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Vellore Institute of Technology

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School of Computer Science and Engineering

J Component – Final Report Online Feedback Management System

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November 2022

ACKNOWLEDGEMENT

This is to declare that the project entitled “Online Feedback Management System” is an original work done by undersigned, in partial fulfilment of the requirements for the degree “Bachelor of Technology in Computer Science and Engineering” at School of Computer Science and Engineering, Vellore Institute of Technology (VIT), Vellore.

All the analysis, design and system development has been accomplished by the undersigned. Moreover, this project has not been submitted to any other college or University.

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1. ABSTRACT

The online feedback management system is a web-based system that takes feedback from each individual student and generates collective feedback that students have automatically provided. This feedback system provides feedback to any department in a university or education system in a simple and timely manner. With this internet approach we can give feedback much faster than with the paper feedback technique. Students fill out an online feedback form provided to them.

Provides security by allowing only the authenticated user to view a stack of collective student submissions and learn their collective views. This online feedback system also allows users to provide subjective feedback by writing comments and reviews on any area or topic. It's an appropriate place to receive feedback balanced against requirements.

2. INTRODUCTION

Online student feedback is a web application, which is currently built for any operating system. The system is developed for the students, faculty, and admin. The aim of the system is to get Information about various kind of feedback based on any program currently running on any. University or will be running in future. It collect feedback information from students of faculty. Members, library and others. The students can give feedback instantly from anywhere any place through his mobile or laptop.

2.1 Background

Student feedback is collected through an online feedback management system. A comment management system (FMS) is an automated commenting system that offers appropriate comments based on categories. With this technology we can give the admin quick feedback on the staff as the students can check the system online. This approach improves the efficiency of the selection process and the accuracy of decision-making. With this technology, we can submit comments in the online system much faster than with the existing paper comment system. This project has four types of users: Student, Staff, HOD and Admin. The student can give their opinion in the online system provided by the admin. The existing system takes more time to complete a task. For this reason the online feedback system is implemented.

The administrator can prepare questions and make them available as a form in the online system. After that, the students fill it out and the feedback to the staff is calculated. This project also gets security that the feedback result is only visible to the authenticated user. Admin, hod and staff can review this feedback report. You can see the grades and assess the staff's performance according to the students' opinions.

2.2 Objectives

The main objectives of the work of this project are as follows:

- This system provides decision power.
- Accurate results can be obtained.
- This system makes the selection process more efficient and effective.
- None proposed system to increase efficiency depends on the classification method.
- The proposed system is used to reduce confusion when processing feedback averages.

2.3 Product Scope

Any kind of Decision making for teacher and admin is provided by this system. User will get accurate result for any feedback. This system will make any Selection process for any topic to work on students more effective. The goal of our feedback system is to gather feedback data and use it to develop the study modules, and other modules of university. To make proper use of students opinion to university we make the best use of feedback data of any students and in future use the data to create events and workshop for students.

2.4 Description

2.4.1 Description on various modules

The various modules are:

1. Admin
2. HOD
3. Faculty
4. Student

Admin Module:

In this module the admin have the authority to manage the whole project. Administrator can handle the front end and back end of the website as well. Admin will create the login string to give the feedback to faculty. The Admin will view the feedback of students and can transfer to the head of the departments.in this system admin will assign the subject to the faculty. The feedback question will be given by the admin.

HOD Module:

Here the respective head of the department will first login. The hod will enter his/her user name and password, if the hod do not have an account they have to create a new account. As the details are filled the faculty/staff dashboard appears in which they can fill self-appraisal, peer appraisal. The hod should firstly fill the self- appraisal in which they have to rate themselves on some criteria. The peer faculty has to click onto the peer appraisal in order to fill the form as they click onto peer appraisal.

Faculty Module:

The users of the Online Feedback Management System are members of faculty. When a faculty enters the faculty id and password the database checks whether the faculty id and password are valid. If valid their account will be opened, and it contains the feedback report.

Student Module:

In this module user login, the account though the valid login string, which is provided by the admin, after login the student can give the feedback to faculty. the given feedback will store in the table and the admin can take decision on that result. The one login string will be valid for given feedback once.

2.4.2 Product Perspective

The proposed system shall be developed using client/server architecture and be compatible with Microsoft Windows operating system .The front end of the system will be developed using Visual Basic 6.0 and back and will be developed using MS SQL Server 2000.

2.4.3 Product Plan

A product plan, also known as a product roadmap, is a broad overview of the upcoming product, its timelines, budget, resources, tasks, and much more. The product plan describes what the product team is set out to build, the reason for building the product, and by when the product is ready for launch. If the product is already launched, roadmaps are used as a way of listing out features and updates that will be rolling out in the future.

- **Work Breakdown Structure**

Breaking work into smaller tasks is a common productivity technique used to make the work more manageable and approachable. Thus for Projects we use a tool called Work Breakdown Structure which uses this technique. There are three types of Work Breakdown Structure. They are as follows:

1. Phase Based WBS: The phase-based WBS displays the final deliverable on top, with the WBS levels below showing the five phases of a project (initiation, planning, execution, control and closeout).

2. Deliverable Based WBS: A deliverable-based WBS first breaks down the project into all the major areas of the project scope as control accounts, and then divides those into project deliverables and work packages.

3. Responsibility Based WBS: The responsibility based WBS divides the entire project based on the activities and the responsibilities of the organization units who will work on the project.

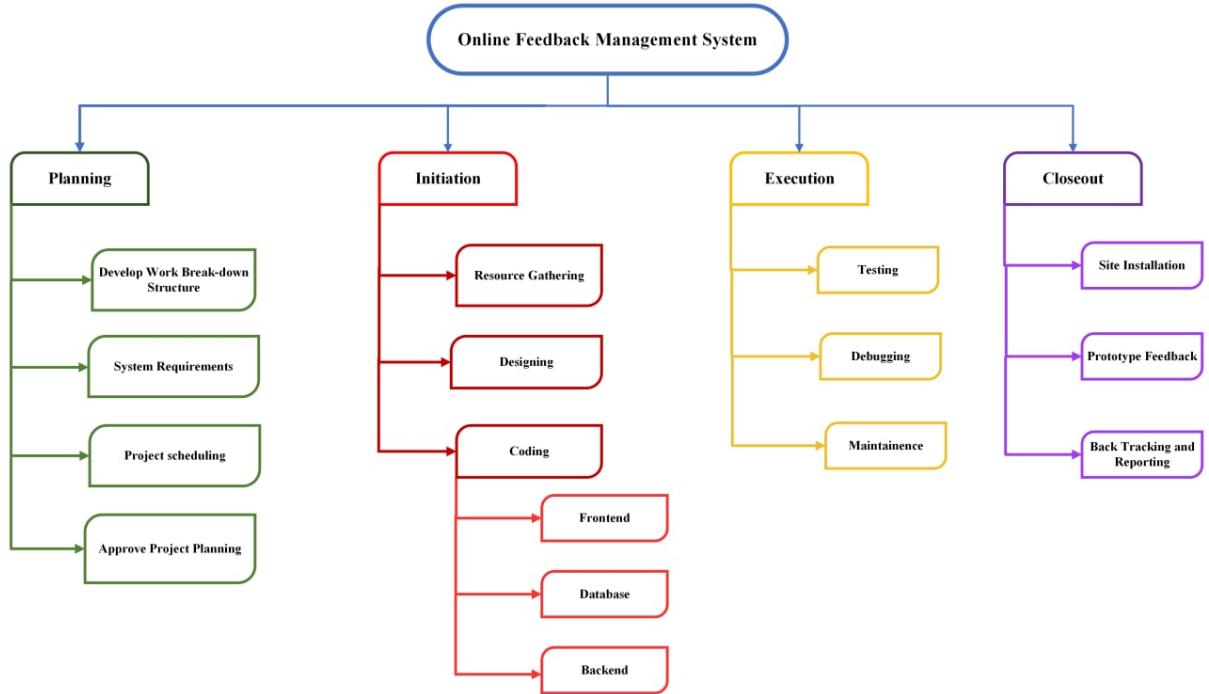


Fig: Phase Based WBS



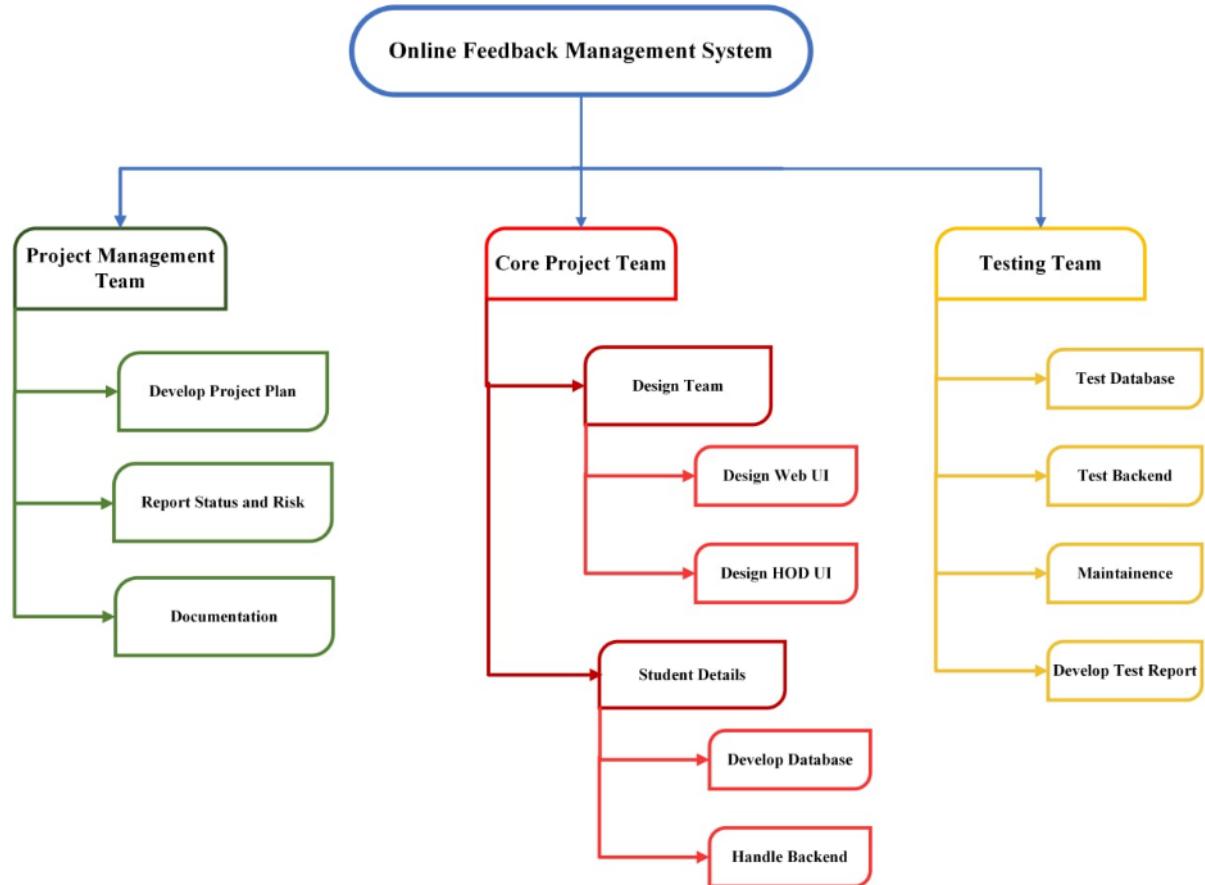


Fig: Responsibility Based WBS

3. LITERATURE SURVEY

Introduction:

The most important step in the software development process is conducting a literature search. Before building the tool, it is important to determine the time factor, economics and strength of the company. Once these requirements are met, the next step is to determine the operating systems and programming languages that can be used to build the project. Once the programmers start creating the tool, they need a lot of outside help. These resources are available from experienced programmers, books, and websites.

For the development of the proposed system, the above concerns will be addressed before the system software is designed.

Manual data entry involves intensive use of manual energy, and when it comes to making mistakes, there is no one in this world who doesn't make mistakes, except machines. As a result, the existing system we use to manage hostel-related data is a bit unwieldy. The manual work will be a big burden for the students and also for the hostel admin panel to check the records and everything.

System Study:

• Feasibility Study:

In this phase, the feasibility of the project is analyzed and the business proposal is proposed with a very general project plan and estimated costs.

During The Systems Analysis, the Feasibility study of the proposed system will be conducted to ensure that the proposed system will not burden an organization. For a proof of concept it is important to understand some of the most important system requirements.

The three key considerations involved in the feasibility analysis are

i. Economic Feasibility:

This study is being conducted to verify the economic impact that the system will have on the organization. The amount of funds that the company can invest in research and development of the system is limited. Expenses must be justified. Therefore, the system developed is within budget and this has been achieved because most of the technologies are open source from reputable organizations. Only personalized products should be purchased.

ii. Technical Feasibility:

The technical feasibility of the proposed system depends on the technology used in the system. It deals with the hardware and software used in the system, whether they are state-of-the-art or not. It happens that after the completion of a system, a new technology appears and the user wants the system to be based on this technology. This system uses Windows platform, HTML as front-end technology and XAMPP server as back-end storage server and PHP , JS and Bootstrap as background technology. Therefore, an ONLINE FEEDBACK MANAGEMENT SYSTEM is technically feasible.

iii. Social Feasibility:

The aspect of this study is to verify the acceptance of the system by the users. This is the process of training the user to use the system efficiently. The user should not feel bad about the system, but accept it out of necessity. The level of user acceptance depends solely on the methods used to educate the user and make them familiar with the system. His trust level needs to be raised so that he too can offer constructive criticism, which is welcome as he is the end user of the system.

A. Enhancing the Impact of Formative Feedback on Student Learning Through an Online Feedback System

The Online Feedback System (OFES), a web-based technology that offers formative feedback, is described in this paper. The system aims to be a useful tool for distributing formative feedback and to encourage students' participation in the feedback process. A stand-alone web application called OFES was created and used to run within an academic network. OFES makes an effort to inspire students to participate in the feedback process to develop a tailored and inspiring online environment that timely delivers feedback in a way that is manageable and directly related to the assessment criteria. OFES was used to give formative input to a second-level computer science course in an undergraduate programme. The academic network that OFES uses needs students to login using a username and password. Each student is identified exclusively by their login, which also enables personalized feedback and ensures security. The PHP scripting language, HTML 4.01 and Cascading Style Sheets (CSS), Javascript, and other technologies were utilized to implement OFES. HTML 4.01 and CSS were used for the application's interface and presentation. Its architecture consists of a data layer, a display layer (web browser), and an application layer (web server) (database server). The web browser is used as the user interface mechanism; other than Javascript support, no other plugins or other parts are needed. The web server, which houses all functionality, interacts with the database server to store and retrieve data. The detailed feedback and personalized comments require considerable manual labor. Reducing instructor workload is very important which this system lacks.

B. Tweedback: Online Feedback System for Large Lectures

An online classroom response system called Tweedback makes it possible for huge audiences to provide feedback. There are three different sorts of feedback available to lecturers. First, multiple choice questions are put into practice via peer instruction. Second, the audience offers questions and votes on them on a Chatwall. Third, the lecturer's speech parameters can be evaluated. Examples of criteria are "understanding" and "speed." Tweedback is accessed by users via their mobile devices. The system was created as a mobile web application that is scalable. One advantage of this idea is the saving of administrative costs compared to dedicated hardware devices. They employ Twitter's bootstrap framework in their strategy. It organizes the way it is visually formatted and offers a set of basic user interface components, such a header bar or a button. Furthermore, they partition the user interface into various perspectives, giving each feature an own view. Students can identify which feature is enabled by noticing which view is now active when a lecturer has a choice of features available. A feature implements one of the functional requirements—Peer Instruction, Chatwall, or Speech Parameter—that were previously described. At the moment, as of June 2013, Peer Instruction and Chatwall are implemented. Chatwall has been limited to a “question wall” where people can ask questions and all others can see them. Students cannot answer questions and they can only vote for questions. In this system, ordering of entries in Chatwall seems to be an issue. There could've been a sorting option for the displayed questions. There

has to be an option for “order by newest entry” and “order by most voted entry”. This system also lacks in marking questions as solved.

C. Educators' perceptions of automated feedback systems

Giving high-quality feedback becomes more difficult when class sizes grow, study methods multiply, and academic responsibilities rise. In this study, an MBA course that was taught in a variety of ways included the use of an automated feedback generator (AFG) across numerous tutors and evaluation items. A survey based on an adaption of the unified theory of acceptance and application of technology (UTAUT) model was completed by all academics grading the course. One of the writers first developed the AFG system in Java using Visual Basic for Applications in Microsoft Word (VBA). The system keeps track of student information and grades in a table with columns for student information and rows for marking standards. The name, maximum number of points, and description of each criterion column must be initialised before the student IDs and names may be manually entered or imported from the university's Blackboard system. Individual markers may also enter and add new comments. Users can choose from a list of all comments entered for the criterion across all students, arranged such that the most popular remarks are at the top. In this study, the usage of the AFG system in a postgraduate MBA course with about 300 students that was offered both online and on-campus utilising the Blackboard system is investigated. According to this preliminary study, an automated feedback generator might be utilised to lighten workloads while also enhancing the number, consistency, and quality of the feedback given to students. This study has some limitations, while having offered insightful information on how staff view an automated feedback system. The study, which was conducted in a class with a total of eight educators, can only be regarded as an exploratory experiment that needs further validation. Second, no comparison with a manual approach in particular was looked into. In spite of being measured, the time savings were not quantified to ascertain the specific advantages brought about by automation.

