that an object is active (or instantiated) during a two-object interaction. The rectangle's size tells us how long the objects will be active. When one object communicates with another in a sequence diagram, there is an interaction between the two things. The activation bar on the lifelines of the Message Caller (the object that transmits the message) and the Message Receiver (the item that receives the message) shows that both are active during the message3 exchange.

iv. Guards – In the UML, we utilise guards to model circumstances. When we need to limit the flow of messages under the guise of a condition being met, we use them. Software engineers rely on guards to inform them of the limitations imposed by a system or specific process.

#### Uses of sequence diagrams –

- Used to simulate and visualize the reasoning behind a complex functions, process or method.
- They can also be employed to display specifies from UML use case diagrams.
- Used to comprehend the precise operations of present or future systems.
- Visualize the flow of tasks and communications between different system component or objects.

#### **Sequence Diagram**

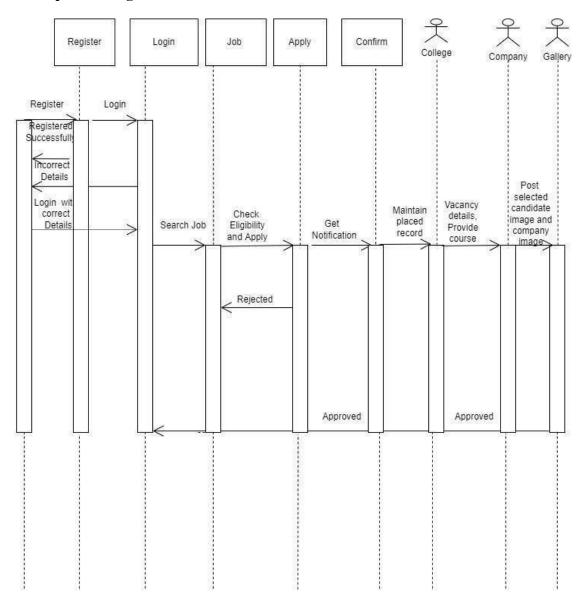


Fig.2: Sequence Diagram for Placement Portal

#### 4.2.3 State Chart Diagram

Diagrams of state charts are used to show a software system's behavior. A state machine diagram in a UML model can represent the behavior of a class, a subsystem, a package, or even an entire system. Other names for it include state charts and state transition diagrams. We can effectively describe the communications or interactions that occur between external entities and a system using state chart diagrams. These diagrams are used to model the event-based system. An event can be used to control an object's state. State chart diagrams are used to show the various states that an entity can be in within the application system.

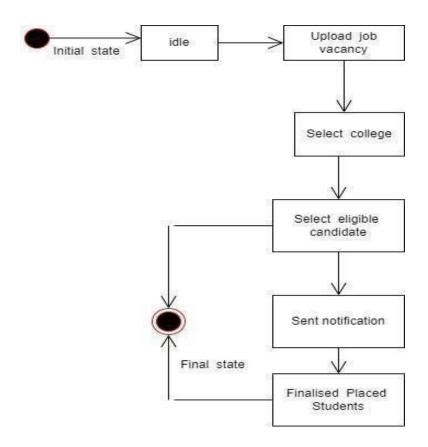


Fig.3: State Chart Diagram for Placement portal

#### 4.2.4 Activity Diagram

Activity diagrams demonstrate how activities are organised to form a service using various degrees of abstraction. Most of the time, a single event requires multiple operations to complete, especially when the operation is intended to complete multiple tasks that require coordination. This is also true for how the events in a single use case relate to one another, particularly in use cases where activities may overlap and coordination is necessary. It is also suitable for modeling how a collection of connected use cases interact to represent business workflows.

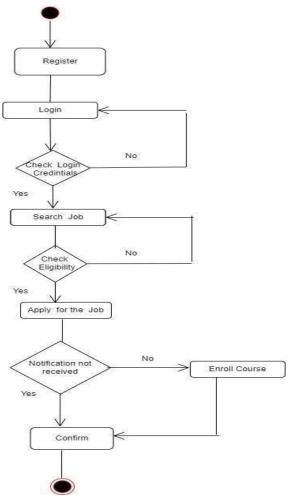


Fig.4: Activity Diagram for Placement portal

#### 4.2.5 Class Diagram

Class diagrams are static diagrams. It represents the static view of an application. Class diagrams can be used for more than only visualising, describing, and documenting different system components; they can also be used to generate software program executable code. A class diagram explains a class's attributes, capabilities, and constraints on the system. Class diagrams are heavily used in the modeling of object-oriented systems since they are the only UML diagrams that can be converted to object-oriented languages directly. A class diagram shows several classes, interfaces, connections, relationships, teamwork, and limitations. An alternative term for it is a structural diagram.

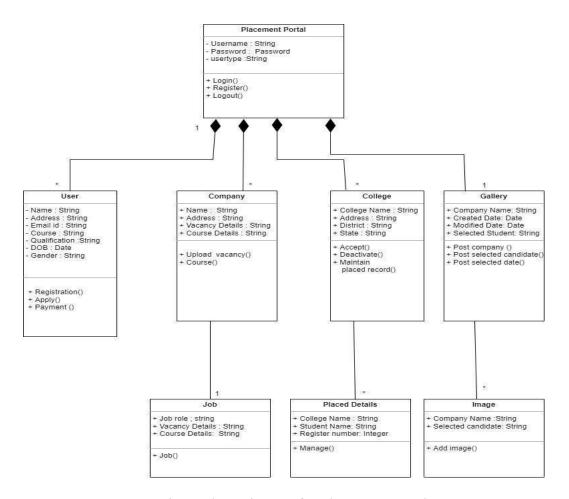


Fig.5: Class Diagram for Placement portal

#### 4.2.6 Object Diagram

Class diagrams act as a source for object diagrams, hence class diagrams are required. An object diagram is used to illustrate a class diagram instance. The core concepts used in class and object diagrams are similar. Object diagrams can be used to describe the static view of a system, which is a snapshot of the system at a certain point in time. Object diagrams are used to illustrate a set of items and their connections.

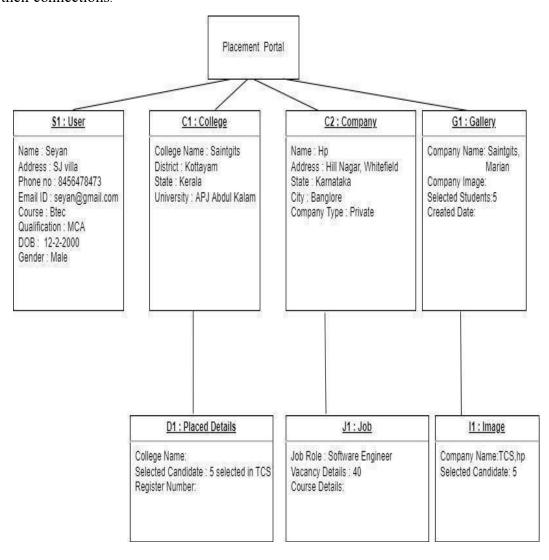


Fig.6: Object Diagram for Placement portal

#### 4.2.7 Component Diagram

The system's physical components are shown on component diagrams. Executables, libraries, files, papers, etc. are some of the elements that make up a node's physical aspects. The structure and connections between a system's individual components are shown using component diagrams. To make system executables, these representations are also employed.

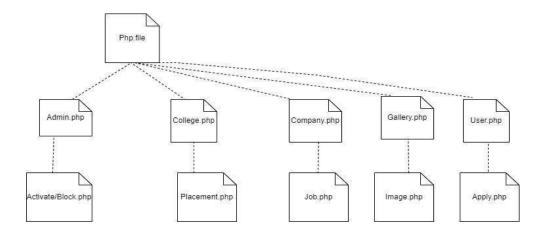


Fig.7: Component Diagram for Placement portal

### 4.2.8 Deployment Diagram

The topology of a system's physical components as well as the locations of its software components are shown in deployment diagrams. The static deployment view of a system is described using deployment diagrams. Diagrams for deployment show nodes and their connections.

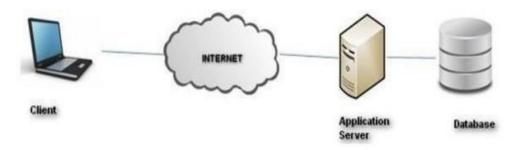


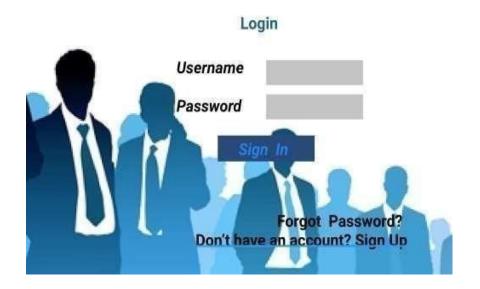
Fig.8: Deployment Diagram for Placement portal

## 4.3 USER INTERFACE DESIGN

### 4.3.1 Input Design

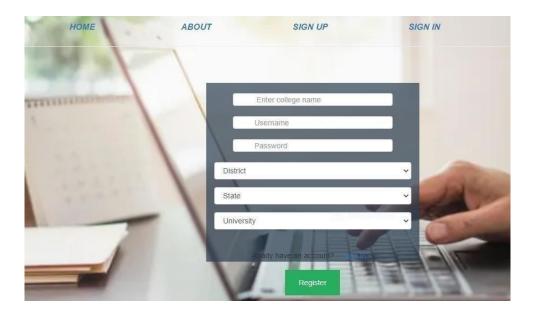




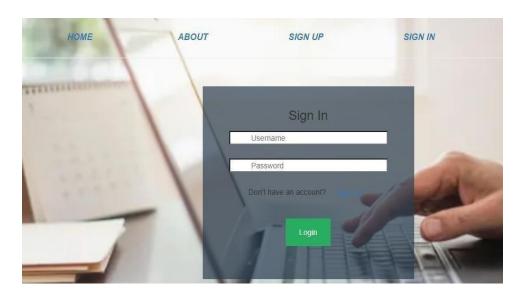


### 4.3.2 Output Design

## Register



## Login



### 4.4 DATABASE DESIGN

A database is a structured system with the capacity to store information and allows users to retrieve stored information quickly and effectively. Any database's primary goal is its data, which demands protection. There are two stages to the database design process. The user needs are obtained in the first step, and a database is created to as clearly as possible meet these criteria. This process, known as information level design, is carried out independently of all DBMS .The design for the specific DBMS that will be used to construct the system in issue is converted from an information level design to a design in the second stage.Physical Level Design is the stage where the characteristics of the particularDBMS that will be used are discussed. Parallel to the system design is a database design. The following two main goals are to be accomplished by the way the datais organized in the database.

- Data Integrity.
- Data independence.

#### 4.4.1 System for Relational Database Management(RDBMS)

The database is represented as a collection of relations in a relational paradigm. A table or file of records with values can be compared to each relation. In formal relational model terminology, a row is referred to as a tuple, a column heading is referred to as an attribute, and the table is referred to as a relation. Numerous tables, each with a unique name, make up a relational database. Each row in a tale reflects a set of related values. Relations, Domains & Attributes, A table is utilized in this regard. The rows of a table are referred to as "tuples." The group of n elements is known as a tuple. Columns in a table are called attributes. There are relationships established up between each table in the database. This ensures both referential and entity connection integrity. A domain D is made up of unified atomic values. A common technique to define a domain is to provide the data type from which the data values for the domain are derived. To make the values of the domain more understandable, it should have a name supplied. The values of a relation are all atomic and cannot be decomposed.

### Relationships

 Table relationships are established using Key. The two main keys of prime importance are Primary Key & Foreign Key. Entity Integrity and Referential Integrity Relationships can be established with these keys.

- Entity Integrity enforces that no Primary Key can have null values.
- Referential Integrity enforces that no Primary Key can have null values.
- Referential Integrity for each distinct Foreign Key value, there must exist a
  matching Primary Key value in the same domain. Other key are Super Key
  and Candidate Keys.

#### 4.4.2 Normalization

To minimize the impact of future changes on data structures, data are put together in the simplest possible way. Normalization is the formal method of arranging data structures in ways that reduce duplication and support integrity. The process of normalization involves dividing superfluous fields and dispersing a huge table into several smaller ones. Additionally, it is employed to prevent insertion, deletion, and update abnormalities. Two notions, keys and relationships, are used in the standard style of data modelling. A table row can only be uniquely identified by a key. Keys come in two varieties: primary keys and foreign keys. When identifying records from the same table, a primary key is an element or a set of elements in the table.

A column in a table that specifically identifies a record from another table is known as a foreign key. The third normal form has been applied to all tables' normalization. As the name suggests, it means returning things to their regular state. Through normalization, the application developer aims to create a data structure where names can be easily associated with the data by users, and where data is logically organized into appropriate tables and columns. Data redundancy, which puts a heavy strain on the computer resources, is avoided through normalization, which gets rid of recurring groups in the data.

#### These include:

- ✓ Normalize the data.
- ✓ Choose proper names for the tables and columns.
- ✓ Choose the proper name for the data.

#### First Normal Form

The First Normal Form states that the domain of each attribute must only contain atomic values and that the value of each attribute in a tuple must be a single value from that domain. Meaning that relationships cannot be used as attribute values within tuples or relations within relations, 1NF bans this. The only attribute values that are allowed by 1NF are single atomic or indivisible values. It is necessary to first enter the data into First Normal Form. To do this, divide the data into tables inside each table that are of the same type. A Primary Key or Foreign Key is assigned to each table depending on the requirements of the project.

This procedure creates new relations for each nested relation or non-atomic attribute. Repeated data groups were eliminated in this process. One can say that a relation is in first normal form if it only satisfies the constraints that involve the primary key.

#### **Second Normal Form**

No non-key attribute should be functionally dependent on a part of the primary key for relations where the primary key includes several attributes, according to the Second Normal Form. This requires creating a new connection for each partial key, which requires breaking each partial key down into its dependant characteristics. The database should retain the initial primary key and any attributes that are exclusively dependent on it. Data that only partially depends on the key can be deleted more easily thanks to this procedure. If and only if the primary key satisfies all the requirements and all of the relation's non- primary key attributes are solely dependent on the primary key, then a connection is said to be in first normal form.

#### Third Normal Form

The Third Normal Form states that no relation should have a non-key property that is functionally defined by a non-key attribute or by a group of non-key attributes. It is important that the primary key not be transitively dependent. The non-key qualities that serve as functional dependencies for other non-key attributes are thus broken down and arranged in relation. This method is used to get rid of anything that isn't completely dependent on the primary key.

#### **Indexing**

By reducing the number of disk access needed when a query is completed, indexing helps a database perform better. It is a data structure method used to locate and access data in a database rapidly. Several database columns are used to generate indexes. The primary key or candidate key of the table is duplicated inthe first column, which is the Search key. To make it easier to find the related data, these values are kept in sorted order. Recall that the information may or may not be kept in sorted order.

#### **Data Sanitization**

An automated procedure called "sanitization" is used to get a value ready for use in a SQL query. This process typically involves checking the values for particular characters that have a special significance for the target database. To prevent a SQL injection attack, you must sanitize (filter) the input string while processing a SQL query based on user input. For instance, the user and password input is a typical scenario. In that particular scenario, the server response would provide access to the 'target user' account without requiring a password check.