D. The Effects Of Online Feedback Training On Students' Text Revision

A sample of 50 English as a Foreign Language (EFL) students willingly enrolled in the writing programme at a scientific and technology institution in central Taiwan. These 50 students came from various academic divisions and colleges. When giving written feedback to peers, the computer-supported collaborative learning (CSCL) system was created to assist EFL college students in improving their text revisions. Two modules make up the CSCL system: a teacher interface and a student interface. The findings of this study demonstrate that the online instruction for giving peer criticism enhanced the text revisions of EFL college students. The more skilled students acknowledged a lack of confidence in their peers' feedback since their peers were not subject matter experts when it came to how the online feedback training affected text revisions. Online feedback training has also been shown to assist EFL students in identifying and fixing mistakes made by both themselves and their peers. After receiving online feedback training, collaborative revisions can help students become more proficient writers because they encourage more comments and recommendations when they work together to edit manuscripts. Only 50 college students took part in the study, so the sample size was insufficient to shed light on the revision styles, educational experiences, and opinions of EFL college students on online error correction. Secondly, The scores that students obtained in online feedback training and final drafts was not investigated. Additionally, the teacher's opinions about the online feedback training were not looked into.

E. Pedal: An Infrastructure for Automated Feedback Systems

This paper introduces Pedal, a technique for automatically producing feedback for students in programming classes. Because it is an extensible Library of components driven by these purposes, Pedal supports the PEDAgogical goals of teachers, which is how it got its name. The type inferencing, flow analysis, pattern matching, and unit testing components that are currently included with Pedal give instructors a wealth of tools for creating and arranging feedback. The concept of an open architecture that emphasises thinking methodically about the kind of feedback and more fundamentally about how that feedback is generated is at the core of Pedal's contribution. Pedal is a piece of open-source, free software that may be downloaded from GitHub (<https://github.com/pedal-edu/pedal>) and installed using standard Python installation tools. It was challenging to predict the type of feedback that would be generated due to the intricacy of the Pedal components and the sheer number of feedback events. Since Pedal is a library whose performance strongly depends on its embedded environment, its current performance cannot be formally evaluated.

F. Student Feedback Management System and Report Generator

The Student Feedback Management System and Report Generator was created to examine how students feel about giving feedback on staff members' work and the overall services offered by the university. The staff evaluation and institution evaluation are two of the validation processes included in this system. Two times a year, one for their odd semester and the other for their even semester, students must validate. Five questions about perfection and performance during a teaching session make up the staff evaluation process. Evaluation of Individual Faculty Members, Institute Evaluation, Automatic Report Generate System, Individual and Consolidate Report, Secured Way of Reports, and Analysis of Prior Reports are the main actions involved with the system. It consists of six different modules which are Administration module, Adding department and staff name module, Update and delete department and staff name module, Staff evaluation module, Institution evaluation module and Report generation module. This is not a comprehensive overview of the feedback system. The addition of more forms will improve the ability to retrieve feedback information. The screens' design can still be improved upon.

4. PROPOSED METHODOLOGY

This chapter looks at the existing system with its disadvantages, the proposed system with its advantages and details the differences between the existing and the proposed system.

4.1 Existing System

- The system retrieves information from students and their concerns about the level of knowledge they are receiving.
- The current system has security issues such as password problems.
- It takes a long time to upload new student information to the database.

4.1.1 Disadvantages

- Lack of privacy.
- Manual work of data collection.
- Insufficient security of the entered data.
- Access to the required data.

4.2 Proposed System

- The system makes comments available anytime, anywhere in a user-friendly manner and offers simple and secure storage with access restrictions.
- It is easy to add many new user data to the server database.
- In this type of student feedback, the system reduces the work of the physical Review of each student's feedback pages.
- Provides security like password management

4.2.1 Advantages

- This Application overcomes all those difficulties.
- Provides more security to the data.
- By using this application, we can find multiple solutions.
- Less time consuming.
- It reduces a lot of paperwork.

4.3 Problem Statement

Defining the problem is the most important part of the software development cycle. When the requirements and parameters of the problem are clearly understood, it is much more likely that the actual result of the development program will meet the requirements fulfill. Expected performance. This first step in defining a problem is to fully understand the problem to be solved.

4.4 Process Model Used In Our Project

The process model we choose for our project is the Iterative Waterfall Model.

- **Iterative Waterfall Model**

In a practical software development project, the classical waterfall model is hard to use. So, the Iterative waterfall model can be thought of as incorporating the necessary changes to the classical waterfall model to make it usable in practical software development projects. It is almost the same as the classical waterfall model except some changes are made to increase the efficiency of the software development.

The iterative waterfall model provides feedback paths from every phase to its preceding phases, which is the main difference from the classical waterfall model.

Advantages:

1. The Iterative waterfall model is very easy to understand and use.
2. Every phase contains a feedback path to its previous phase.
3. This is a simple way to make changes or any modifications at any phase.
4. By using this model, developers can complete projects earlier.
5. Customer involvement is not required during software development.
6. This model is suitable for large and complex projects.

Disadvantages:

1. There is no feedback path for the feasibility study phase.
2. This model is not suitable if requirements are not clear.
3. It can be more costly.
4. There is no process for risk handling.
5. Customers can view the final project. There is no prototype for taking customer reviews.
6. This model does not work well for short projects.
7. If modifications are required repeatedly then it can be more complex projects.

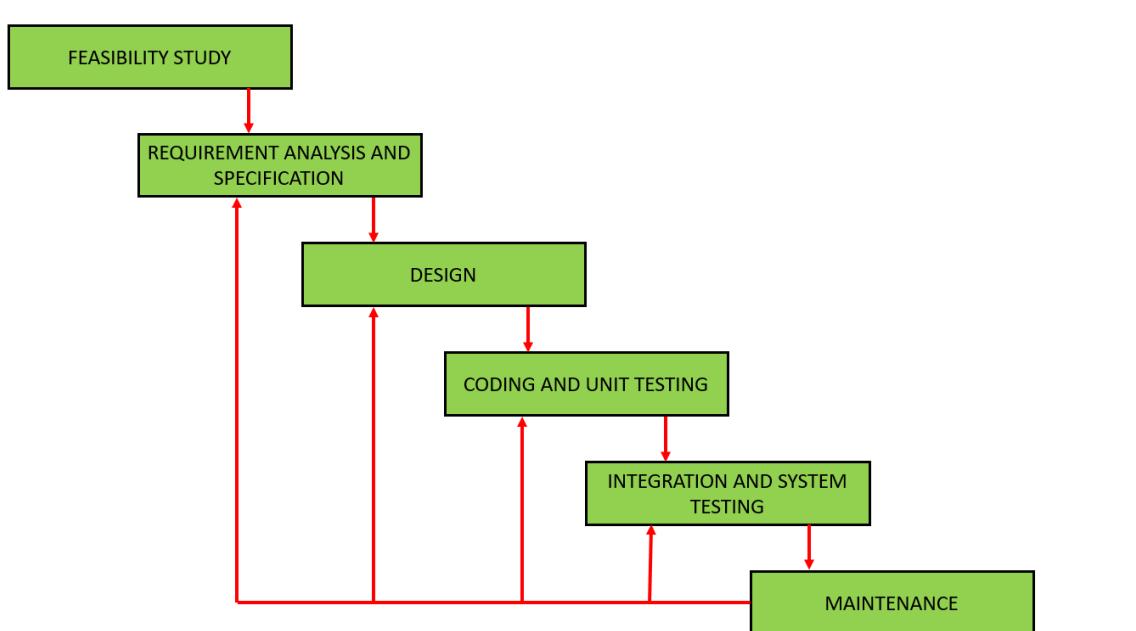


fig. Overview of Iterative Waterfall Method

4.4.1 Reason for choosing iterative waterfall model

The Iterative Waterfall Model is the extension of the Classical Waterfall model. This model is almost the same as the classical waterfall model except some modifications are made to improve the performance of the software development. The iterative waterfall model provides customer's feedback paths from each phase to its previous phases except for the Feasibility study phase. For the Online Feedback Management System Iterative waterfall model suits better than any other model, as the Online Feedback Management System requires no big updates once it is developed and it is stable. No big changes are required and even if minor updates are required, we can do it with the help of the feedback paths going to that particular phase and updating it. As our requirements are fulfilled, we choose the iterative waterfall model.

4.4.2 Reason for not choosing other models

Other models like classical waterfall model, Incremental model, Prototype model, Rad model, SPIRAL MODEL doesn't suit the Online Feedback Management System because classical waterfall model don't have feedback path so that we can't come back to the particular phase for any updates or to solve errors and INCREMENTAL MODEL is normally used for the projects which need to be incremented version wise but Online Feedback Management System doesn't require the increments to be done and using PROTOTYPE MODEL, a product cannot be developed in short period of time as the requirements are refined in later prototypes, User Involvement High, quick initial reviews are not possible. It does not give emphasis on risk analysis. As per the focus of this ONLINE FEEDBACK MANAGEMENT SYSTEM, "ITERATIVE WATERFALL MODEL" is the best methodology that suits this development.

5. PROJECT MANAGEMENT

Software project management is an art and discipline of planning and supervising software projects. It is a sub-discipline of software project management in which software projects planned, implemented, monitored and controlled. It is a procedure of managing, allocating and timing resources to develop computer software that fulfills requirements. There are three needs for software project management. They are time, cost and quality.

5.1 Project Scheduling:

Project schedule simply means a mechanism that is used to communicate and know about that tasks are needed and has to be done or performed and which organizational resources will be given or allocated to these tasks and in what time duration or time frame work is needed to be performed. Effective project scheduling leads to success of project, reduced cost, and increased customer satisfaction. Scheduling in project management means to list out activities, deliverables, and milestones within a project that are delivered.

The diagrams that we used in our project for better project schedule are as follows:

Gantt Chart:

A Gantt chart is a type of bar chart that illustrates a project schedule.

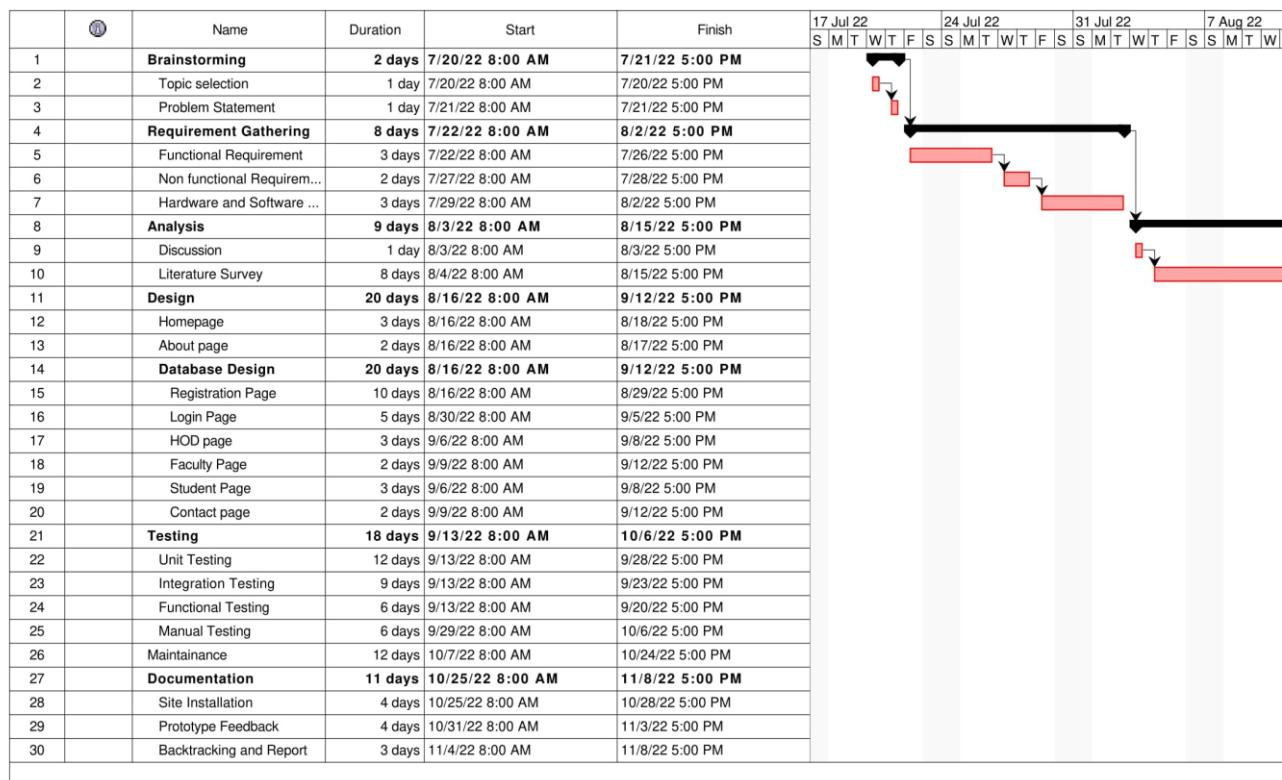


Fig: Gantt Chart

Timeline Chart:

A timeline chart is a visual rendition of a series of events and milestones of the project.

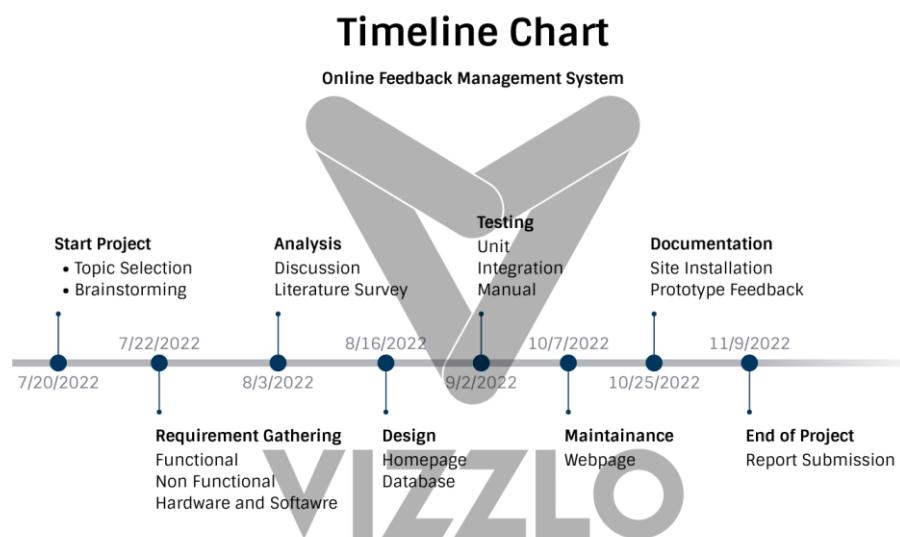


Fig. Timeline chart

PERT Chart:

A Pert chart is a project management tool used to schedule, organize and coordinate tasks within a project.

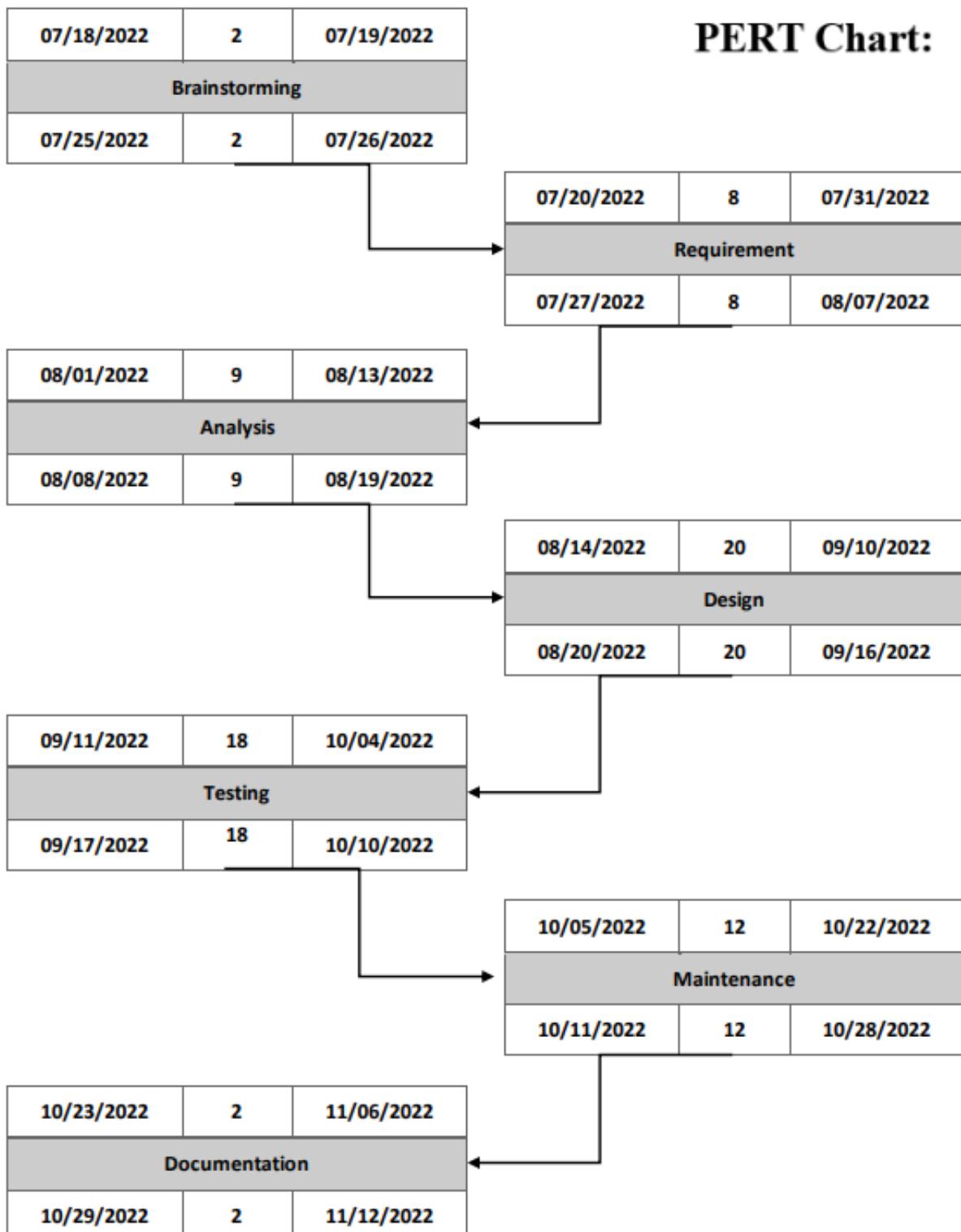


Fig. Pert Chart

6. RISK ANALYSIS

- The attackers/hackers can breach our database and leak confidential information.
- If many users login at once then the server gets overloaded and it may also crash.
- Since our software is an online software we are highly dependent on the internet. In the absence of Internet, our project is almost useless.
- The students can give faulty feedback. That is for a good faculty, the student can give false feedback and can deduct the score of the faculty.

7. REQUIREMENTS

The software requirements are description of features and functionalities of the target system. Requirements convey the expectations of users from the software product. The requirements can be obvious or hidden, known or unknown, expected or unexpected from client's point of view. Here, we divide requirements in two parts. They are:

7.1 Functional Requirements:

They are the Requirements which are related to functional aspect of software fall into this category. They define functions and functionality within and from the software system.

7.1.1 Log In

Log In to the website using email and password after creating an account, and if validated by admin for students, faculty and HOD.

7.1.2 Student's Feedback

Students can give feedback to the faculties.

7.1.3 Faculty gets student's report

When a faculty enters the faculty id and password the database checks whether the faculty id and password are valid. If valid their account will be opened and it contains the feedback report

7.1.4 HOD View feedback

The HOD can view the student feedback given to the faculty in their department

7.2 Non-Functional Requirements

Requirements, which are not related to functional aspect of software, fall into this category. They are implicit or expected characteristics of software, which users make assumption of.

- **Adaptability:** - The system should be able to adapt to the need of the end users.
- **Flexibility:** - The system should be able to be flexible so that every user can use it easily and give any feedback if needed.
- **Reliability:** - The system should be trusted by the users.
- **Robustness:** - The system should be able to handle so many requests at a moment.

7.3 Other Non-Functional Requirements

Performance Requirements:

The user email id and password must match in the database and return the result whether valid or not within 2 seconds.

Safety Requirements

- The system should not operate until the input is valid.
- The system should not accept feedback if the given name of university or faculty is invalid.
- The system should accept only one feedback from one user at a time.
- The system should be able to arrange all the feedbacks in a order.

Security Requirements

- Once a feedback is submitted from a user, the system should not allow the user to update it.
- The system should only allow the selective persons only to make any changes in the data.
- The system shouldn't permit other users to change or modify the feedback of a user.
- The system should give only access to developers to make any changes in the future.

8. PRODUCT FUNCTIONS

- Admin will create the login string for students to give the feedback to faculty, will view the feedback of students, and can transfer to the head of the departments. In this system, admin will assign the subject to the faculty.
- The student can give the feedback to the faculty.
- The staff can check their overall and written feedback given by a batch of students.
- The HOD can view the student feedback given to the faculty in their department.

9. USER INTERFACE DESIGN

9.1 User Interface Design components

There are seven components of user interface design, they are as follows:

1. User familiarity:

Using familiar elements, the user interface is made to feel friendly and comparable to other interfaces they have used in the past. Like navigation bar, general Photos, sign-in, sign-up tools, logos etc. So, in this way user familiarity has been fulfilled.

2. Consistency:

Consistency has been established in our design by using equivalent fonts, color, theme, background, size all across the interface. The headings and topics has been highlighted in bolder fonts, bigger size and in different color to differentiate from other contents.

3. Recoverability:

The system considers the error and allows the user to recover from user errors by UNDO facility, deletes, etc.

4. Minimal surprise:

The principle of minimal surprise has been maintained as it uses the interface, which is similar, common, and versatile and can be used by every average users from beginners to professional.

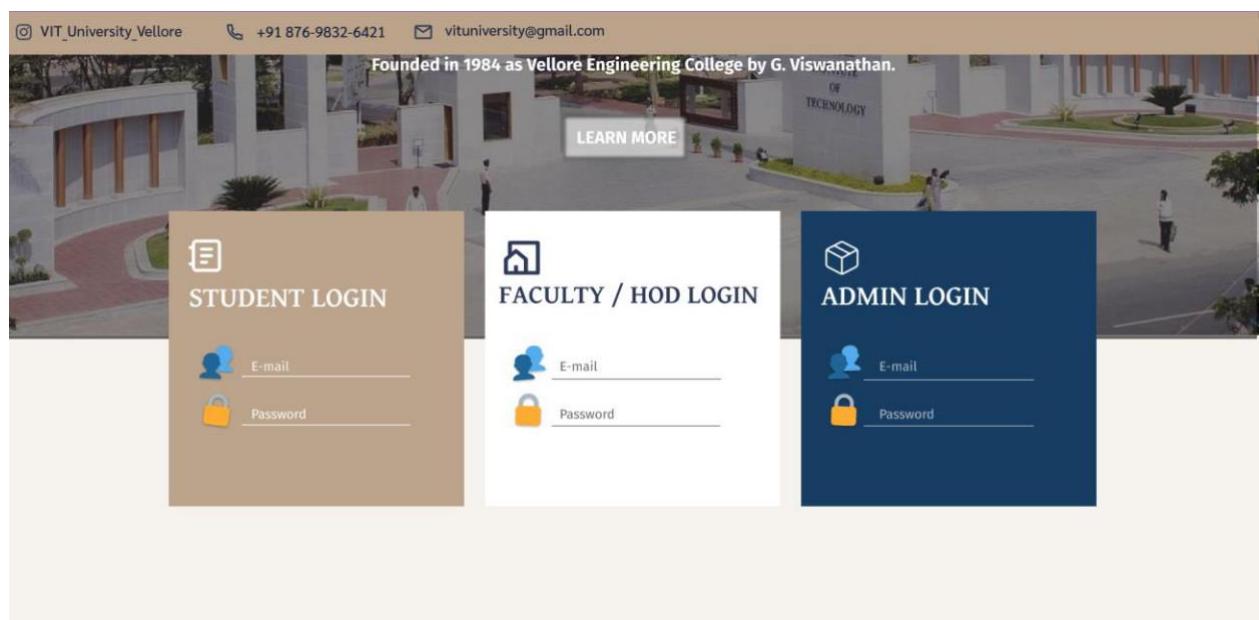
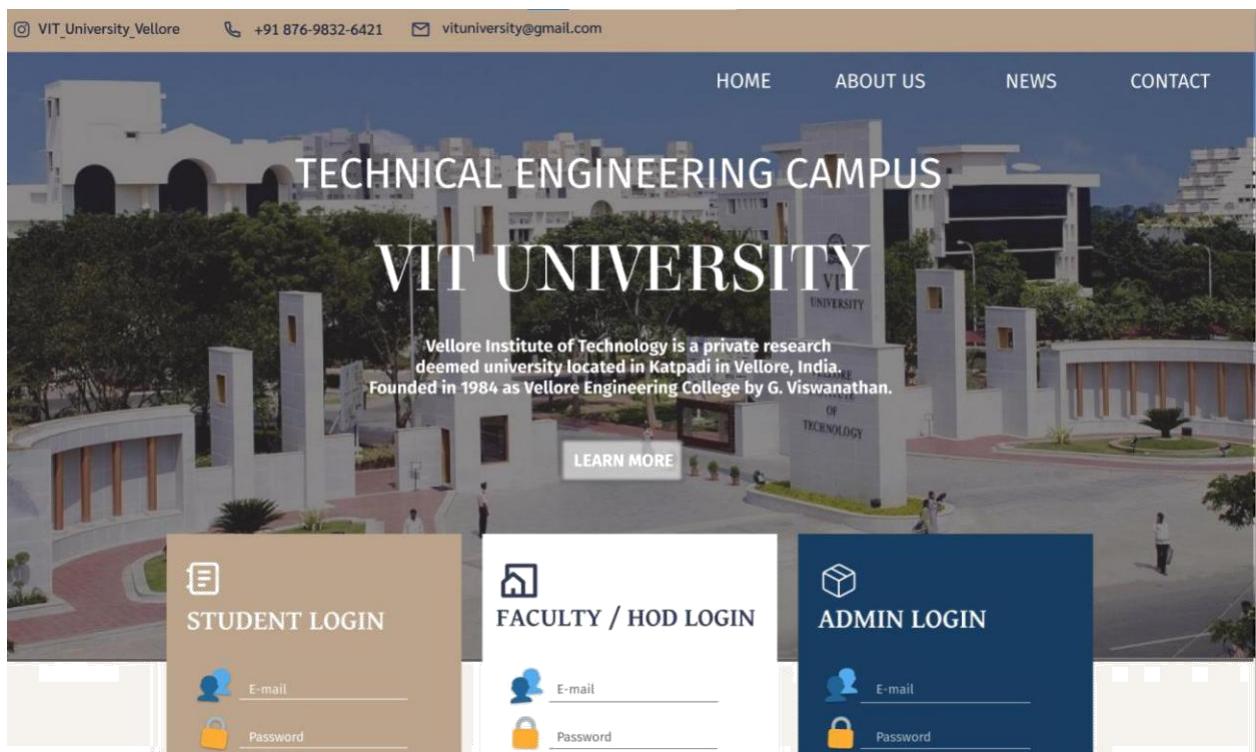
5. User diversity:

The principle of user diversity has been considered by providing suitable means of interaction for various system users that matches interest of maximum users.

6. User guidance:

The user will be guided with the help of user interface that includes feedback, manuals and help systems, etc. so that it will not be difficult to use the system.

9.2 User Interface Prototype for our website



10. ARCHITECTURE / DESIGN

10.1 Structure and Relationships

The Feedback Management System will be developed under 3-tier Client/Server Architecture. Client can browse the internet and access the Feedback Management System provided within the local area network of the University.

10.1.1 Three-Tier Client Server Architecture

In a client server architecture, the functionality of the system is organized into services, with each service delivered from separate server. Clients are users of these services and access servers to make use of them. We will use this 3- Tier Client Server Architecture because, when data in a shared database has to be accessed from a range of locations. Because servers can be replicated, may also be used when the load on a system is a variable.

- Data Tire**

The data tire maintains the applications data such as Users' data, Departments' data, subjects' data, courses' data, faculties' data and the SQL queries. It stores these data in a relational database management system (RDBMS). All the connections with the RDBMS are managed in this tier.

- Middle Tire**

The middle tier (web / application server) implements the business logic, controller logic and presentation logic to control the interaction between the applications' clients and data. Business rules enforced by the business logic dictate how clients and cannot access application data and how applications process data.

- Client Tire**

The client tire is the applications user interface connecting data entry forms and client side applications. It displays data to the user. User interact directly with the application through user interface. The client tier interacts with the web/ application server to make requests and to retrieve data from the database. It then displays to the user the data retrieved from the server.

The architectural view of the 3-tier Client Server is given below:

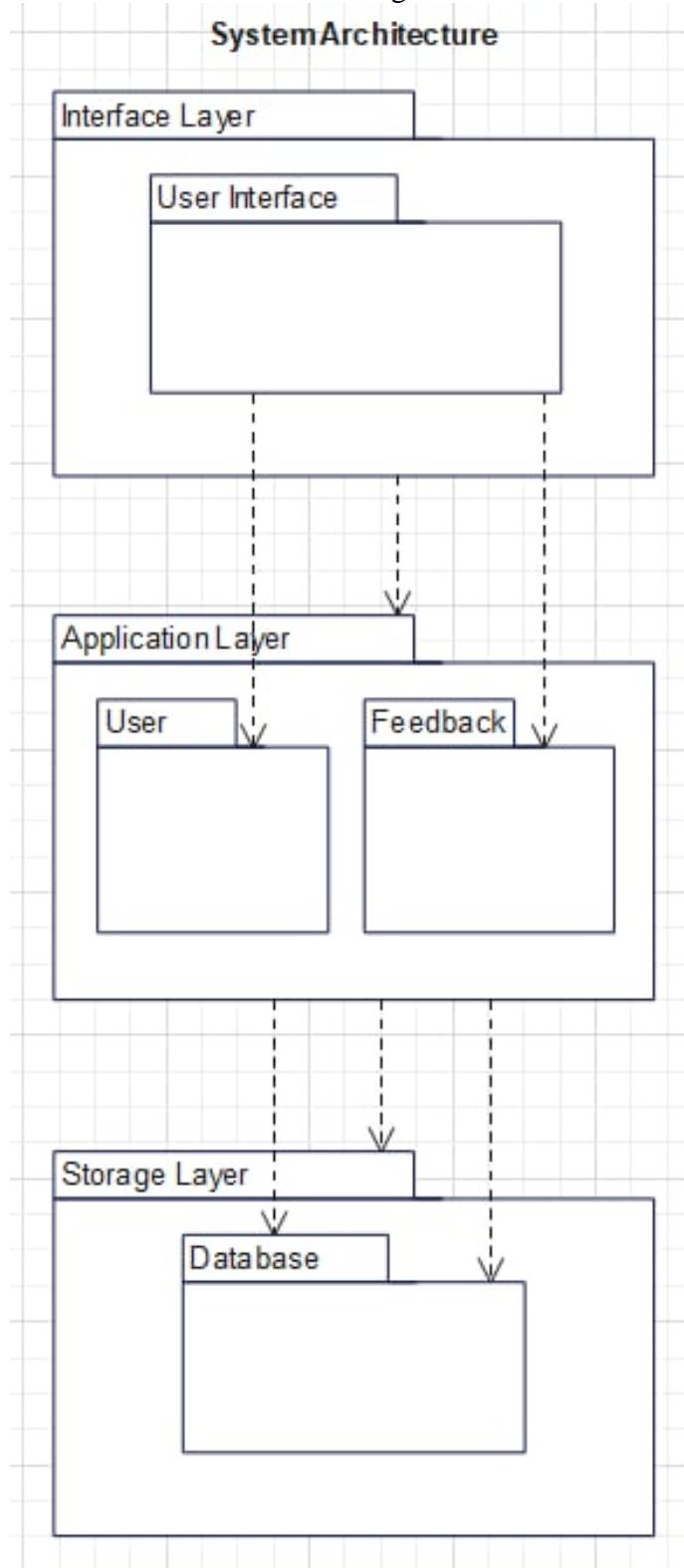


fig. Architectural View of the OFMS

10.1.2 Structure Chart

A structure chart in software engineering and organizational theory is a chart which shows the breakdown of a system to its lowest manageable levels. They are used in structured programming to arrange program modules into a tree. Each module is represented by a box, which contains the module's name. The tree structure visualizes the relationships between modules.

The structure chart of Online Feedback Management System is as follows:

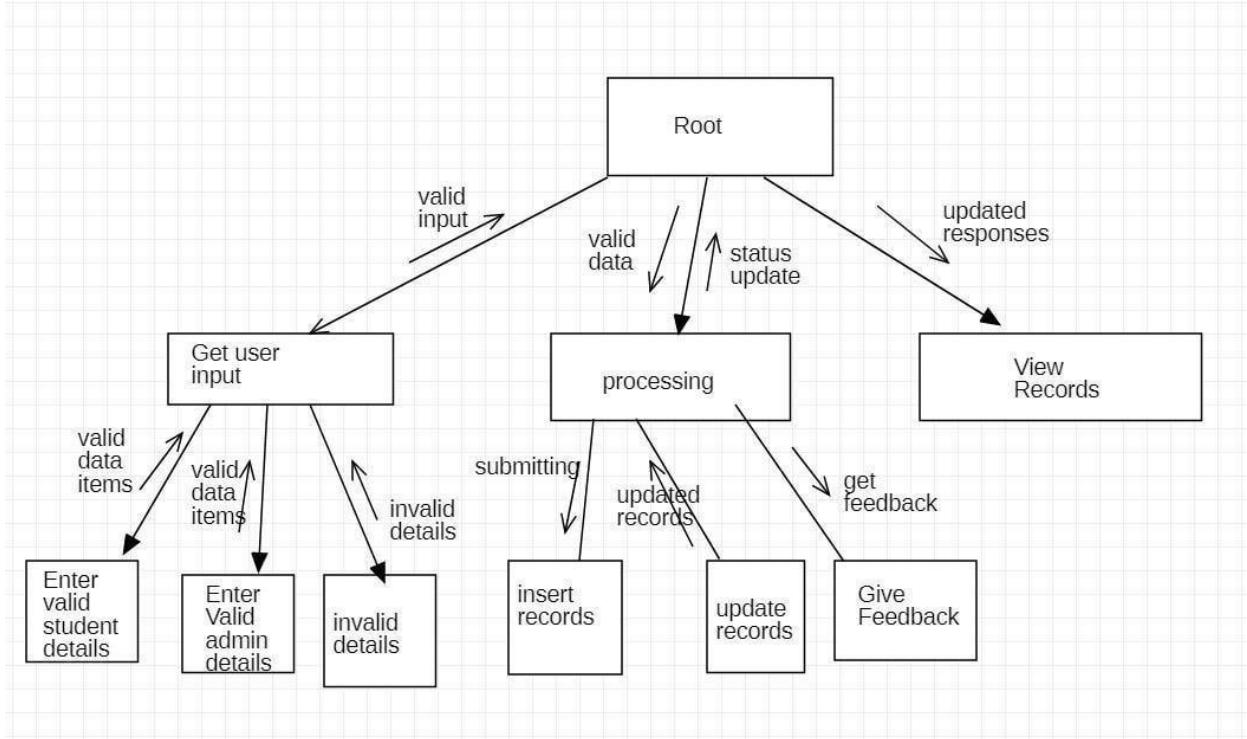


fig. Structure Chart

10.2 Components and detailed design

This chapter provides information of software development life cycle, design model i.e. various UML diagrams and process specification. Component and Detailed design is the process of refining and expanding the preliminary design phase of a system or component to the extent that the design is sufficiently complete to be implemented. Here, we go deep into each component to define its internal structure and behavioral capabilities, and the resulting design leads to natural and efficient construction of software.

Design Diagrams:

10.2.1 ER Diagram

ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships. ER Diagrams contain different symbols that use rectangles to represent entities, ovals to define attributes and diamond shapes to represent relationships.