#### **TABLE DESIGN**

1. login\_table

Table description: To store sign in credentials of the users

Primary key: Login\_id

Foreign key: Null

Field Name	Data type	Constraints	Description
Login_id	Integer	Primary Key	Login id
Role_id	Varchar(20)	Not null	Login type
Userid	Varchar(20)	Not null	Username
Password	Password	Not null	Password
Status	Integer	Not null	Status

2. college\_registration\_table

Table description: Registering details of the users

Primary key: id

Foreign key: Login\_id (login\_id from login\_table)

Field Name	Data type	Constraints	Description
Id	Integer	Primary key	College Registration id
College_name	Varchar(20)	Not null	College name
District	Varchar(20)	Not null	District
State	Varchar(20)	Not null	State
University	Varchar(20)	Not null	University
Status	Varchar(20)	Not null	Status
Login_id	Integer	Forign Key	Login_id

# 3. college details\_table

Table description: To store college details.

Primary key: College\_id

Foreign key: Null

Field Name	Data type	Constraints	Description
College_id	Integer	Primary key	College id
Id	Integer	Forign key	College Registration id
College_address	Varchar(20)	Not null	Address of the college
Pincode	Integer	Not null	Pincode
Phone_no	Integer	Not null	Phone no
Userid	Varchar(20)	Not null	Userid of the college
Course	Varchar(20)	Not null	Course
specialization	Varchar(20)	Not null	Specialization

### 4. college request\_table

Table description: To know accept or rejected.

Primary key: College\_request\_id

Foreign key: College\_id (College\_id from college details\_table)

Foreign key:id (From college registration table)

Field Name	Data type	Constraints	Description
College_request_id	Integer	Primary key	College request id
College_id	Integer	Foriegn key	College id
Id	Integer	Foriegn key	College Registration id
Accept_college	Boolean	Not null	Accept college
Status	Varchar(20)	Not null	Status

#### 5. company\_table

Table description: To store company details

Primary key: Company\_id

Foreign key: id (from college registration table)

Field Name	Data type	Constraints	Description
Company_id	Integer	Primary key	Company id
Company_name	Varchar(20)	Not null	Company name
Company_address	Varchar(50)	Not null	Company address
Company_location	Varchar(20)	Not null	Company location
Image	Varchar(90)	Not null	Image
Company_descript ion	Varchar(20)	Not null	Company description
Prefered sex	Varchar(50)	Not null	Prefered sex
Designation	Varchar(50)	Not null	Designation
Qualification	Varchar(20)	Not null	Qualification
Job	Varchar(20)	Not null	Job
Id	Integer	Foriegn key	College Registration id

## 6. Placed\_table

Table description: To show the details of placed students

Primary key: id

Foreign key: Null

Field Name	Data type	constraint	Description
Id	Int	Primary key	Placed id
Name	Varchar(20)	Not null	Name
College	Varchar(20)	Not null	College
Course	Varchar(20)	Not null	Course
Year	Int	Not null	Year
Image	Varchar(20)	Not null	Image
Status	Integer	Not null	Status

## 7. placement\_table

Table description: To store the eligibility criteria of a company

Primary key: id

Foreign key: Company\_id (from Company\_table)

Field Name	Data type	constraints	Description
Id	Integer	Primary key	Placement id
eligibility	Varchar(20)	Not null	Placement eligibility
Selected_college	Varchar(20)	Not null	Selected college
Placed_students	Varchar(20)	Not null	Placed students
deadline	Integer	Not null	Deadline
description	Varchar(20)	Not null	Placement description
Company_id	Integer	Forign key	Company id
Status	Integer	Not null	Status

### 8. company\_registration\_table

Table description: Registering details of a company

Primary key:id

Foreign key: Login\_id (from login\_table)

Field Name	Data type	constraints	Description
Id	Integer	Primary key	Company Registrationid
Login_id	Integer	Foriegn key	Login id
Company Name	Varchar(20)	Not null	Company name
Userid	Varchar(20)	Not null	Userid
Password	Password	Not null	Password
address	Varchar(20)	Not null	Address
State	Varchar(20)	Not null	State
Role_id	Varchar(20)	Not null	Role_id
Status	Varchar(20)	Not null	Status

### 9. company request\_table

Table description: To know accepted or rejected.

Primary key: Company\_request\_id

Foreign key: Null

Field Name	Data type	Constraints	Description
Company_reque st_id	Integer	Primary key	Company request id
Id	Integer	Foriegn key	Company Rg id
Company_id	Integer	Foriegn key	Company id
Accept_compan Y	Boolean	Not null	Accept company
Status	Varchar(20)	Not null	Status

### 10. Gallery

Table description: To store the company name and image

Primary key: id Foreign key:Null

Field Name	Data type	Constraint	Description
Id	Integer	Primary Key	Id
Company	Varchar(50)	Not null	Company name
Image	Varchar(100)	Not null	Image of the company
Created	Varchar(50)	Not null	Created
Modified	Varchar(50)	Not null	Modified

### 11. course\_table

Table description: To store the course details provided by the company

Primary key: id Foreign key: Null

Field Name	Data Type	Constraint	Description
Id	Int	Primary key	Id
Course	Varchar(100)	Not null	Course
Filename	Varchar(100)	Not null	Filename
Image	Varchar(100)	Not null	Image
Size	Integer	Not null	Size
Amount	Integer	Not null	Amount

## 12. Paymenttable

Table description: To store the payment details

Primary key: id

Foreign key: Null

Field Name	Data Type	Constraint	Description
Id	Integer	Primary key	Payment id
Fname	Varchar(20)	Not null	fname
password	Varchar(5)	Not null	Password
Cred	Integer	Not null	Cred
coursename	Varchar(50)	Not null	Course name

## 13. card\_activation

Table description: To store the details of a User

Primary key: id

Foreign key: Null

Field name	Data Type	Constraint	Description
id	Integer(10)	Primary key	card id
u_card	Varchar(20)	No null	user card
u_f_name	Varchar(20)	No null	user name
u_l_name	Varchar(20)	No null	user last name
stream	Varchar(20)	No null	Stream
placed	Varchar(50)	No null	Placed company
u_birthday	Integer(20)	No null	Birthday
u_gender	Varchar(50)	No null	Gender
u_email	Varchar(50)	No null	Email
u_phone	Integer(5)	No null	Phone
u_state	Varchar(50)	No null	State
u_dist	Varchar(50)	No null	District
image	Varchar(50)	No null	Image
uploaded	Varchar(50)	No null	Uploaded

### 14. Tbljob

Table description: To store the details of company adding jobs.

Primary key: JOBID

Foreign key:Null

Field name	Data Type	Constraint	Description
JOBID	Integer(10)	Primary key	Job id
CATEGORY	Varchar(20)	Not null	Category of Job
OCCUPATION TITLE	Varchar(20)	Not null	Title of Job
REQ_NO_EMPLOYEES	Integer(10)	Not null	Required no:
SALARIES	Integer(10)	Not null	Salary
QUALIFICATION_WORKEXPEREI ENCE	Varchar(20)	Not null	Experience or Qualification
PREFERED SEX	Varchar(20)	Not null	Prefered sex
SECTOR_VACANCY	Integer(10)	Not null	Vacancy no:

## 15. job\_table

Table description: To store the details in a job application form

Primary key: id

Foreign key:Null

Field name	Data type	Constraint	Description
Id	Integer(10)	Primary key	Id
First Name	Varchar(20)	Not null	First name
Last Name	Varchar(20)	Not null	Last name
Email	Varchar(20)	Not null	Email
Job Role	Varchar(50)	Not null	Job role
Address	Varchar(20)	Not null	Address
D.O.B	datetime(6)	Not null	D.O.B
Upload your CV	Varchar(100)	Not null	Upload your CV

# **CHAPTER 5**

# **SYSTEM TESTING**

#### 5.1 INTRODUCTION

Testing is a method of establishing proper the execution of software in order to determine whether it behaves as intended. The words verification and validation are frequently used in connection with software testing. Validation is the process of examining or evaluating a product, including software, to determine whether it complies with all relevant specifications. One type of verification, software testing, uses methods including reviews, analyses, inspections, and walk through as well. Verifying that what has been specified matches what the user truly desired is the process of validation.