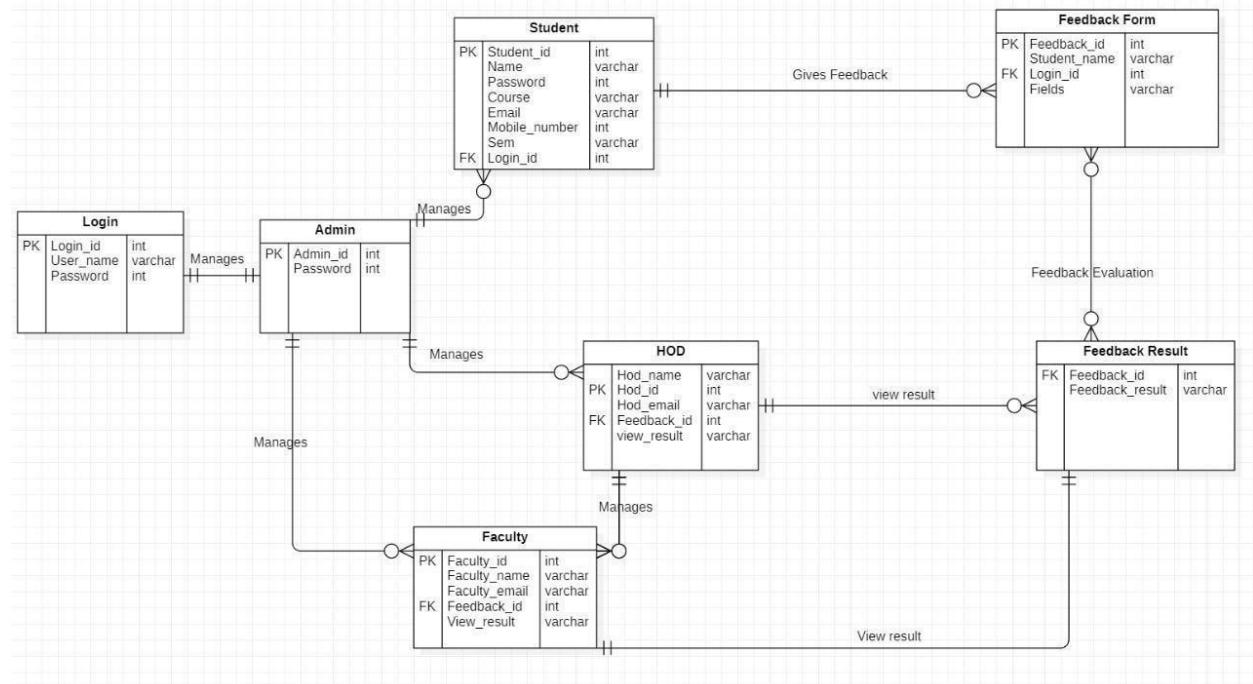


Fig. ER- DIAGRAM

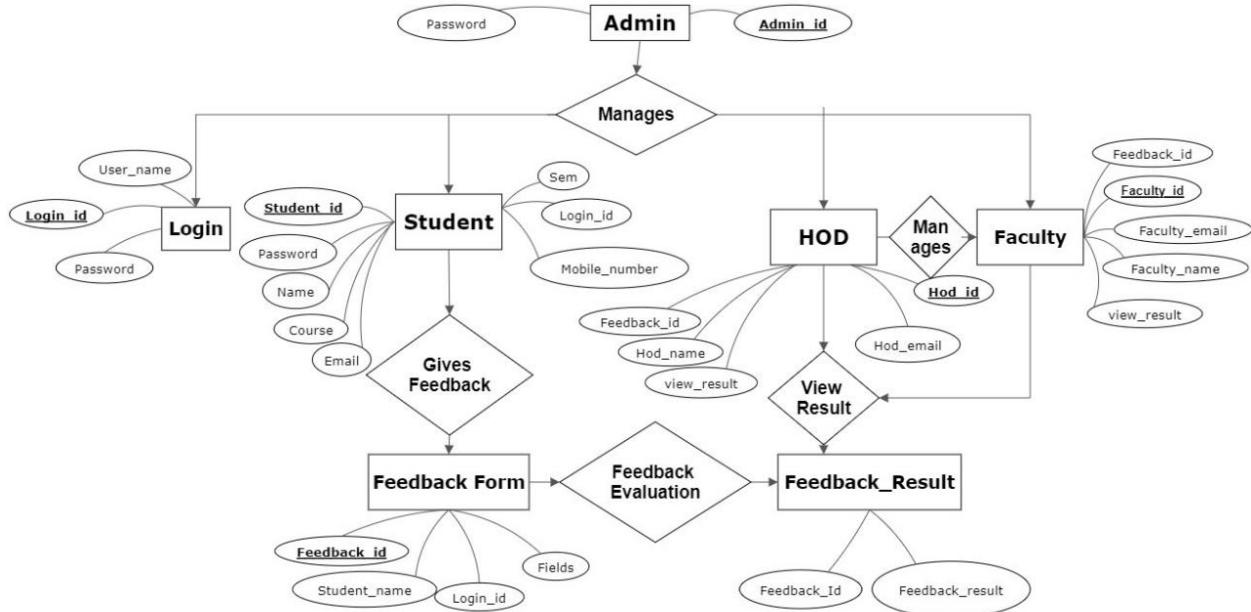
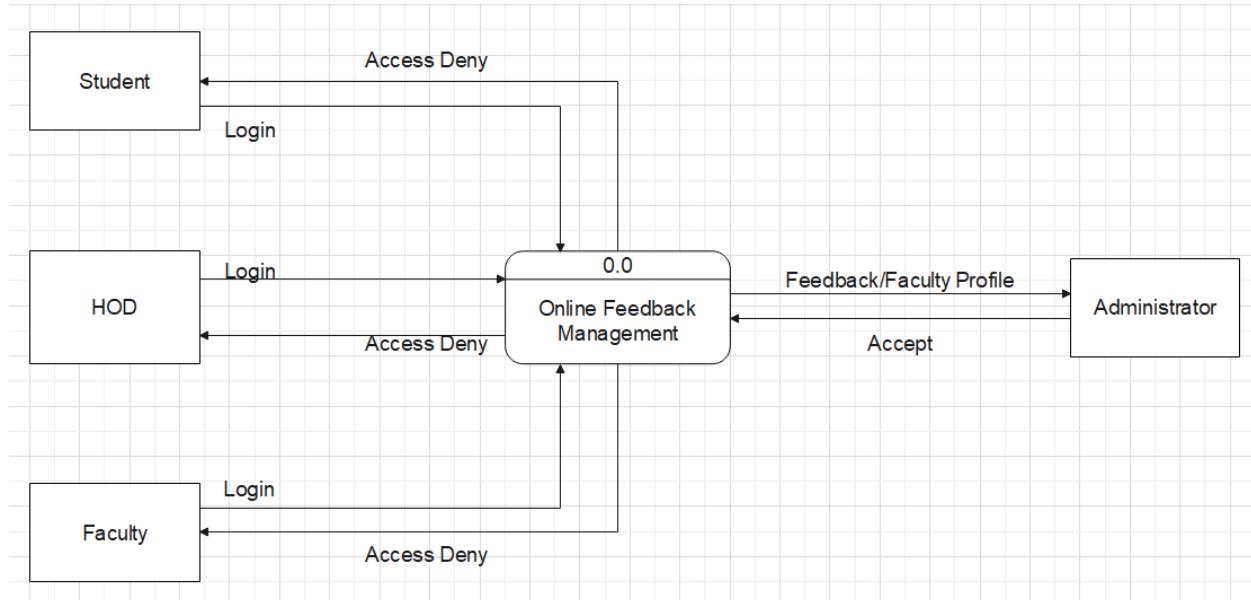


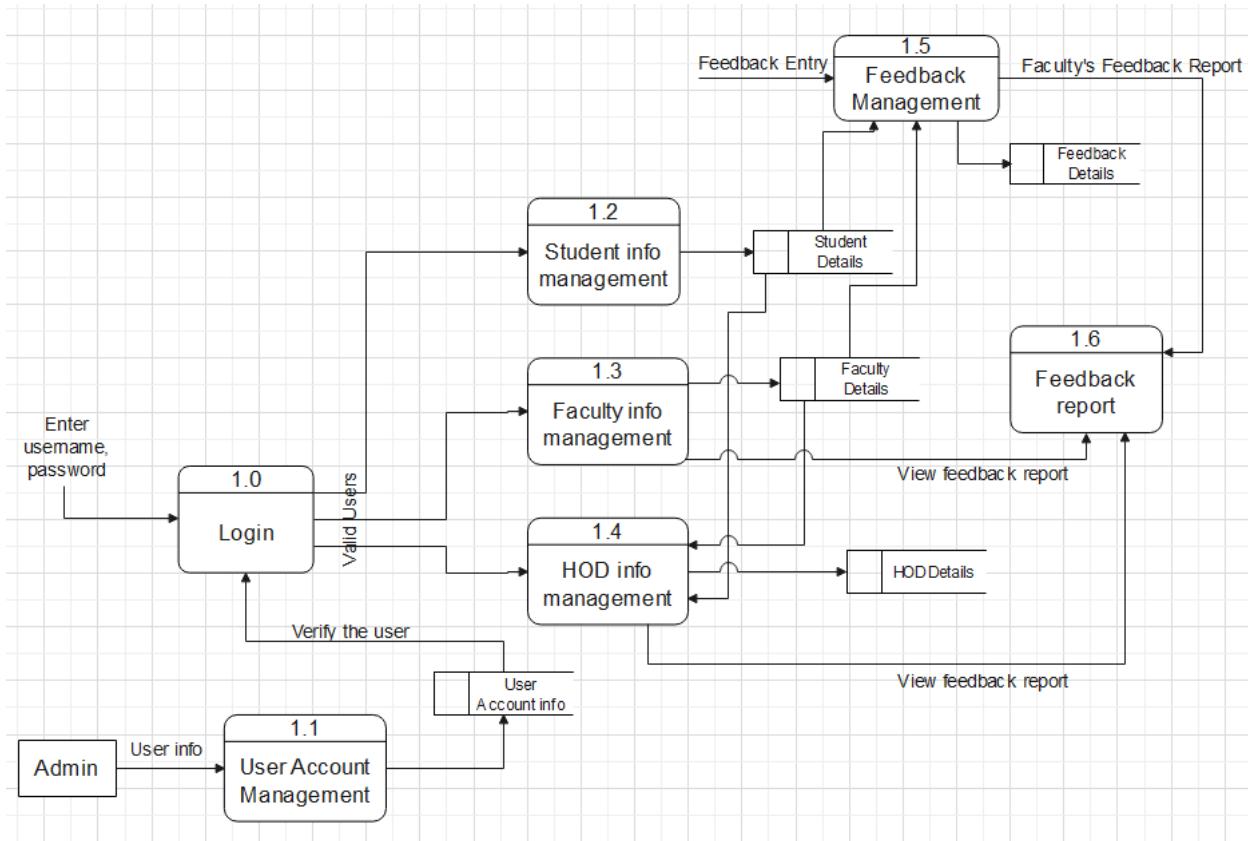
Fig:ER Diagram

10.2.2 Data Flow Diagram:

LEVEL 0:

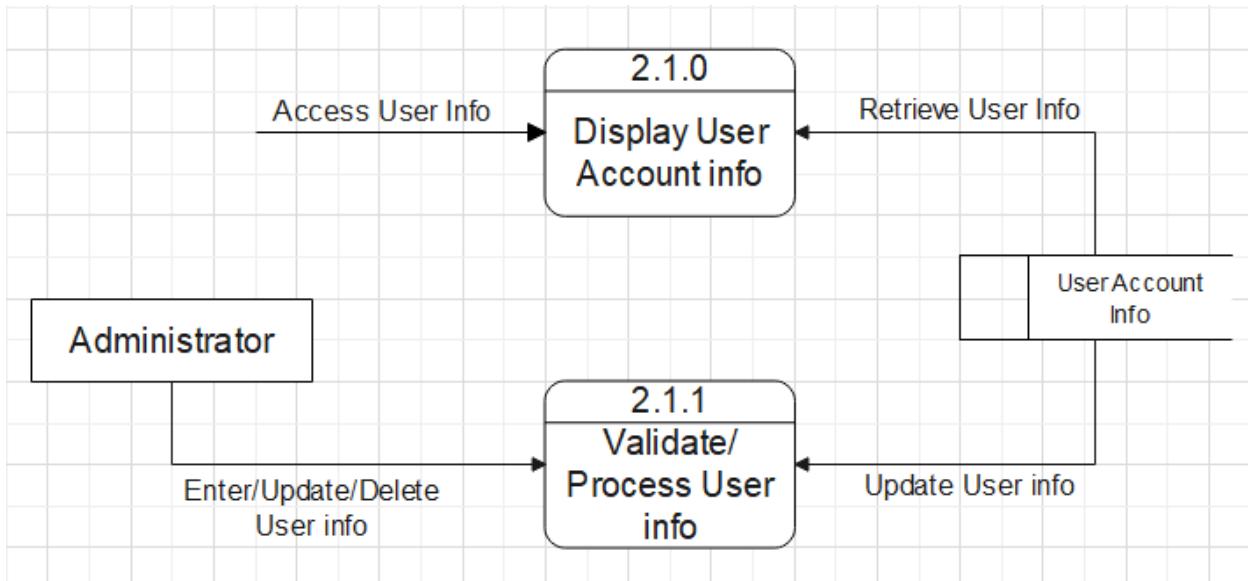


LEVEL 1:

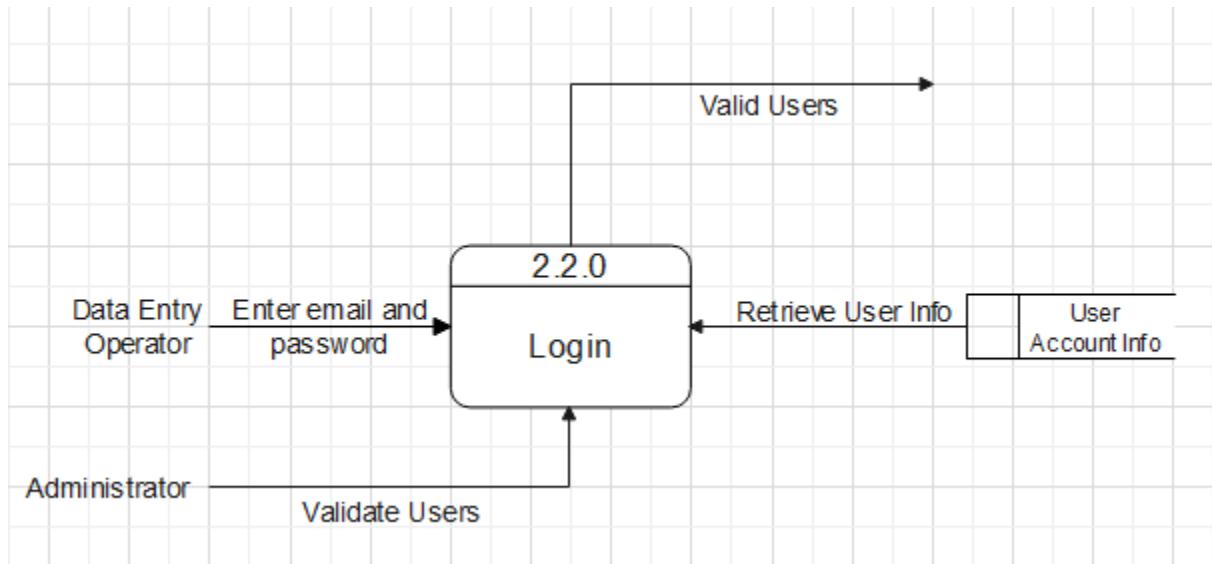


LEVEL 2:

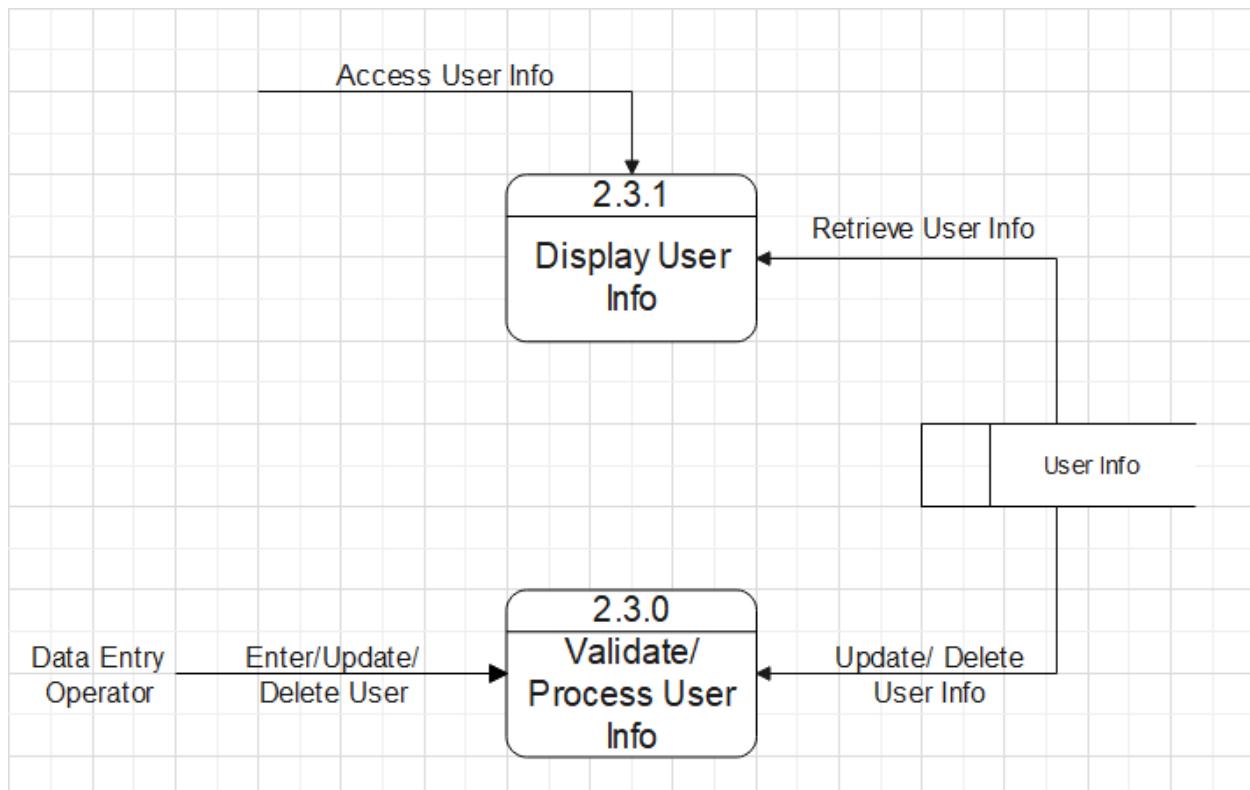
1. User Account Management



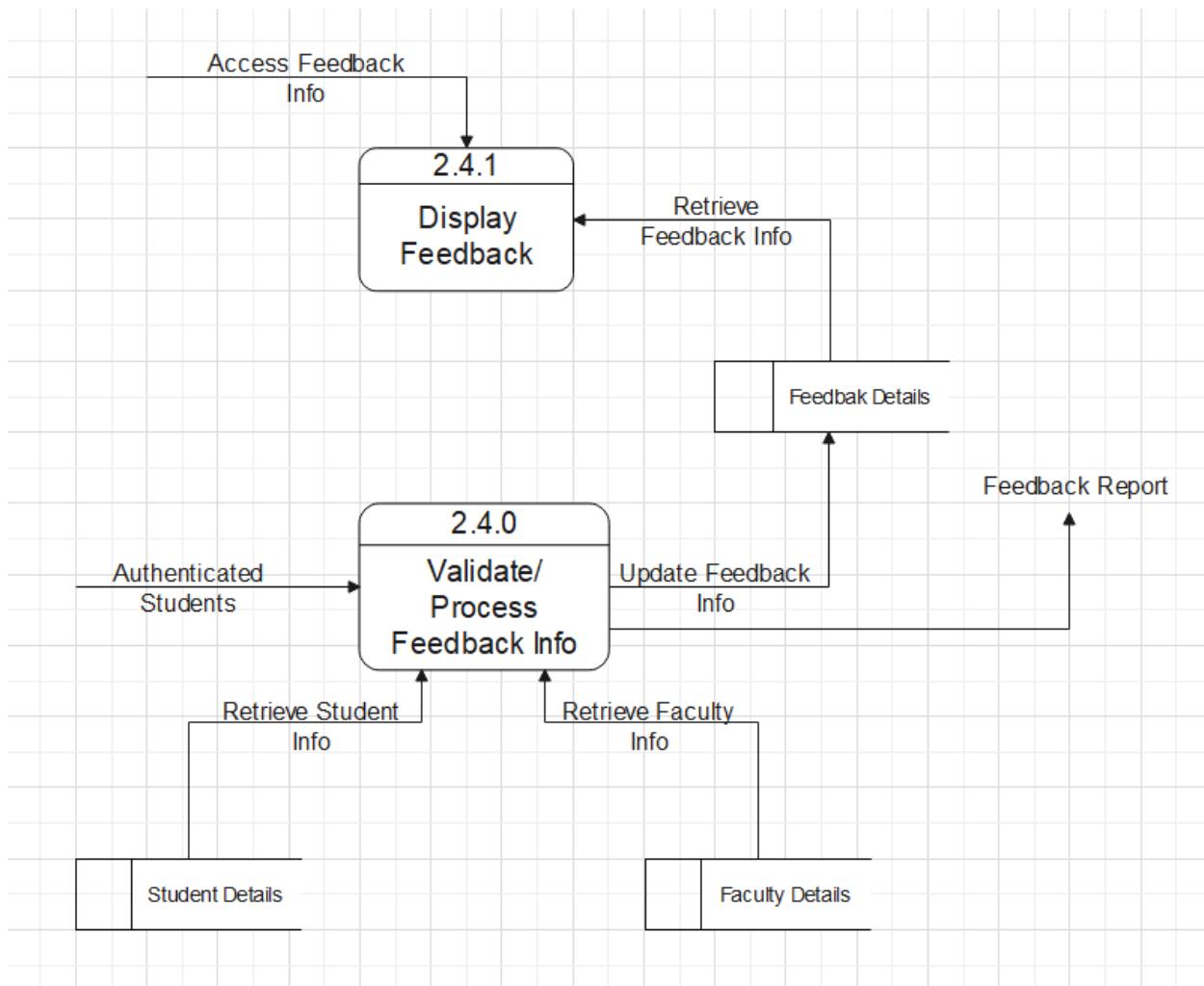
2. Login



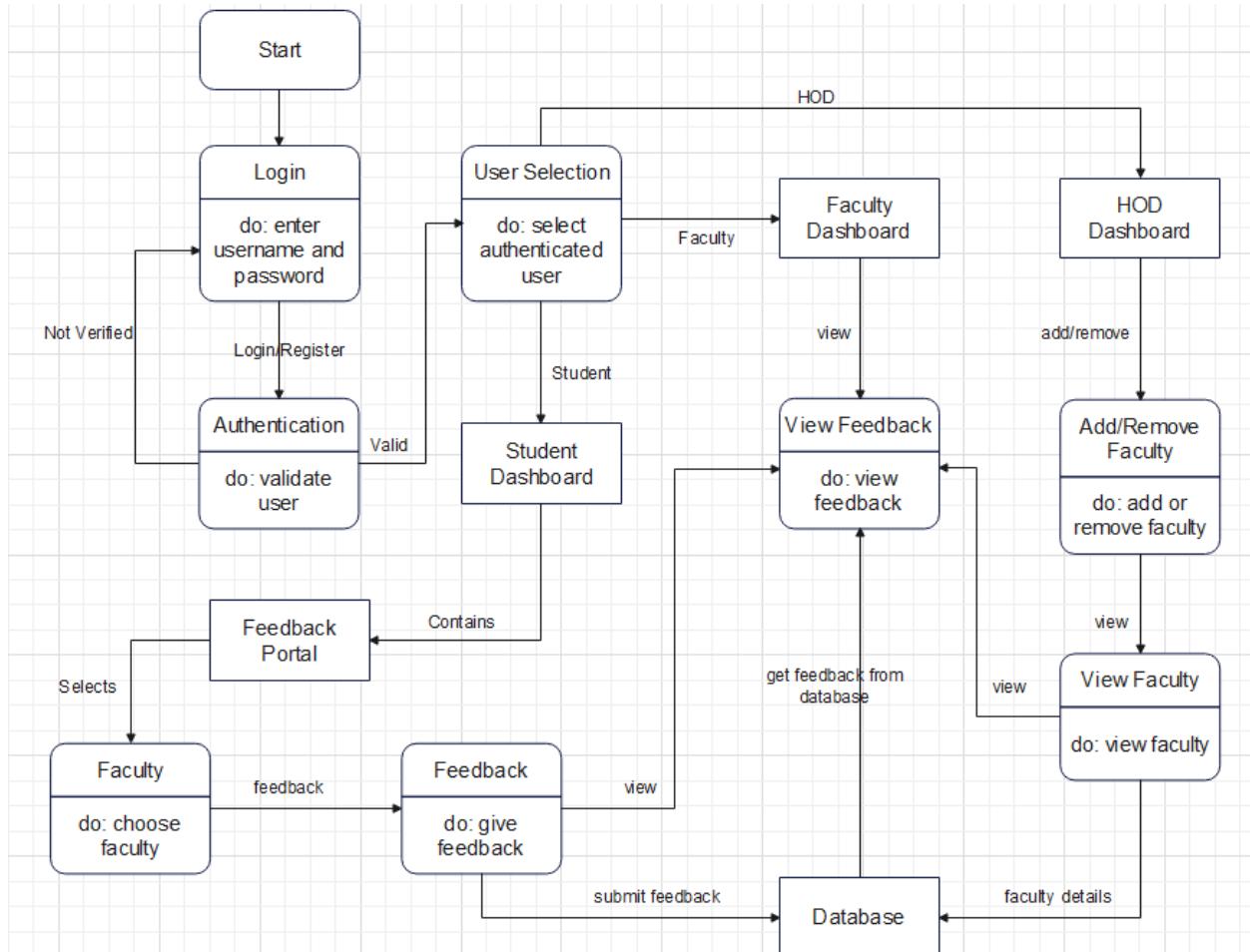
3. User Information Management



4. Feedback Management



10.2.3 State Transition Diagram:



10.3 UML DIAGRAMS

An object-oriented system is composed of objects. The behaviour of the system is achieved through collaboration between these objects, and the state of the system is the combined state of all the objects in it. Collaboration between objects involves those sending messages to each other. The exact semantics of message sending between objects varies depending on what kind of system is being modeled. In some systems, "sending a message" is the same as "invoking a method".

Object Oriented Analysis aims to model the problem domain, the problem we want to solve by developing an object-oriented (OO) System. The source of the analysis is a written requirement statement, and/or written use cases, UML diagrams can be used to illustrate the statements.

The Unified Modeling Language allows the software engineer to express an analysis model using the modeling notation that is governed by a set of syntactic semantic and pragmatic rules. A UML system is represented using five different views that describe the system from distinctly different perspective. Each view is defined by a set of diagrams, which is as follows.

10.3.1 Use Case Diagram

A use case diagram is a graphical depiction of a user's possible interactions with a system. Use case diagrams are a set of use cases, actors, and their relationships. They represent the use case view of a system.

The given UML diagram is a basic Use Case Diagram with all the functionalities,

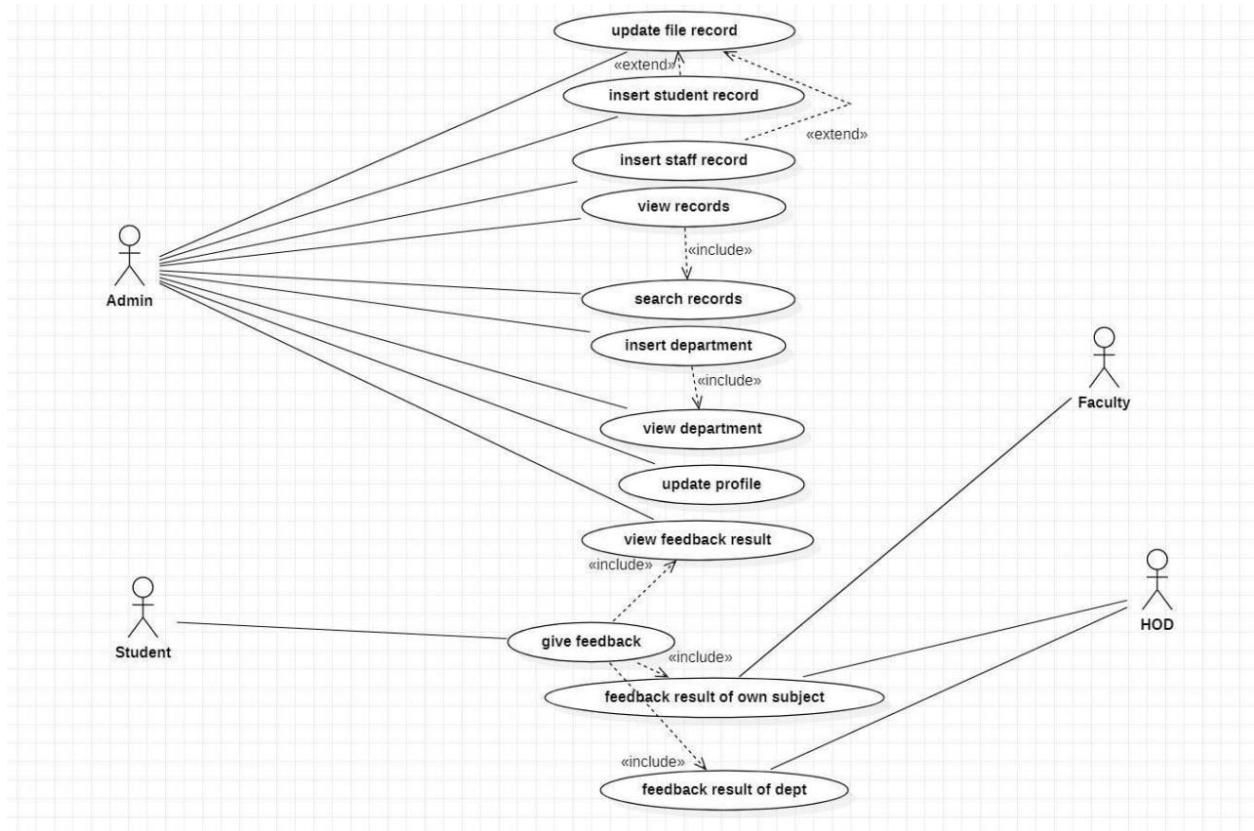


fig. Use Case Diagram

10.3.2 Sequence Diagram

The sequence diagram depicts the process of sending students feedback from a web **server**. The student can give feedback objectively and in a subjective manner by comments. The database server to generate collective feedback processes the feedback.

The diagram consists of the following lifelines:

- User
- Register
- Login
- Feedback
- Web Server
- Database Server

It includes these sequence messages between the lifelines:

- Attempt to login
- Check the status
- User Status
- Login Successful
- Registration Needed
- Register user
- User Login
- Give Feedback
- Authenticate User
- Store Feedback
- Stored Successfully
- Successful Feedback

The given UML diagram is a Sequence Diagram,

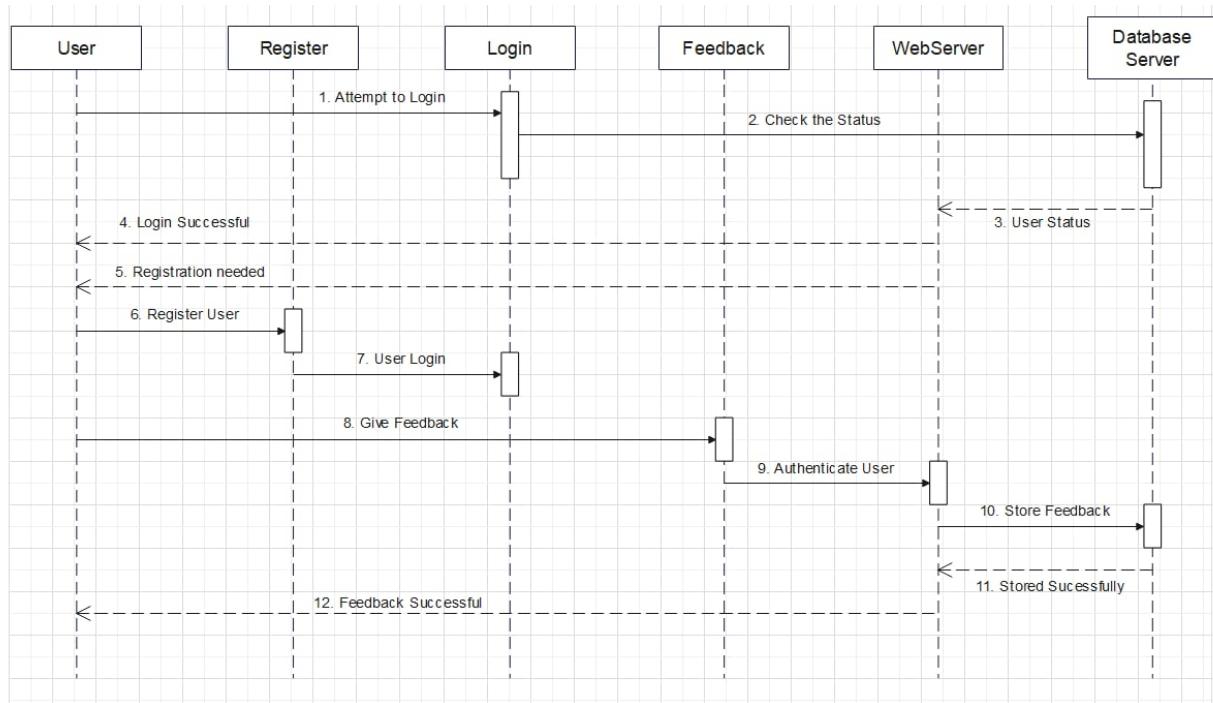


fig. Sequence Diagram

10.3.3 Collaboration/ Communication Diagram

A communication diagram is an extension of an object diagram that shows the objects along with the messages that travel from one to another. The collaboration diagram is used to show the relationship between the objects in a system. Collaboration diagram is another form of interaction diagram. It represents the structural organization of a system and the messages sent/received. Structural organization consists of objects and links.