The methods of static analysis and dynamic analysis are alternative ones that are often related to software testing. Static analysis examines the software's source code, searching for issues and obtaining statistics without actually running the code. Dynamic analysis examines how software behaves while it is running in order to offer data like execution traces, timing profiles, and test coverage details.

Testing is a collection of activities that can be planned ahead of time and carried out in a methodical manner. Testing starts with individual modules and progresses to the integration of the full computer-based system. There are many rules that can be used as testing objectives, and testing is necessary for the system testing objectives to be successful. They are:

Testing is a process of executing a program with the intent of finding an error.

- A good test case one that high possibility of finding an undiscovered error.
- A successful test is one that uncovers an undiscovered error.

If a test is successfully performed in accordance with the aforementioned aims, it will reveal software bugs. Additionally, testing shows that the software functions seem to operate in accordance with the specification and that the performance requirements seem to have been satisfied. There are three ways to test program.

- For correctness
- For implementation efficiency
- For computational complexity

#### **5.2 TEST PLAN**

A test plan denotes a sequence of desired steps to be taken in order to complete various testing procedures. The Test Plan serves as a road map for the course of activity. An electronic program, along with related data structures and documentation, is created by software developers. The software developers are always in charge of testing each of the program's separate components to make sure that it fulfills the purpose for which it was intended. An independent test group (ITG) was created to address the inherent issues with allowing the builder to test what they have created. Measureable phrases should be used to describe the testing precise goals.

The test plan should contain data on the mean time to failure, the cost to find and fix issues, the remaining defect density or frequency of occurrence, and the number of test work hours required for each regression test. The levels of testing include:

- Unit testing.
- Integration Testing.
- Data validation Testing.
- Output Testing.

### **5.2.1** Unit Testing

Unit testing verifies the functionality of the fundamental building block of software design, the software component or module. Important control pathways are examined to find faults inside the module's border using the component level design description as a guide, the degree to which tests differ in complexity and the unit testing's uncovered breadth. Unit testing is white-box focused, and it is possible to run numerous components in parallel. The modular interface is put to the test to make sure that data enters and exits the software unit being tested correctly. The local data structure is inspected to make sure that information temporarily stored keeps its integrity.

Prior starting any other test, tests of data flow over a module interface are necessary. All other tests are irrelevant if data cannot enter and depart the system properly. An important duty during the unit test is the selective examination of execution pathways. Error circumstances must be foreseen in good design, and error handling paths must be put up to cleanly reroute or halt work when an error does arise. The final step of unit testing is boundary testing. Software frequently fails at its limits.

In the Sell-Soft System, unit testing was carried out by treating each module as a distinct entity and subjecting them to a variety of test inputs. The internal logic of the modules had some issues, which were fixed.

Each module is evaluated and run after it has been developed. To guarantee that every module functions properly and produces the desired outcome, all extraneous code was deleted.

### 5.2.2 Integration Testing

Integration testing is a methodical process for creating the program's structure and running tests at the same time to find interface issues. The goal is to use unit- tested components to construct a program structure that has been predetermined by design. The entire program is put to the test. The vastness of the entire program makes it challenging to isolate the reasons, making correction challenging. Once these mistakes are fixed, new ones come into being, and the process keeps going in an apparently infinite loop. All the modules were merged into the System after unit testing was completed to check for any interface consistency issues. Additionally, variations in program structures were eliminated, and a special program structure developed.

#### **5.2.3** Validation Testing or System Testing

The testing process ends with this phase. In this, the complete system, including all forms, code, modules, and class modules, was tested as a whole. Black box testing or system tests are common names for this type of testing. Black Box testing is primarily concerned with the functional requirements of the software. To fully test all functional requirements for a program, software developers might design sets of input conditions for Black Box testing. Black Box testing looks for flaws in the following areas: erroneous or missing functions, interface mistakes, data structure mistakes or faults involving external data access, performance mistakes, initialization mistakes, and termination mistakes.

### 5.2.4 Output Testing or User Acceptance Testing

The system under consideration has its user acceptance assessed; in this case, it must meet the needs of the company. When creating and making modifications as needed, the software should stay in touch with the user and viewpoint system. This was done in consideration of the following:

- input screen designs.
- > output screen designs.

The testing mentioned above is carried out using several test data types. In the system testing process, the preparation of test data is crucial. The system understudy is evaluated using the test data after it has been prepared. During system testing, faults in the test data are once again found and fixed using the testing procedures described above. The fixes are also logged for use in the future.

#### 5.2.5 Automation Testing

Software and other computer goods are tested automatically to make sure they abide by tight guidelines. In essence, It's a test to ensure that the hardware or software performs exactly as intended. It checks for errors, flaws, and any other problems that might occur throughout the creation of the product. Any time of day can be used to do automation testing. It looks at thesoftware using scripted sequences. It then summarizes what was discovered, and this data can be compared to results from earlier test runs.

### 5.2.6 Advantages of Automated Testing

Detailed reporting capabilities - Test cases for different scenarios are carefully built for automation testing. These planned sequences can cover a lot of ground and produce in-depth reports that are simply impossible for a human to produce.

Improve bug detection - Finding bugs and other flaws in a product is one of the key reasons to test it. This procedure can be made simpler with automation testing. Additionally, it can examine a greater test coverage than perhaps people can.

- Simplifies testing Most SaaS and tech organizations regularly test their products as part of daily operations. The key is to keep things as basic as you can. Automation has a lot of advantages. The test scripts can be reused when automating test tools.
- Speed up the testing process Humans cannot keep up with automated technology and machines. This is why we employ them, along with increased accuracy. Consequently, your software development cycles are shortened.
- Reduces human intervention Without a human in charge, tests can be carried out at any hour of the day or night. Additionally, when done automatically, this can lessen the possibility of human error.

#### 5.2.7 Selenium Testing

An open source program called Selenium automates web browsers. It offers a single interface that enables you to create test scripts in a number of different programming languages including Ruby, Java, Node JS, PHP, Perl, Python, and C#. Web application testing for cross browser compatibility is automated using the selenium testing tool. No matter if a web application is responsive, progressive, or standard, it is employed to assure good quality. Selenium is a free program.

#### **Test cases for Login Page**

Project Name: Placement Portal  Updation Test Case			
Test Priority (Low/Medium/High):	Test Designed Date: 18-07-2022		

Module Name: Login Screen Test Executed By: Ajith G.S

Test Title: Verify login with validusername and Test Execution Date: 18-07-2022

password

Description: Test the Login Page

High

**Pre-Condition:** User has valid username and password

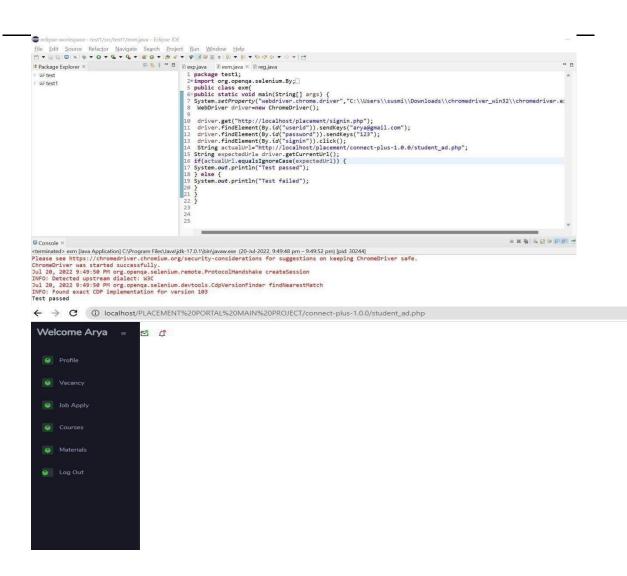
Test Step	Test Data	Expected Result	Actual Result	Status(P ass/Fail)
Navigation to Login Page		Login Page should be displayed	Login page displayed	Pass
ProvideValid User Name	User Name: susminmariam@g mail.com	User should be able to Login	User Logged in and navigated tothe dashboard with records	Pass
Provide Valid Password	Password: susu	Zogin	William	
Click on Sign In button				
Provide Invalid user nameor Password	Email Id: susum@gmail.com Password: sus	User should not be able to Login	Message for enter valid username or password	Pass
Provide Null Username Id Or Password	Email Id: null Password: null		displayed	
Click on Sign In button				

**Post-Condition:** User is validated with database and successfully login into account. The Account session details are logged in database

#### Code:

```
package test1;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import
org.openqa.selenium.chrome.ChromeDriver;
public class exm {
public static void main(String[] args)
{ System.setProperty("webdriver.chrome.driver", "C:\\Users\\susmi\\Downloads\\chromedrive
r win 32\\chromedriver.exe");
WebDriver driver=new ChromeDriver();
driver.get("http://localhost/placement/signin.php");
driver.findElement(By.id("userid")).sendKeys("arya@gmail.com");
driver.findElement(By.id("password")).sendKeys("123");
driver.findElement(By.id("signin")).click();
String actualUrl="http://localhost/placement/connect-plus-
1.0.0/student ad.php";String expectedUrl= driver.getCurrentUrl();
if(actualUrl.equalsIgnoreCase(expectedUrl))
{ System.out.println("Test passed");
} else {
System.out.println("Test failed");
```

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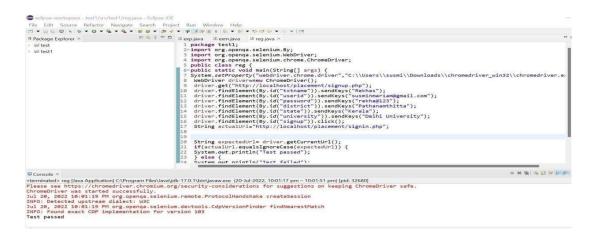
## Test cases for Registration

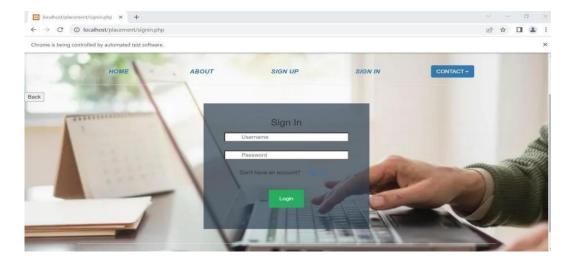
		<b>Project Name:</b>	<b>Placement Portal</b>	<u> </u>	
		Updati	on Test Case		
To	est Case ID: Regist	ration	Test Γ	Designed By: Aksa A	Anna Jose
Test Priority (Low/Medium/High): High		Test Designed Date: 18-07-2022			
Mo	dule Name: Regist	er Screen	Test Execu	ted By: Ajith G.S	
Test Title: User Registration Details		Test Execution Date: 18-07-2022			
Registr	otion: Register to sy ration is completed f some error occurs,	then			
Pre-Con	dition: User has va	lid user name and	d password		
Step	Test Step	Test Data	Expected Result	Actual Result	Status (Pass/Fail
1	Navigation to Register Page		Register Page shouldbe displayed	Registrtion page displayed	Pass
2	Provide Valid  Registration  details	User Name: jaison@ gmail.co m	User should be able to	User registrion Completed after	Pass
3			Register	go to the login page	
4	Click on Login button				
5	Provide profiledetails	Input Profile Detail	User will be redirected to	redirected To	D
7	Click on register button		Loginpage	Loginpage	Pass
8	Provide invalid information	Input invalid profile details.	41	User will be	Pass
9	Click on register button		User will be stay in register page	stay on that page showing error message	

**Post-Condition:** User is validated with database and successfully registered. The Account session details are logged in database.

#### Code:

```
package test1;
import org.openqa.selenium.By;
import
org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
public class reg {
public static void main(String[] args)
{ System.setProperty("webdriver.chrome.driver","C:\\Users\\susmi\\Downloads\\chrome
driver win32\\chromedriver.exe");
WebDriver driver=new ChromeDriver();
driver.get("http://localhost/placement/signup.php");
driver.findElement(By.id("txtname")).sendKeys("Rekhas");
driver.findElement(By.id("userid")).sendKeys("susminmariam@gmail.com");
driver.findElement(By.id("password")).sendKeys("rekha@123");
driver.findElement(By.id("district")).sendKeys("Pathanamthitta");
driver.findElement(By.id("state")).sendKeys("Kerala");
driver.findElement(By.id("university")).sendKeys("Delhi University");
driver.findElement(By.id("signup")).click();
String actualUrl="http://localhost/placement/signin.php";
String expectedUrl= driver.getCurrentUrl();
if(actualUrl.equalsIgnoreCase(expectedUrl))
{ System.out.println("Test passed");
} else {
System.out.println("Test failed");
```





# **CHAPTER 6**

# **IMPLEMENTATION**

#### 6.1 INTRODUCTION

The project's implementation phase is when the theoretical design is transformed into a functional system. It can be regarded as the most important stage in creating a successful new system since it gives users assurance that the system will operate as intended and be reliable and accurate. User documentation and training are its main concerns. Usually, conversion happens either during or after the user's training. Implementation is the process of turning a newly revised system design into an operational one, and it simply refers to placing a new system design into operation.

The user department now bears the most of the workload, faces the most interruption, and has the biggest influence on the current system. If the implementation is not well thought out or managed, confusion and chaos may result.

Implementation encompasses all of the steps used to switch from the old system to the new one. The new system could be entirely different, take the place of an existing manual or automated system, or it could be modified to work better. A reliable system that satisfies organisational needs must be implemented properly. System implementation refers to the process of actually using the built system. This comprises all the processes involved in switching from the old to the new system. Only after extensive testing and if it is determined that the system is operating in accordance with the standards can it be put into use. The system personnel assess the system's viability.

The effort necessary to implement the three key components of education and training, system testing, and changeover will increase with the complexity of the system being deployed. The implementation state involves the following tasks:

- Careful planning.
- ➤ Investigation of system and constraints.
- > Design of methods to achieve the change over.

#### **6.2 IMPLEMENTATION PROCEDURES**

Software implementation refers to the complete installation of the package in its intended environment, as well as to the system's functionality and satisfaction of its intended applications. In many businesses It will be operated by someone else the commissioning project for developing software.

In the initial stage people doubt about the software but we have to ensure that the resistance does not build up, as one has to make sure that:

- The active user must be aware of the benefits of using the new system.
- Their confidence in the software is built up.
- Proper guidance is imparted to the user so that he is comfortable in using the application.

Before going ahead and viewing the system, the user must know that for viewing the result, the server program should be running in the server. If the server object is not up running on the server, the actual process won't take place.

#### **6.2.1** User Training

The purpose of user training is to get the user ready to test and modify the system. It is crucial for the participants to have faith in their roles in the new system in order to achieve the goal and benefits anticipated from a computer-based system. Training is more necessary as systems get more complicated. The user learns how to enter data, handle error warnings, query the database, call up routines that will generate reports, and execute other important tasks through user training.

### **6.2.2** Training on the Application Software

The user will need to receive the essential basic training on computer awareness after which the new application software will need to be taught to them. This will explain the fundamental principles of how to use the new system, including how the screens work, what kind of help is displayed on them, what kinds of errors are made while entering data, how each entry is validated, and how to change the date that was entered. Then, while imparting the program's training on the application, it should cover the information required by the particular user or group to operate the system or a certain component of the system. Depending on the user group and hierarchical level, this training could be different.