The given UML diagram is a Collaboration Diagram,

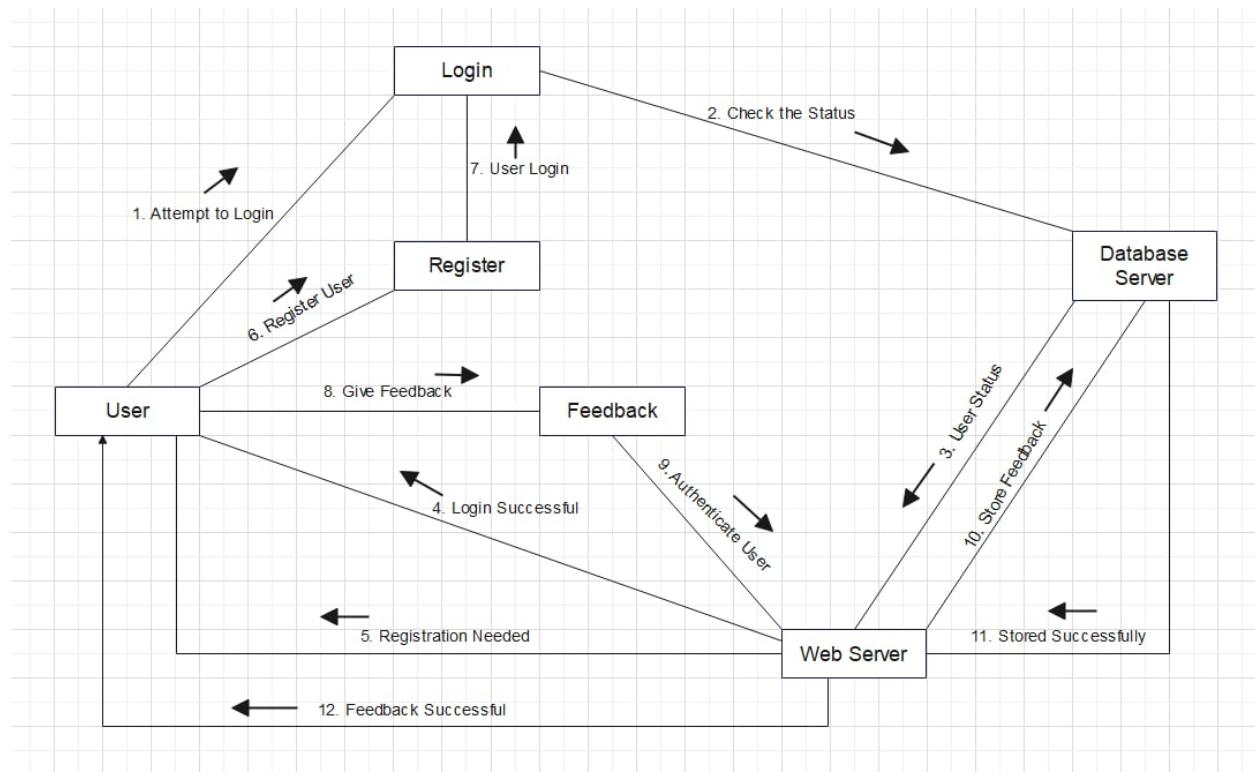


fig. Collaboration Diagram

10.3.4 Class Diagram

Class diagrams are the blueprints of your system or subsystem. You can use class diagrams to model the objects that make up the system, to display the relationships between the objects, and to describe what those objects do and the services that they provide. Class diagrams are the most common diagrams used in UML. Class diagram consists of classes, interfaces, associations, and collaboration. Class diagrams basically represent the object-oriented view of a system, which is static in nature.

The given UML diagram is a Class Diagram,

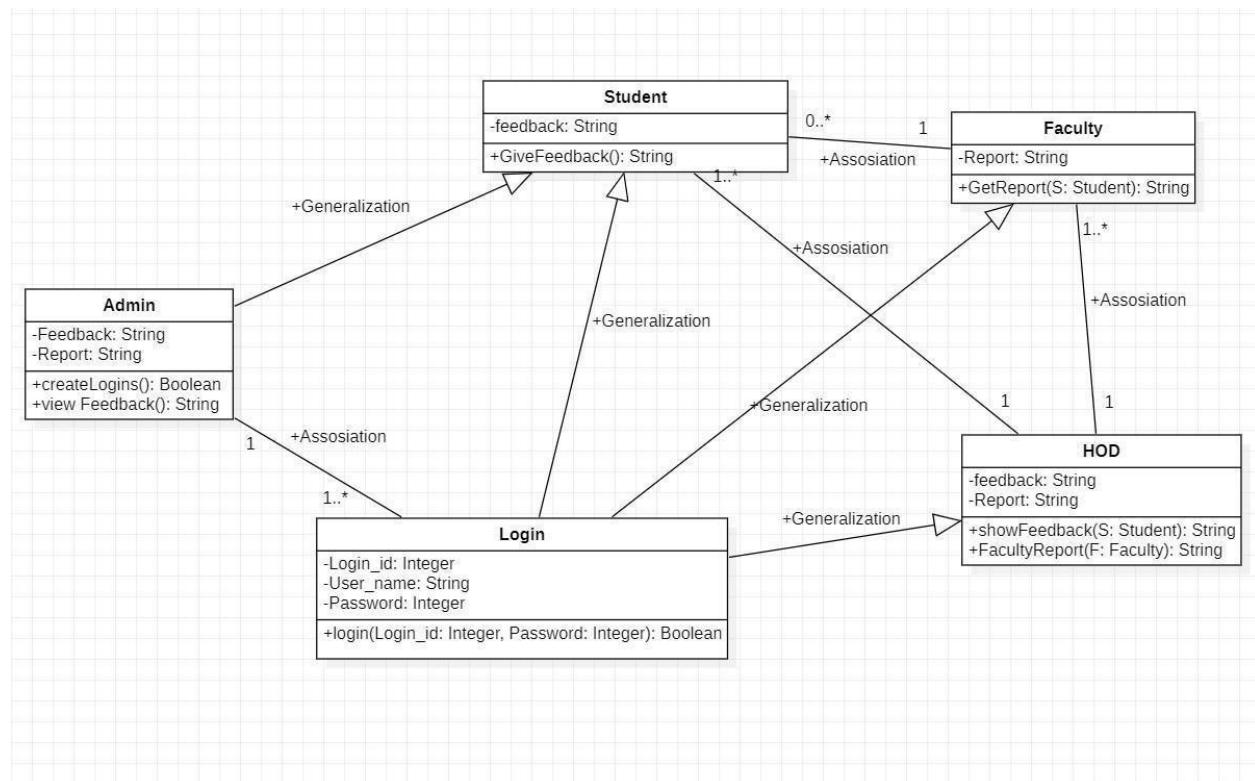


fig. Class Diagram

10.3.5 Object Diagram

Object diagrams are derived from class diagrams so object diagrams are dependent upon class diagrams. Object diagrams are used to render a set of objects and their relationships as an instance. Object diagrams can be described as an instance of class diagram. Thus, these diagrams are more close to real-life scenarios where we implement a system. Object diagrams are a set of objects and their relationship is just like class diagrams. They also represent the static view of the system. The usage of object diagrams is similar to class diagrams but they are used to build prototype of a system from a practical perspective.

The given UML diagram is a Object Diagram,

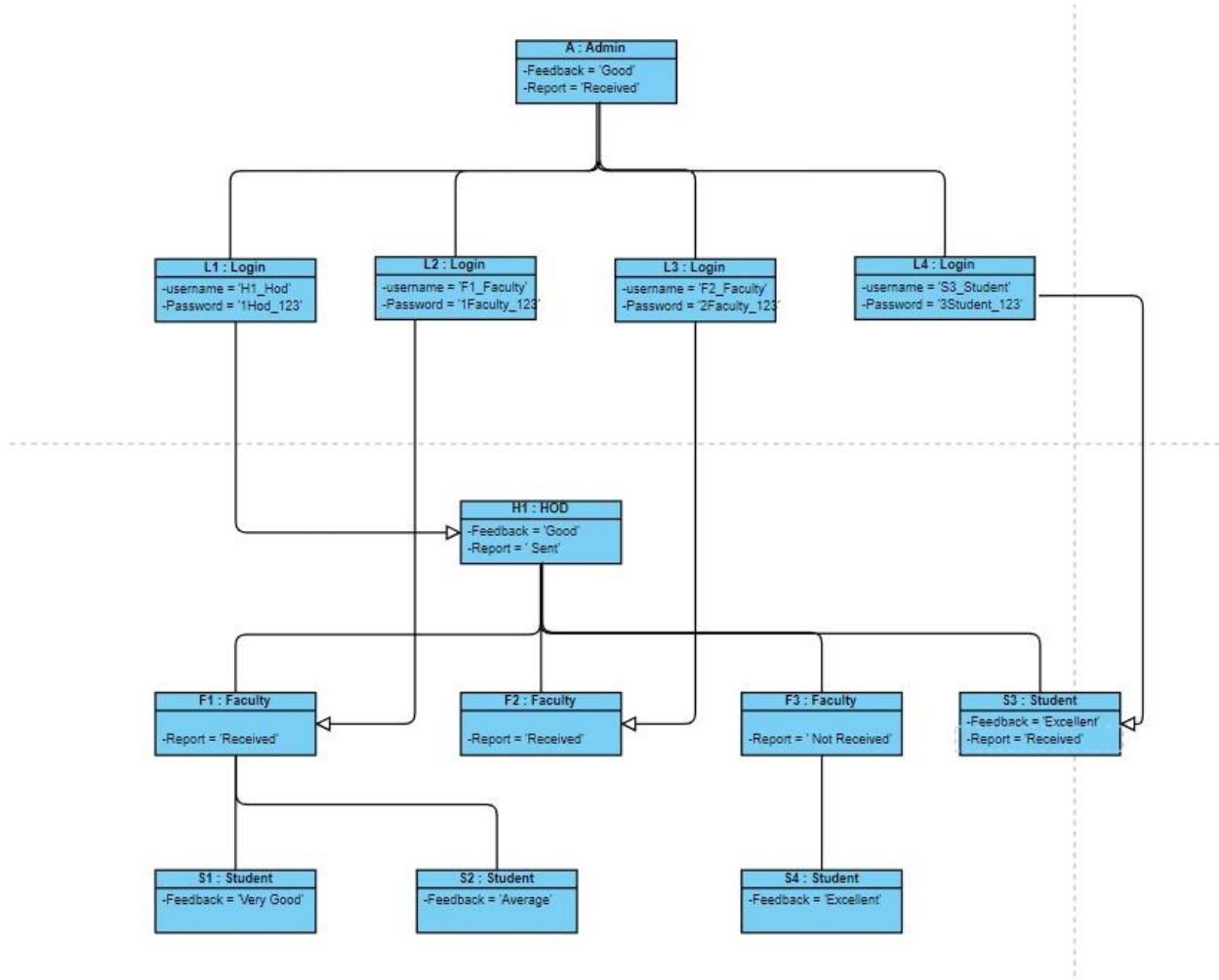


fig. Object Diagram

10.3.6 Component Diagram

Component diagrams are used in modeling the physical aspects of object-oriented systems that are used for visualizing, specifying, and documenting component-based systems and for constructing executable systems through forward and reverse engineering. Component diagrams represent a set of components and their relationships. These components consist of classes, interfaces, or collaborations. Component diagrams represent the implementation view of a system.

The given UML diagram is a Component Diagram,

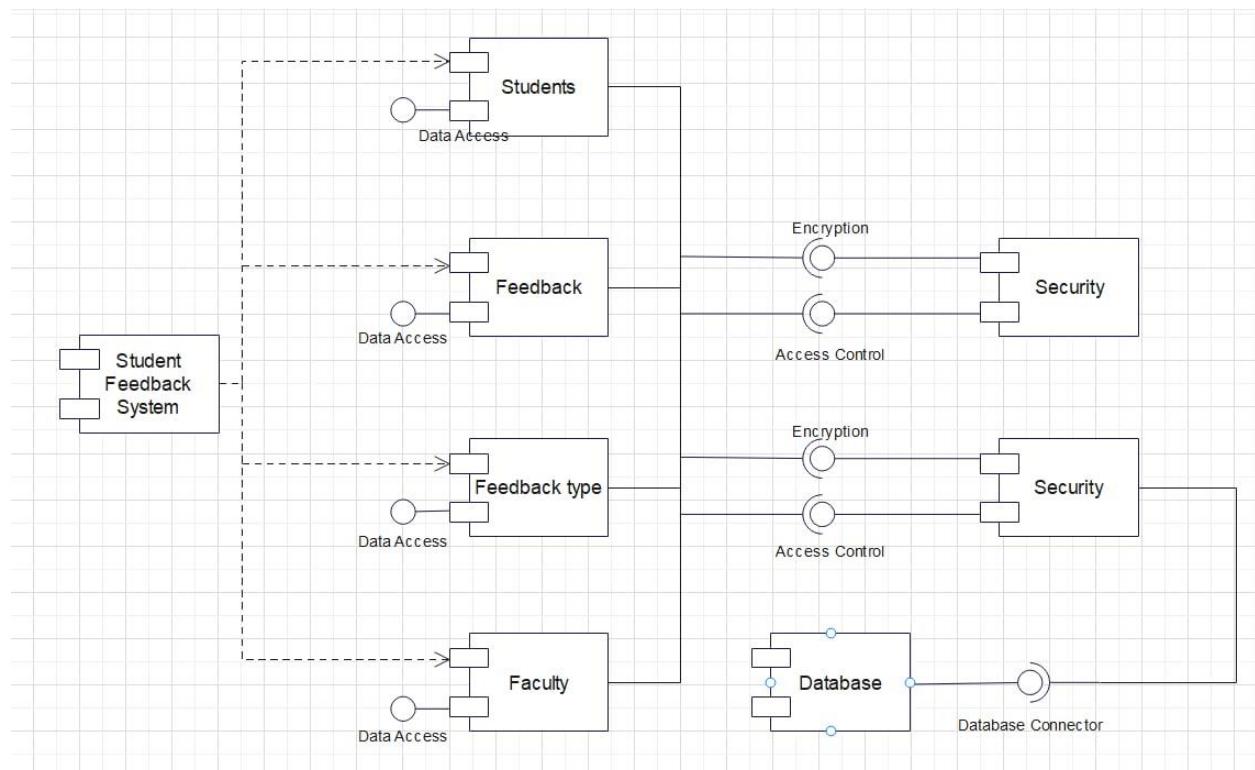


fig. Component Diagram

10.3.7 Deployment Diagram

In UML, deployment diagrams model the physical architecture of a system. Deployment diagrams show the relationships between the software and hardware components in the system and the physical distribution of the processing. Deployment diagrams are a set of nodes and their relationships. These nodes are physical entities where the components are deployed. Deployment diagrams are used for visualizing the deployment view of a system. This is generally used by the deployment team.

The given UML diagram is a Deployment Diagram,

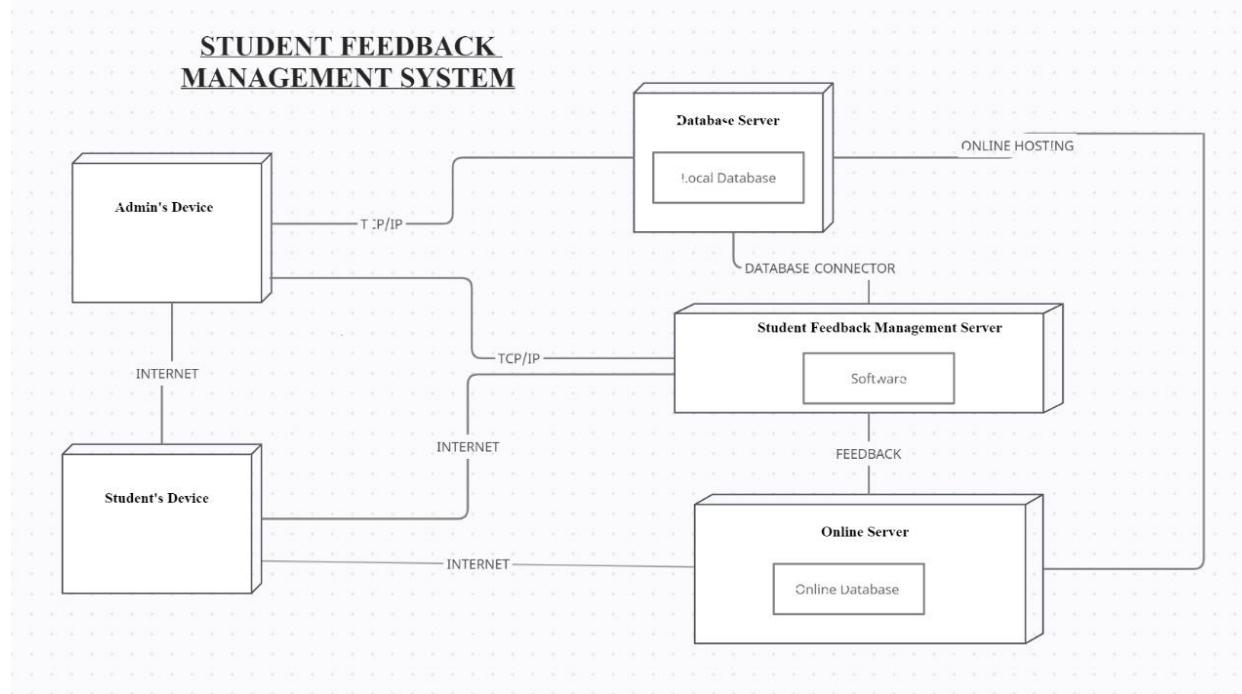
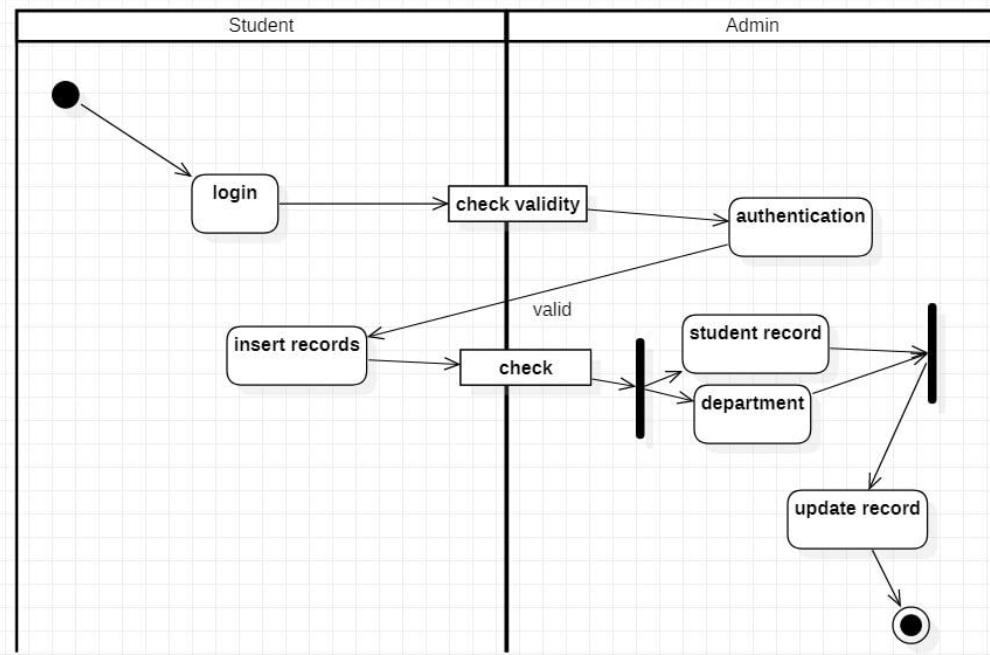