#### **6.2.3** System Maintenance

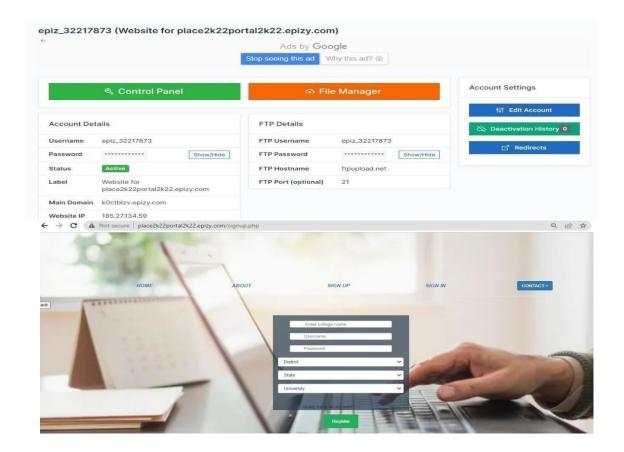
The mystery of system development is maintenance. When a software product is in the maintenance stage of its life cycle, it is actively working. A system should be properly maintained after it has been effectively implemented. An essential part of the software development life cycle is system maintenance. In order for a system to be flexible to changes in the system environment, maintenance is required. Of course, software maintenance involves much more than just "Finding Mistakes."

## 6.2.4 Hosting

app.infinityfree.net is a free website hosting platform that provides an array of valuable features, including a website builder, control panel and file manager.

### **Hosting Procedures**

- 1. Create an Account or Log In into your account.
- 2. Create a Hosting Account.
- 3. Create a Custom Domain or a Subdomain provided by InfinityFree.
- 4. Manage your account.
- 5. Upload your files.
- 6. Creating your Databases.
- 7. Changing your PHP connections file configurations.



# **CHAPTER 7**

# CONCLUSION AND FUTURE SCOPE

## 7.1 CONCLUSION

The proposed system provides the facility for users to register in the portal and view all information and services about the portal. The system introduces the facility for job oriented courses and the users make payment to that course. The college maintains placed students details for future reference. The company details and new vacancy details can be viewed through this website.

### 7.2 FUTURE SCOPE

The challenge of maintaining records for thousands and thousands of students can be overcome by institutions using online placement portals. It aids in the efficient and timely use of hardware and software resources.

This system can be upgrade with following functionalities:

- Mock interview for students.
- Mock aptitude test for students.
- To conduct webinar for users.

# **CHAPTER 8**

# **BIBLIOGRAPHY**

#### **REFERENCE:**

- Gary B. Shelly, Harry J. Rosenblatt, "System Analysis and Design", 2009.
- Roger S Pressman, "Software Engineering", 1994.
- PankajJalote, "Software engineering: a precise approach", 2006.
- James lee and Brent ware Addison, "Open source web development with LAMP",2003.
- IEEE Std 1016 Recommended Practice for Software Design Descriptions.

#### **WEBSITES:**

- www.w3schools.com
- www.geeksforgeeks.com
- www.jquery.com
- http://homepages.dcc.ufmg.br/~rodolfo/es-1-03/IEEE-Std-830-1998.pdf
- www.agilemodeling.com/artifacts/useCaseDiagram.html

**CHAPTER 9** 

**APPENDIX** 

## 9.1 SAMPLE CODE

### Signin.php

```
<?php
include 'header.php';
<body style="background-color:#E0F0C8;">
</style>
<div style="background-color: grey; width: 500px;">
</div>
<h3><center> <class="text-center mb-4"> Sign In</h3></center>
<link rel="stylesheet" href="style.css">
<form action="login_action.php" method="post" >
<center>
<input type="text" name="userid" id="userid" placeholder="Userid" require></div>
                          <input type="password" name="password" id="password"
placeholder="Password" required></div>
<div class="container signin">
 Don't have an account? <a href="signup.php" class="btn">Sign
Up </a> 
<br> <input type="submit" name="submit" value="Login" class="btn-login"/>
</form>
</center>
<?php
include 'footer.php';
```

# login\_action.php

```
<?php
session_start();
include "connection.php";
$Userid=$_POST['userid'];
$Password=$ POST['password'];
$a=mysqli_query($conn,"SELECT * FROM `login_table` WHERE `Userid` ='$Userid' and
`Password`='$Password''');
//if($a)
//{
while(srow = mysqli fetch assoc(sa))
if($row['role_id']==0)
$_SESSION['id']=$row['login_id'];
                                  header("Location:./connect-
plus-1.0.0/company ad.php");
else if($row['role id']==1)
$ SESSION['id']=$row['login id'];
header("Location:./connect-plus-1.0.0/admin.php");
else if($row['role_id']==2)
$ SESSION['id']=$row['login id'];
header("Location:./connect-plus-1.0.0/student ad.php");
else if($row['role_id']==3)
$ SESSION['id']=$row['login id'];
header("Location:./connect-plus-1.0.0/college_ad.php");
else
header("Location:connect-plus-1.0.0/admin.php");
?>
```

#### apply.php

```
<?php
//require("db.php");
include("connection.php");
?>
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title></title>
</head>
<body>
<div class="form">
<h2></h2>
<h2><font color=black><center>Apply Job</h2></center>
<thead>
>
<strong>Sl No </strong>
<strong>CATEGORY</strong>
<strong>OCCUPATIONTITLE</strong>
<strong>QUALIFICATION WORKEXPERIENCE</strong>
<strong>Action</strong>
</thead>
<?php
count=1;
$sel query="Select * from tbljob ORDER BY JOBID asc;";
$result = mysqli query($conn,$sel query);
while($row = mysqli fetch assoc($result)) { ?>
align="center"><?php echo $count; ?>
<?php echo $row["CATEGORY"]; ?>
<?php echo $row["OCCUPATIONTITLE"]; ?>
<?php echo $row["QUALIFICATION_WORKEXPERIENCE"]; ?>
<!--<td><a href="block.php?block=<?php echo $row["id"]; ?>"> <button class="btn btn-
```

```
danger">Block</button></a>
<a href="unblock.php?unblock=<?php echo $row["id"] ?>"><button class="btn btn-danger">Unblock</button></a>
>="btn btn-danger">Unblock</button></a>
>="btn btn-danger">Unblock</button></a>
>="btn btn-danger">Unblock</button></a>
>="button "gapply=<?php echo $row["JOBID"]; ?>"> <button type="button" class="btn btn-primary" id="btn" value="View" onclick="myFunction()">Apply Now!</button>
>="btn" value="view" onclick="myFunction()">Apply Now!
>="btn" value="view" onclick="myFunction()">Apply value="view" onclick="myFunc
```

#### course\_stud.php

```
<?php
//include 'session.php';
//register
include 'connection.php';
?>
<!-- partial -->
<!-- partial -->
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title></title>
</head>
<body>
<div class="form">
<h2></h2>
<thead>
<center>
<!--#5FCF80 is color-->
<!DOCTYPE html>
       <link rel="stylesheet"</pre>
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
<!-- jQuery library -->
           <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
<!-- Latest compiled JavaScript -->
         <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>
```

```
link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
 awesome/4.7.0/css/font-awesome.min.css">
         link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
 awesome/4.7.0/css/font-awesome.min.css">
 <style>
 @media screen and (max-width: 1000px)
 .coursecards {display:block;}
 .card{display: block;min-width: 300px;}
 @media screen and (max-width: 1000px)
 #cform{min-width: 500px;}
 .mouse
 transform:
 rotate(90deg);
 background-color:
 black;
 .price-table:hover
 box-shadow: 5px 5px 5px lightgrey, -5px 0px 5px lightgrey;
 .modal-header
 background-color:#5FCF80;
 .mybutton {
border-radius: 0px 40px 40px 0px;
 background-color: #5FCF80;
 border: none;
color: #FFFFFF; text-
 align: center;font-size:
 28px; padding: 10px;
 width: 200px;
 transition: all 0.5s; cursor:
 pointer; margin: 5px;
```

```
.mybutton span { cursor: pointer; display: inline-
  block; position: relative;
  transition: 0.5s;
.mybutton span:after {content:
  '\00bb';
   position: absolute; opacity: 0;
     top: 0; right: -20px;
  transition: 0.5s;
.mybutton:hover span {padding-right:
  25px;
  }
.mybutton:hover span:after {opacity: 1;
  right: 0;
  .card {
 box-shadow: 0 4px 8px 0 rgba(0,0,0,0.2);transition: 0.3s;
  width: 20%;
 float:left; margin:8px;
  .card:hover {
  box-shadow: 0 8px 16px 0 rgba(0,0,0,0.2);
  .cardcontainer { padding: 2px 16px;
```

```
.card {
   box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.2);max-width:
     300px;
     margin: auto;
      text-align: center;font-family:
     arial;
    float: left; margin: 5px;
     margin-left: 50px;
         .title { color: grey;
     font-size: 18px;
                button {border: none;
              outline: 0; display: inline-block;
     padding: 8px;
      color: white; background-color: #000;text-align:
      cursor: pointer; width: 100%; font-size:
     18px;
text-decoration: none; font-size: 22px;
     color: black;
     }
     button:hover, a:hover {opacity: 0.7; color:white;
     img
   width: 100%; height: 150px;
     #cform
     display: none;
       position: absolute;top:-20px;
     }
     </style>
     <html lang="en">
     <head>
     <meta charset="utf-8">
     <meta name="viewport" content="width=device-width,</pre>
```

```
initial-scale=1">
         <title>Placement Portal</title>
         <meta name="description" content="Free Bootstrap Theme by BootstrapMade.com">
                         <meta name="keywords" content="free website templates,</pre>
                         freebootstrapthemes, free template, free bootstrap, free website template">
                   <link rel="stylesheet" type="text/css"</pre>
         href="https://fonts.googleapis.com/css?family=Open+Sans|Candal|Alegrey a+Sans">
         link rel="stylesheet" type="text/css" href="css/font-awesome.min.css">
         link rel="stylesheet" type="text/css" href="css/bootstrap.min.css">
         link rel="stylesheet" type="text/css" href="css/imagehover.min.css">
         <link rel="stylesheet" type="text/css" href="css/style.css">
         Theme Name: Mentor
          Theme URL: https://bootstrapmade.com/mentor-free-education-bootstrap-
         theme/Author: BootstrapMade.com
         Author URL: https://bootstrapmade.com
         </head>
         <body>
         <!--Navigation bar-->
         <nav class="navbar navbar-default navbar-fixed-top">
         <div class="container">
         <div class="navbar-header">
<button type="button" class="navbar-toggle" data-toggle="collapse" data-</pre>
         target="#myNavbar">
         <span class="icon-bar"></span>
         <span class="icon-bar"></span>
         <span class="icon-bar"></span>
         </button>
         </div>
         </nav>
         <!--/ Navigation bar-->
         <script>
         function showMessage(btnId)
```

```
document.getElementById("cform").style.display="block";
document.getElementById("coursecards").style.display="none";
document.getElementById("couselect").value=btnId;
document.getElementById("couselect").readOnly
</script>
<div class="row">
<div class="col-xs-12">
<div class="checkbox icheck">
</div>
</div>
<div class="col-xs-12">
<button type="submit" class="btn btn-green btn-block btn-flat" >
Buy this course!</button>-->
</div>
</div>
</form>
</div>
</div>
</div>
</div>
</div>
<div class="card" >
<img src="img/course2.jpg" >
<h1>React JS</h1>
Advanced Level
 8000/-
<div style="margin: 24px 0;">
</div>
<!--<p><button type="submit" id="reactjs"
onClick='showMessage(this.id)'>Buy the course</button>-->
                          <form
                          name="profile" action="../../PaytmKit/TxnTest.php"
method="POST" style="padding: 15px;background:white;color:black;" class="container
rounded">
```

```
<input type="hidden" value="8000" id="choose" name="choose" />
<input type="submit" class="btn btn-primary" value="Submit"</pre>
   style="width:100px;background-color:black;margin-right:79%"/>
   <?php ?>
   </form>
   </div>
   <!-- row2-->
   <div class="card" >
   <img src="img/course4.png">
   <h1>Angular JS</h1>
   Advanced Level
    8000/-
   <div style="margin: 24px 0;">
   </div>
   <!-- <p><button type="submit" id="angularjs"
   onClick='showMessage(this.id)'>Buy the course</button>-->
   <!--row3-->
     <form name="profile" action="../../PaytmKit/TxnTest.php" method="POST"</pre>
   style="padding: 15px;background:white;color:black;" class="container rounded">
   <input type="hidden" value="8000" id="choose" name="choose" />
   <input type="submit" class="btn btn-primary" value="Submit"
   style="width:100px;background-color:black;margin-right:79%"/>
   <?php ?>
   </form>
   </div>
   <div class="card" id="coursecard">
   <img src="img/course10.png" >
   <h1>Node JS</h1>
   8000/-
   <div style="margin: 24px 0;">
```

```
</div>
<!--<p><button type="submit" id="Nodejs" onClick='showMessage(this.id)'>Buy the
   course</button>-->
                       <form
                       name="profile" action="../../PaytmKit/TxnTest.php"
                       method="POST"
                       style="padding: 15px;background:white;color:black;"
                       class="container rounded">
   <input type="hidden" value="8000" id="choose" name="choose" />
   <input type="submit" class="btn btn-primary" value="Submit"
   style="width:100px;background-color:black;margin-right:79%"/>
   <?php ?>
   </form>
   </div>
   <!--
                                  row4-->
   <div class="card" > <img src="img/course15.jpg" >
   <h1>Perl</h1>
   8000/-
   <div style="margin: 24px 0;">
   </div>
             <!--<p><button type="submit" id="perl"
             onClick='showMessage(this.id)'>Buythe course</button>-->
                <form name="profile" action="../../PaytmKit/TxnTest.php"</pre>
   method="POST"
                             style="padding: 15px;background:white;color:black;"
   class="container rounded">
   <input type="hidden" value="8000" id="choose" name="choose" />
 <input type="submit" class="btn btn-primary" value="Submit"</pre>
   style="width:100px;background-color:black;margin-right:79%"/>
   <?php ?>
   </form>
```

```
</body>
 <!--
                       php for calculating visits in courses-->
 <?php
 if($ SERVER['REQUEST METHOD']=="GET"){
 $localhost = "localhost";
 $usernamew = "root";
 $passwordw = "";
$db = "placement_portal";
$conn =
 mysqli connect($localhost,$usernamew,$passwordw,$db);if(!$conn){echo
 "Connection error";
else{
 $sql = "UPDATE counter SET visit=visit+1 WHERE id = 1";
$result = mysqli_query($conn,$sql);
 }
 ?>
 </center>
 <?php
 $sql13 = "SELECT * FROM course table";
 $result13 = mysqli query($conn, $sql13);
 $files = mysqli_fetch_all($result13, MYSQLI_ASSOC);
 ?>
 <?php foreach ($files as $file): ?>
 <?php echo $file['Course']; ?>
 <?php echo $file['Filename']; ?>
 <?php echo floor($file['size'] / 100000) . 'KB'; ?>
```

```
<?php
  id = file['id'];
  $sql = "SELECT * FROM course table WHERE id='$id'";
             $result = mysqli query($conn, $sql);if
  (mysqli num rows(\$result) > 0) {
  if ($row = mysqli fetch assoc($result)) {
  <?php
  <a href="uploads/<?php echo $row['Course']; ?>" download="<?php echo
  $row['Course']; ?>" class="download link"><?php echo "download"; ?></a>
  <?php endforeach;?>
  </div>
  </div>
  </div>
  <!-- Sing in Form -->
  <!-- <section class="sign-in">
  <div class="container">
  <div class="signin-content">
  <div class="signin-image">
  <figure><img src="images/signin-image.jpg" alt="sing up image"></figure>
  <a href="#" class="signup-image-link">Create an account</a>
  </div>
  <div class="signin-form">
  <h2 class="form-title">Sign up</h2>
  <form method="POST" class="register-form" id="login-form">
  <div class="form-group">
<label for="your name"><i class="zmdi zmdi-account material-icons-</pre>
  name"></i></label>
  <input type="text" name="your name" id="your name" placeholder="Your Name"/>
  </div>
  <div class="form-group">
  <label for="your pass"><i class="zmdi zmdi-lock"></i></label>
  <input type="password" name="your pass" id="your pass" placeholder="Password"/>
```

```
</div>
<div class="form-group">
<input type="checkbox"
name="remember-me" id="remember-me" class="agree-term" />
<label for="remember-me" class="label-agree-term">
<span></span></span>Rememberme</label>
</div>
<div class="form-group form-button">
<input type="submit" name="signin"
id="signin" class="form-submit" value="Log in"/>
</form>
</body>
</html>
```