fig. Deployment Diagram

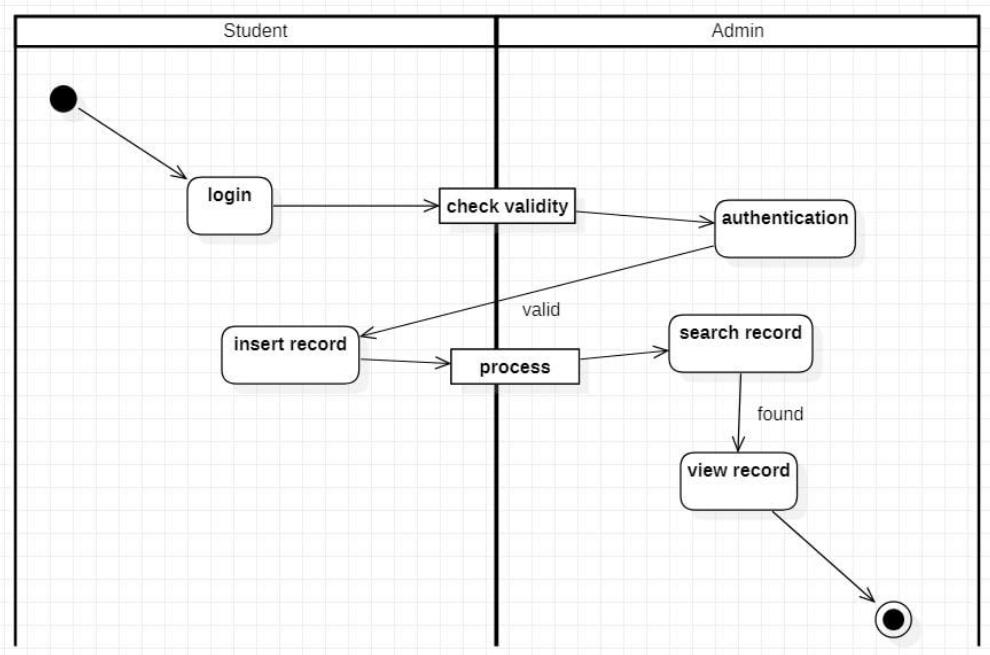
10.3.8 Activity Diagram

Activity diagram is another important behavioral diagram in UML diagram to describe dynamic aspects of the system. Activity diagram is essentially an advanced version of flow chart that modeling the flow from one activity to another activity. Activity diagram describes the flow of control in a system. It consists of activities and links. The flow can be sequential, concurrent, or branched.

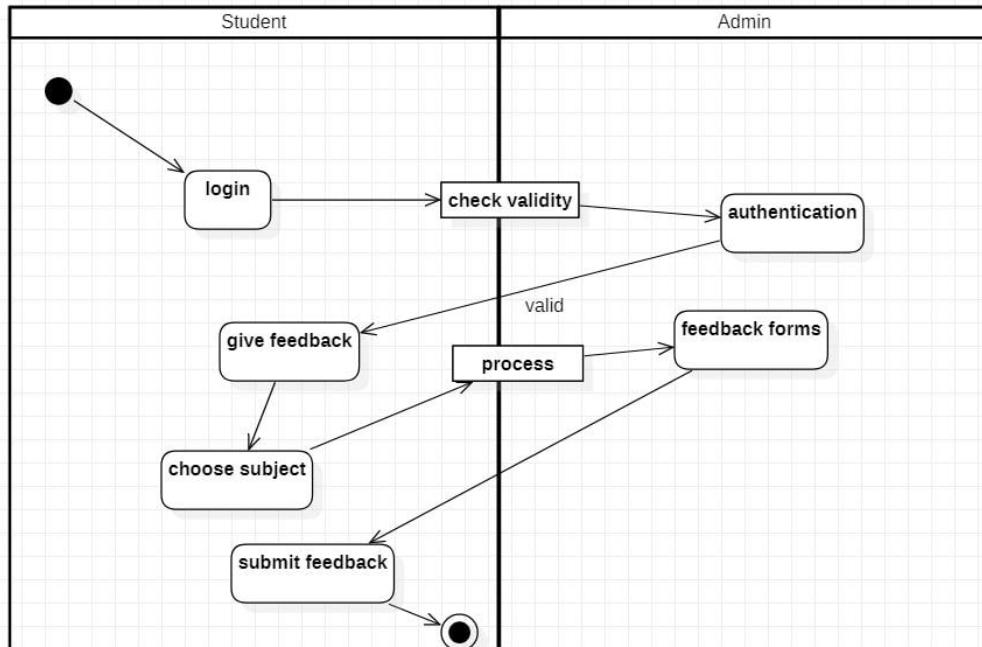
Use case 1: Insert Records



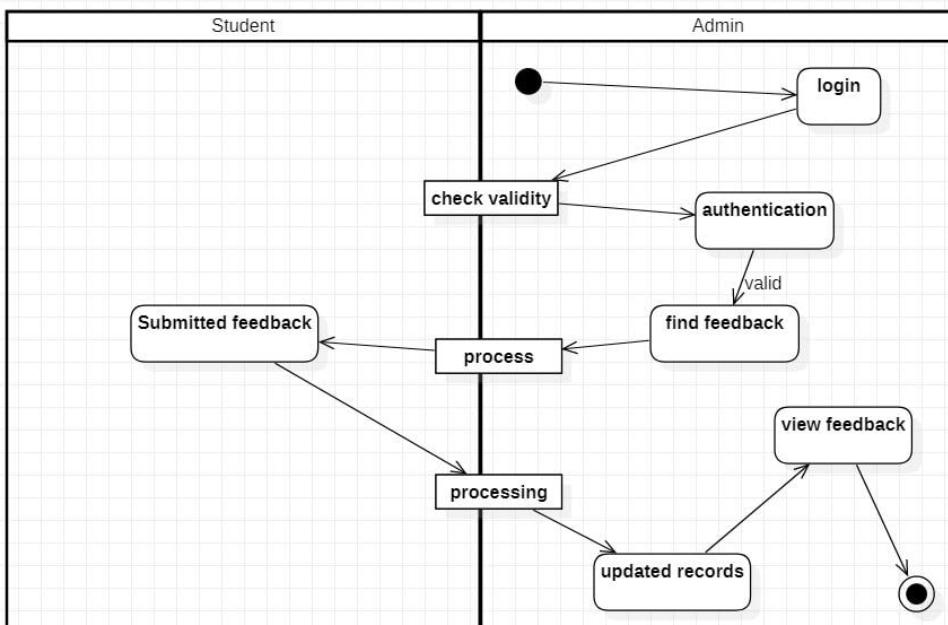
Use case 2: View Record



Use case 3: Give Feedback



Use case 4: View Feedback



10.3.9 State Chart Diagram

The name of the diagram itself clarifies the purpose of the diagram and other details. It describes different states of a component in a system. The states are specific to a component/object of a system. Any real-time system is expected to be reacted by some kind of internal/external events. These events are responsible for state change of the system. State Chart diagram is used to represent the event driven state change of a system. It basically describes the state change of a class, interface, etc. State chart diagram is used to visualize the reaction of a system by internal/external factors.

The given UML diagram is a State Chart Diagram,

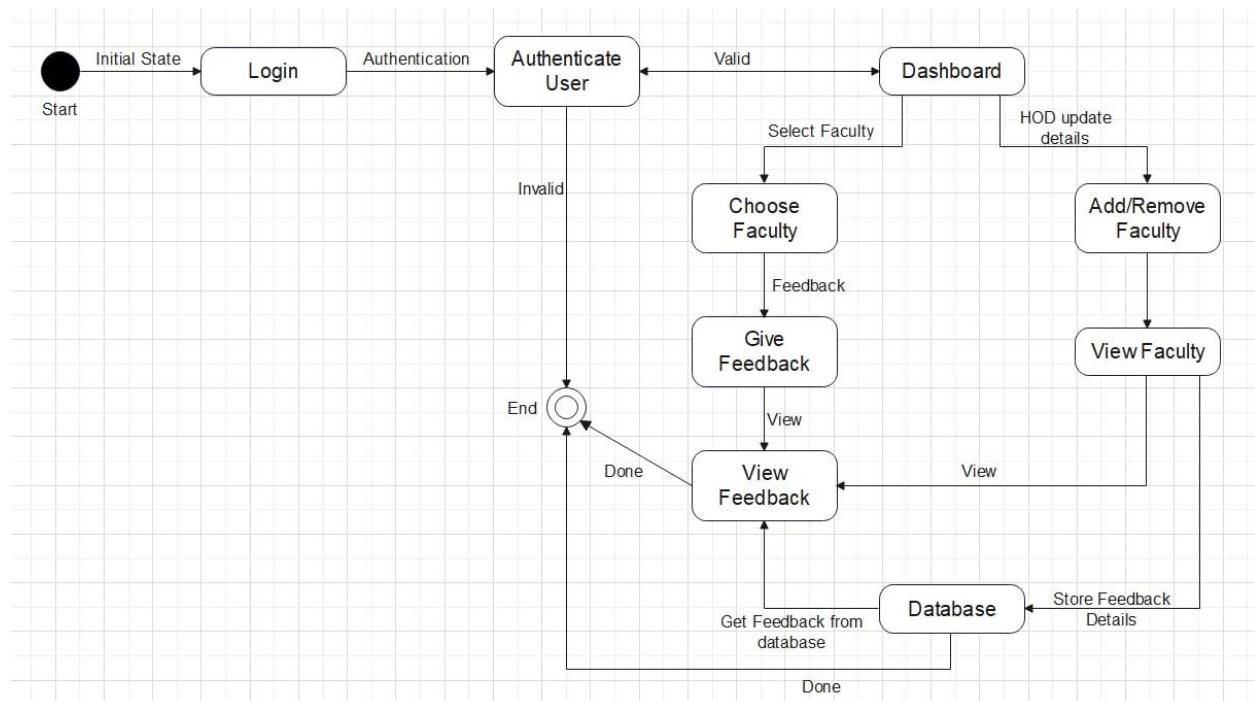


fig. State Chart Diagram

11. CODE

Technologies Used:

- HTML:**

Hyper Text Markup Language (HTML), the language of the World Wide Web (WWW), allows users to produce Web pages that include text, graphics and pointers to other Web pages (Hyperlinks). HTML is not a programming language but it is an application of ISO Standard 8879, SGML (Standard Generalized Markup Language), but specialized to hypertext and adapted to the Web. The idea behind Hypertext is that instead of reading text in rigid linear structure, we can easily jump from one point to another point.

We can navigate through the information based on our interest and preference. A mark up language is simply a series of elements, each delimited with special characters that define how text or other items enclosed within the elements should be displayed. Hyperlinks are underlined or emphasized words that lead to other documents or some portions of the same document. HTML can be used to display any type of document on the host computer, which can be geographically at a different location.

It is a versatile language and can be used on any platform or desktop. HTML provides tags (special codes) to make the document look attractive. HTML tags are not case-sensitive. Using graphics, fonts, different sizes, color, etc., can enhance the presentation of the document. Anything that is not a tag is part of the document itself.

- CSS:**

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS is a MUST for students and working professionals to become a great Software Engineer especially when they are working in Web Development Domain. I will list down some of the key advantages of learning CSS. Create Stunning Web site - CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, and variations in display for different devices and screen sizes as well as a variety of other effects.

Become a web designer - If you want to start a career as a professional web designer, HTML and CSS designing is a must skill. Control web - CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

Learn other languages - Once you understand the basic of HTML and CSS then other related technologies like JavaScript, php, or angular are become easier to understand.

- **PHP:**

PHP is an acronym for Hypertext Pre-Processor/Personal Home Page PHP is completely server-side scripting language for creating dynamic web applications/Websites. The creator of PHP is ‘Rasmus Lerdof’ an employer in apache software foundation and he invented PHP in 1995. The user can access the website through browser. That means user types the URL of the website in the browser and hit go. The page request on the browser will reach to the web server. The server collects the requested page from its document root.

- **XAMPP SERVER:**

XAMPP is an abbreviation for cross-platform, Apache, MySQL, PHP and Perl, and it allows you to build Word Press site offline, on a local web server on your computer. This simple and lightweight solution works on Windows, Linux, and Mac – hence the “cross-platform” part. The term XAMPP is an apparent acronym. However, there is no official acronym expansion specified on the Apache Friends website. Their homepage header reads "XAMPP Apache + Maria DB + PHP + Perl", indicating that this abbreviation is a recursive acronym.

- **MySQL:**

A database is a separate application that stores a collection of data. Each database has one or more distinct APIs for creating, accessing, managing, searching and replicating the data it holds.

Other kinds of data stores can also be used, such as files on the file system or large hash tables in memory but data fetching and writing would not be so fast and easy with those type of systems. Nowadays, we use relational database management systems (RDBMS) to store and manage huge volume of data. This is called relational database because all the data is stored into different tables and relations are established using primary keys or other keys known as Foreign Keys.

MySQL 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 a 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 the well-known SQL data language.

11.1 Index Page

```
<?php
require('header.php');
?>
<html>
    <head> <style>
        .pan-head {
            color: #344e41;
            background-color: #a3b18a;
            border-color: #d6e9c6;
            height: 41px;
            padding: 10px 15px;
            border-bottom: 1px solid transparent;
            border-top-left-radius: 3px;
            border-top-right-radius: 3px;
        }
    </style></head>
</html>
<br /><br />
<div class="container">
    <div class="row" style="margin-left: -250px;">
        <!-- <h3 class="form-signin-heading">Please Login here...</h3><br/>-->
        <div class="col-md-3">&nbsp;
        </div>
        <div class="col-md-3">
            <div class="panel panel-success">
                <div class="pan-head">Student Login</div>
                <div class="panel-body">
                    <form class="form-signin" role="form" action="student.php"
method="post"><br/><br/>

                        <div class="input-group">
                            <span class="input-group-addon" id="sizing-
addon2"><i class="glyphicon glyphicon-user text-primary"></i></span>
                            <input type="text" class="form-control"
placeholder="Admission Number" name="sid" pattern="[0-9]{2}[0-9a-zA-Z]{2}[0-
9]{1}[a-zA-Z]+[0-9]{4}" title="Only Alphabets, digits are allowed with a
maximum of 10 characters" maxlength="10" required autofocus />
                        </div><br/>
                        <div class="input-group">
                            <span class="input-group-addon" id="sizing-
addon2"><i class="glyphicon glyphicon-lock"></i></span>
                            <input type="password" class="form-control"
placeholder="Password" name="pwd" required />
                        </div>
                <br/>
            </div>
        </div>
    </div>
</div>
```

```

        <button class="btn btn-md btn-primary btn-block"
type="submit">Log in</button>

    </form>
    <br />
    <p align="right"><a href="forgot.php"> Forgot Password?</a></p>
    </div>
    </div>
</div>
<div class="col-md-3">
    <div class="panel panel-success">
        <div class="pan-head">Staff/Admin Login</div>
        <div class="panel-body">
            <form class="form-signin" role="form" action="staff.php"
method="post"><br/><br/>

                <div class="input-group">
                    <span class="input-group-addon" id="sizing-
addon2"><i class="glyphicon glyphicon-user text-primary"></i></span>
                    <input type="text" class="form-control"
placeholder="Username" name="sname" required autofocus />
                </div><br/>
                <div class="input-group">
                    <span class="input-group-addon" id="sizing-
addon2"><i class="glyphicon glyphicon-lock"></i></span>
                    <input type="password" class="form-control"
placeholder="Password" name="spwd" required />
                </div>
                <br/>
                <button class="btn btn-md btn-primary btn-block"
type="submit">Log in</button>
            </form>
            <br />
            <p align="right"><a href="forgot.php"> Forgot Password?</a></p>
            </div>
            </div>
        </div> <!-- /container -->

<?php
require('footer.php');

?>
```

11.2 Code for Header

```
<?php
error_reporting(0);
?>
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <title>Online Feedback System</title>
    <!-- Bootstrap -->
    <link href="css/bootstrap.min.css" rel="stylesheet">
    <link rel="stylesheet" type="text/css" media="print"
href="css/bootstrap.min.css">
    <!-- HTML5 shim and Respond.js for IE8 support of HTML5 elements and media
queries -->
    <!-- WARNING: Respond.js doesn't work if you view the page via file:// -->
    <!--[if lt IE 9]>
      <script
src="https://oss.maxcdn.com/html5shiv/3.7.2/html5shiv.min.js"></script>
      <script
src="https://oss.maxcdn.com/respond/1.4.2/respond.min.js"></script>
      <![endif]-->
    <style type="text/css">
/* Sticky footer styles
----- */
html {
  position: relative;
  min-height: 100%;
}
body {
  /* Margin bottom by footer height */
  margin-bottom: 60px;
  /*background-color: #DFE2DB;
  background-color: #FDF3E7;*/
  background-color: #F5F3EE;
}
.footer {
  position: absolute;
  bottom: 0;
  width: 100%;
  /* Set the fixed height of the footer here */
  height: 60px;
  background-color: #f5f5f5;
}
```

```
.labelapply3{
    padding-top: 1px !important;
}

.nav1{
    background: #1a243f;
    margin-right:0.1em;
}

.vit{
    display:flex;
    margin-left:0.6em;
    margin-top:1.8rem;
    margin-bottom:0.6em;
    float:left;
    font-size:30px;
    margin-right:6.4em;
}

.txt_left{
    display:flex;
    margin-top:1.8rem;
    margin-bottom:0.6em;
    float:left;
    font-size:30px;
    margin-right:1em;
}

.txt_right{
    display:flex;
    margin-top:1.8rem;
    margin-bottom:0.6em;
    float:right;
    margin-left:1em;
    font-size:30px;
}

.feed{
    margin-top:1.8rem;
    margin-bottom:0.6em;
    font-size:30px;
    margin-right:0em;
    color:#a3b18;
}
```

```

.logo{
    align:center;
    margin-right:0.5em;
}

.container {
    padding-right: 5px;
    padding-left: 5px;
    margin-right: 0em;
    margin-left: 1em;
    width: 1450px;
}

.col-md-3 {
    width: 25%;
    margin-right: 6.0em;
}

.doprint{
display: none;
}

@media print {
    .dontprint { display: none !important; }
    .doprint { display: block !important; }
}
.text-success{
    color:#fff;
}