## Adding job.php

```
<?php
include("connection.php");
?>
<!DOCTYPE html>
<html>
<head>
<style>
      .status-
btn{ border:none;
color:white;
padding:5px 10px;
width:100px; cursor:
pointer;
box-shadow:0px 0px 15px gray
  .approve{ background-
color:green;
  .disapprove{ background-
color:red;
</style>
</head>
<body>
<!--<form action="">
<div class="form container">
<!-- ==== displaying data with approval button ===== -->
<!--<table border="5" cellspacing="5" cellpadding="10" width="80%">-->
<center>
<h2><font color=black>Vacancy List</h2>
&nbsp &nbsp &nbsp
<th>>S.N</th>
CATEGORY
OCCUPATIONTITLE
REQ_NO_EMPLOYEES
SALARIES
QUALIFICATION WORKEXPERIENCE
PREFEREDSEX
SECTOR VACANCY
```

```
</thead>
<?php
count=1;
$sel query="select * from tbljob";
   $result = mysqli_query($conn,$sel_query);while($row =
mysqli fetch assoc($result)) { ?>
&nbsp&nbsp&nbsp&nbsp&nbsp<?php echo $count; ?>
<?php echo $row["CATEGORY"]; ?>
<?php echo $row["OCCUPATIONTITLE"]; ?>
<?php echo $row["REQ_NO_EMPLOYEES"]; ?>
<?php echo $row["SALARIES"]; ?>
<?php echo $row["QUALIFICATION WORKEXPERIENCE"];
?>
<?php echo $row["PREFEREDSEX"]; ?>
<?php echo $row["SECTOR_VACANCY"]; ?>
<!--
<div class="button container">
<button type="submit" name="submit">Add</button>
</div>
-->
</form>
<?php $count++; } ?>
</center>
</div>
</body>
</html>
```

## Placement.php

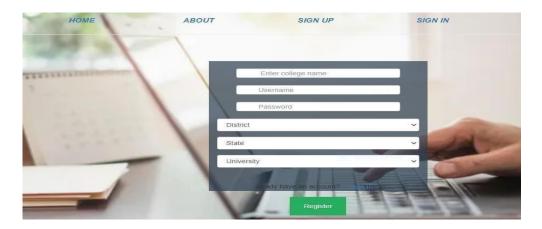
```
<html>
<head lang="en">
<meta charset="UTF-8">
             link type="text/css" rel="stylesheet" href="bootstrap-3.2.0-
dist\css\bootstrap.css"> <!--css file link inbootstrap folder-->
<title>View Users</title>
</head>
                    <body>
                     <div class="table-scrol">
                <h1 align="center">All the User</h1>
                <div class="table-responsive">
                <!--this is used for responsive
                                                  other devices-->
                  display in mobile
                                         and
               <table class="table table-bordered table-hover table-striped"
style="table-layout:
                            fixed">
                     <thead>
>
placement_id 
placement eligibility
selected college
placed students
deadline
placement description
Delete User
</thead>
<?php
include( 'connection.php');
$view_users_query="select * from placement_table";
$run=mysqli_query($conn,$view_users_query); //here run the sql query.
```

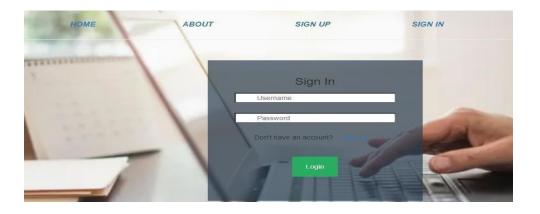
```
$placement_id=$row[0];
$placement eligibility=$row[1];
$selected college=$row[2];
$placed students=$row[3];
$deadline=$row[4];
$placement_description=$row[
5];
?>
>
<!--here showing results in the table -->
<?php echo $placement id; ?>
<?php echo $placement eligibility; ?>
<?php echo $selected college; ?>
<?php echo $placed students; ?>
<?php echo $deadline; ?>
<?php echo $placement description;
?>
  <a href="delete.php?del=<?php echo $placement id ?>"><button
class="btn btn-danger">Delete</button></a><!--btn btn-danger is a
bootstrap button to show danger-
->
<?php } ?>
</div>
</body>
</html>
```

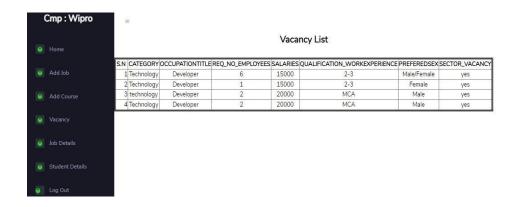
# 9.2 SCREENSHOTS

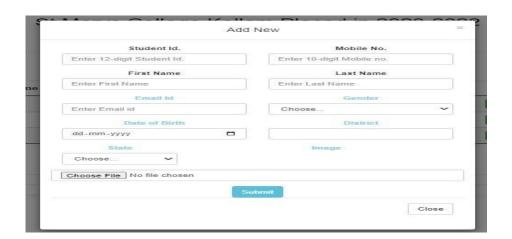
# Home page







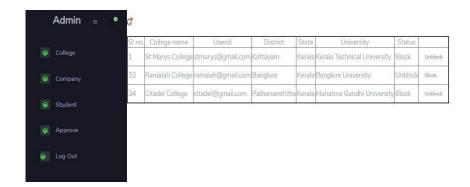




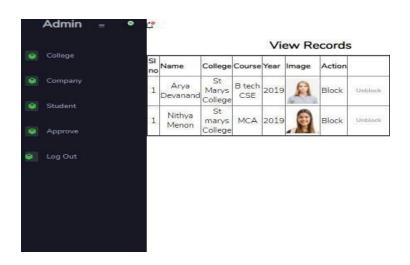




#### **Admin Dashboard**







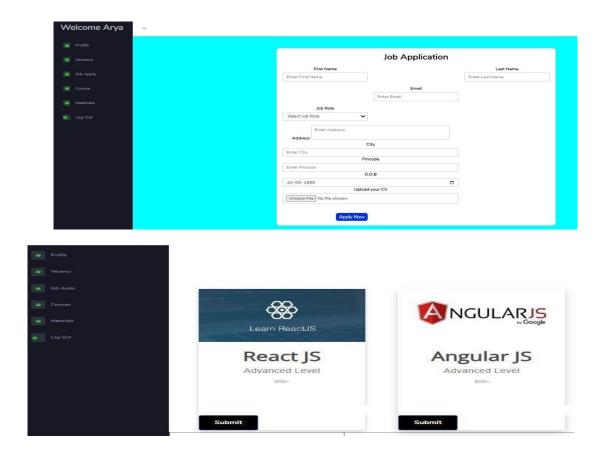
Approved

Rejected

# St Mary College, Kollam Placed in 2017-2020









# 9.3 PLAGIARISM REPORT