```

</style>

<script src="js/jquery-3.1.1.min.js"></script>

</head>

<body>

<!-- Fixed navbar -->

<nav class="navbar navbar-default navbar-static-top dontprint nav1">

<div class="container">

<div class="txt_left">

VELLORE INSTITUTE OF TECHNOLOGY

</div>

<div class="txt_right">

Online Feedback System

```
    </div>
</div>
</div>
</nav>
```

11.3 Code for footer

11.4 Code for admin page

```
<style>
  select{
    font-family: inherit;
    font-size: inherit;
    line-height: inherit;
    padding: 10px;
  }

  input[type="submit"]{
    padding: 8px;
  }

.adminhead{
```

```

        font-size:25px;
        padding-bottom:5px;

    }
</style>
<?php
@session_start();
if(!empty($_SESSION['user']) && !empty($_SESSION['priv'])&&
($_SESSION['priv']=="hod" || $_SESSION['priv']=="admin")){
require('header.php');
?>
<div class="container-fluid">
    <div class="row row-offcanvas row-offcanvas-left">
<div class="col-xs-12 col-sm-3 sidebar-offcanvas" id="sidebar"
role="navigation">
<div class="list-group">
<?php
$menu_id = 10;
require_once("menu.php");

?>
</div>
</div>
<div class="col-xs-12 col-sm-9">

    <div class="row">

        <h4 class="adminhead">Welcome Admin</h4>
        </div>
        </div>
        <?php
        if($_SESSION['user']=="admin" ||
strtolower($_SESSION['user'])=="administrator"){

            if(!empty($_POST)){
                if(!empty($_POST['dept'])){
                    $br = explode("|",$_POST['dept']);
                    $_SESSION['br_code'] = $br[0];
                    $_SESSION['br'] = $br[0];
                    $_SESSION['branch'] = $br[1];
                }
            }
            echo "<h4>Selected Department: &nbsp;";
            if(!empty($_SESSION['branch']) && $_SESSION['branch']=="all"){
                echo "None";
            }else{
                echo $_SESSION['branch'];
            }
        }
    </div>
</div>

```

```

        }
        echo "</h4>";
    ?>

    <form action="admin.php" method="post">
        <select name="dept" required>
            <option value="">--Select Department--</option>
            <option value="01|CIVIL">CIVIL</option>
            <option value="02|EEE">EEE</option>
            <option value="03|MECH">MECH</option>
            <option value="04|ECE">ECE</option>
            <option value="05|CSE">CSE</option>
            <option value="27|FDT">FOOD TECH</option>

        </select>
        <input type="submit" name="deptchange" value="Change
Department" />
    </form>

    <?php } ?>
    </div>
    </div>
<?php
require('footer.php');
}
?>
```

11.5 Code for backend

```

<?php

use Phppot\DataSource;
require_once 'DataSource.php';
$db = new DataSource();
$conn = $db->getConnection();

if (isset($_POST["import"]) && !empty($_POST["whoisit"]) &&
$_POST["whoisit"]=="student") {

    $fileName = $_FILES["file"]["tmp_name"];

    if ($_FILES["file"]["size"] > 0) {

        $file = fopen($fileName, "r");

        while (($column = fgetcsv($file, 10000, ",")) !== FALSE) {

            $sid = "";
```

```

if (isset($column[0])) {
    $sid = mysqli_real_escape_string($conn, $column[0]);
}
$email = "";
if (isset($column[1])) {
    $email = mysqli_real_escape_string($conn, $column[1]);
}
$spass = "";
if (isset($column[2])) {
    $spass = mysqli_real_escape_string($conn, $column[2]);
}
$privilege = "";
if (isset($column[3])) {
    $privilege = mysqli_real_escape_string($conn, $column[3]);
}
$cr_code = "";
if (isset($column[4])) {
    $cr_code = mysqli_real_escape_string($conn, $column[4]);
}
$regulation = "";
if (isset($column[5])) {
    $regulation = mysqli_real_escape_string($conn, $column[5]);
}
$year = "";
if (isset($column[6])) {
    $year = mysqli_real_escape_string($conn, $column[6]);
}
$sem = "";
if (isset($column[7])) {
    $sem = mysqli_real_escape_string($conn, $column[7]);
}
$br_code = "";
if (isset($column[8])) {
    $br_code = mysqli_real_escape_string($conn, $column[8]);
}
$status = "";
if (isset($column[9])) {
    $status = mysqli_real_escape_string($conn, $column[9]);
}
$otp_status = "";
if (isset($column[10])) {
    $otp_status = mysqli_real_escape_string($conn, $column[10]);
}
$feedback_status = "";
if (isset($column[11])) {
    $feedback_status = mysqli_real_escape_string($conn,
$column[11]);
}

```

```

        $sqlInsert = "INSERT IGNORE into st_login
(sid,email,spass,privilege,cr_code,regulation,year,sem,br_code,status,otp_status,feedback_status)
values (?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?)";
$paramType = "ssssssssiii";
$paramArray = array(
    $sid,
    $email,
    $spass,
    $privilege,
    $cr_code,
    $regulation,
    $year,
    $sem,
    $br_code,
    $status,
    $otp_status,
    $feedback_status
);
$insertId = $db->insert($sqlInsert, $paramType, $paramArray);

if (! empty($insertId)) {
    $type = "success";
    $message = "Students CSV Data Imported into the Database
Successfully!";
} else {
    $type = "error";
    $message = "Problem in Importing CSV Data";
}
}

if (isset($_POST["import"]) && !empty($_POST["whoisit"]) &&
$_POST["whoisit"]=="faculty") {

$fileName = $_FILES["filefac"]["tmp_name"];

if ($_FILES["filefac"]["size"] > 0) {

$file = fopen($fileName, "r");

while (($column = fgetcsv($file, 10000, ",")) !== FALSE) {

$fname = "";
if (isset($column[0])) {
$fname = mysqli_real_escape_string($conn, $column[0]);
}
}
}
}

```

```

$br_code = "";
if (isset($column[1])) {
    $br_code = mysqli_real_escape_string($conn, $column[1]);
    $br_code = str_pad($br_code, 2, '0', STR_PAD_LEFT);
}
$branch = "";
if (isset($column[2])) {
    $branch = mysqli_real_escape_string($conn, $column[2]);
}
$fuser = "";
if (isset($column[3])) {
    $fuser = mysqli_real_escape_string($conn, $column[3]);
}
$fpass = "";
if (isset($column[4])) {
    $fpass = mysqli_real_escape_string($conn, $column[4]);
}
$email = "";
if (isset($column[5])) {
    $email = mysqli_real_escape_string($conn, $column[5]);
}

$sqlInsert = "INSERT IGNORE INTO `fac_login`(`fname`, `br_code`,
`branch`, `fuser`, `fpass`, `privilege`, `email`, `otp_status`) VALUES
(?, ?, ?, ?, ?, 'staff', ?, 1)";
$paramType = "ssssss";
$paramArray = array(
    $fname,
    $br_code,
    $branch,
    $fuser,
    $fpass,
    $email
);
$insertId = $db->insert($sqlInsert, $paramType, $paramArray);

if (!empty($insertId)) {
    $type = "success";
    $message = "Faculty CSV Data Imported into the Database
Successfully!";
} else {
    $type = "error";
    $message = "Problem in Importing Faculty CSV Data";
}
}
}
?>

```

```

<?php
    @session_start();
    if(!empty($_SESSION['user']) && !empty($_SESSION['priv'])&&
$_SESSION['priv']=="hod"){

        require_once('header.php');
        require_once('cgs.php');
        $cgs_obj = new CGS;
        $dep = $cgs_obj->getdep($_SESSION['user']);
        $reg=$cgs_obj->getReg1();
        //$_SESSION['fac_sub'] = array();
        //var_dump($_SESSION['fac_sub']);

    ?>
<style>

.adminhead{
    font-size:25px;
    padding-left:15px;
    padding-bottom:5px;
}
</style>
<script src="jquery-1.12.4.js"></script>
<script src="jquery-ui.js"></script>
<script src="js/jquery-3.1.1.min.js"></script>
<h3 class="adminhead">Welcome <?php echo $_SESSION['user'];?></h3>
<div class="container-fluid">

    <div class="row row-offcanvas row-offcanvas-left">

        <div class="col-xs-12 col-sm-3 sidebar-offcanvas" id="sidebar"
role="navigation">
            <div class="list-group">
                <?php
                    $menu_id = 556;
                    require_once("menu.php");
                ?>
            </div><!--/span-->

        <div class="outer-scontainer">
            <h2>Import Students Details</h2>
            <br>

            <form class="form-horizontal" action="" method="post"
name="frmCSVImport" id="frmCSVImport"
enctype="multipart/form-data">
                <div class="input-row">

```

```

        <input type="file" name="file"
               id="file" accept=".csv">
        <br>
        <input type="hidden" name="whoisit" value="student" />
        <button type="submit" id="submit"
name="import" class='btn btn-success'
               class="btn-submit">Import</button>
        <br />

    </div>

</form>
<br><br>

<h2>Import Faculty Details</h2>
<br>

<form class="form-horizontal" action="" method="post"
      name="frmCSVImp" id="frmCSVImp"
      enctype="multipart/form-data">
    <div class="input-row">
        <input type="file" name="filefac"
               id="filefac" accept=".csv">
        <br>
        <input type="hidden" name="whoisit" value="faculty" />
        <button type="submit" id="submit"
name="import" class='btn btn-success'
               class="btn-submit">Import</button>
        <br />

    </div>

</form>
<h4>
<center>
    <div id="response" style="color:green"
         class="<?php if(!empty($type)) { echo $type . " display-
block"; } ?>">
        <?php if(!empty($message)) { echo $message; } ?>
    </div>
</h4>
</center>
</div>
<script type="text/javascript">
$(document).ready(function() {
    $("#frmCSVImport").on("submit", function () {

        $("#response").attr("class", "");
```

```

$( "#response" ).html("");
var fileType = ".csv";
var regex = new RegExp("([a-zA-Z0-9\s_\\.\-:])+(" + fileType + ")$");
if (!regex.test($("#file").val().toLowerCase())) {
    $("#response").addClass("error");
    $("#response").addClass("display-block");
    $("#response").html("Invalid File. Upload : <b>" + fileType +
"<!--&gt; Files.");
        return false;
    }
    return true;
});
$("#frmCSVImp").on("submit", function () {

    $("#response").attr("class", "");
    $("#response").html("");
    var fileType = ".csv";
    var regex = new RegExp("([a-zA-Z0-9\s_\\.\-:])+(" + fileType + ")$");
    if (!regex.test($("#filefac").val().toLowerCase())) {
        $("#response").addClass("error");
        $("#response").addClass("display-block");
        $("#response").html("Invalid File. Upload : &lt;b&gt;" + fileType +
"<!--&gt; Files.");
            return false;
        }
        return true;
    });
});
&lt;/script&gt;

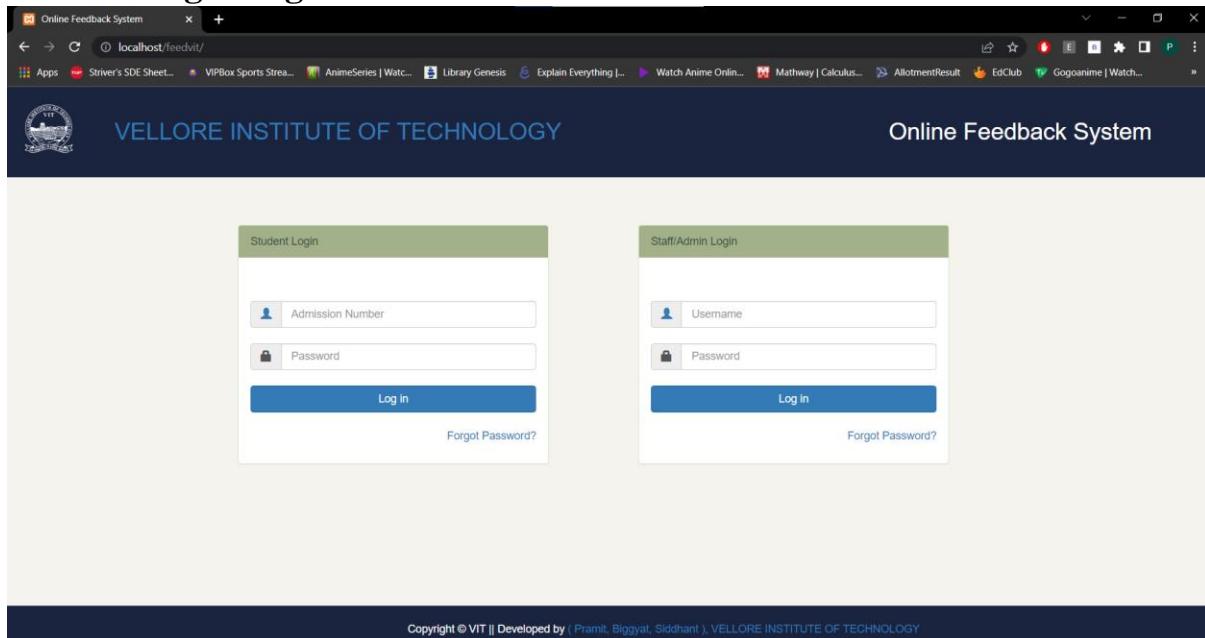
&lt;?php
    require('footer.php');

}
else {
    header('Location: index.php');
}
?&gt;</pre>

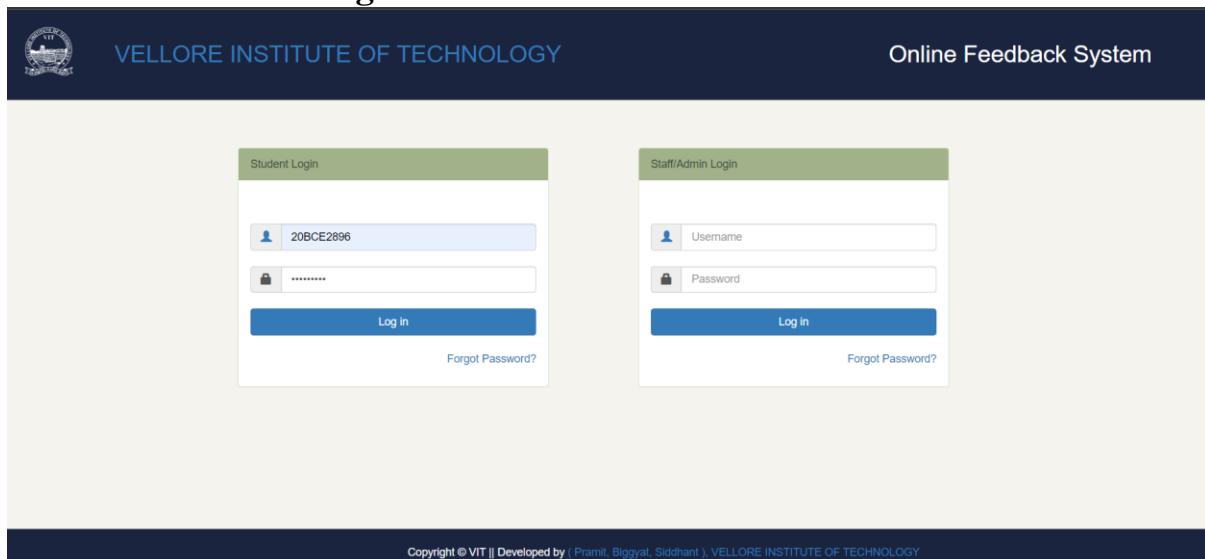
```

12. OUTPUTS

12.1 Login Page



12.2 Student Login



• Student Feedback Page

 VELLORE INSTITUTE OF TECHNOLOGY

Online Feedback System

Welcome 20BCE2896

[Feedback](#)

[Change Password](#)

[Logout](#)

FEEDBACK FORM FORM:1

S.No	Question	Excellent	Very Good	Good	Average	Poor
1	Teacher comes to the class on time	<input type="radio"/>				
2	Teacher speaks clearly and audibly	<input type="radio"/>				
3	Teacher plans lesson with clear objective	<input type="radio"/>				
4	Teacher has got command on the subject	<input type="radio"/>				
5	Teacher writes and draws legibly	<input type="radio"/>				
6	Teacher asks qstions to promote interaction and effective thinking	<input type="radio"/>				

Online Feedback System | localhost / 127.0.0.1 / feedback1 / st... | + | localhost/feedback/form.php

Logout

FEEDBACK FORM FORM:1

S.No	Question	Excellent	Very Good	Good	Average	Poor
1	Teacher comes to the class on time	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Teacher speaks clearly and audibly	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	Teacher plans lesson with clear objective	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	Teacher has got command on the subject	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Teacher writes and draws legibly	<input type="radio"/>	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>
6	Teacher asks qstions to promote interaction and effective thinking	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Teacher encourages,compliments and praises originality and creativity displayed by the student	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Teacher is courteous and impartial in dealing with the students	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	Teacher covers the syllabus completely	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	Teacher evaluation of the sessional exams answer scripts,lab records etc is fair and impartial	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	Teacher is prompt in valuing and returning the answer scripts providing feedback on performance	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Teacher offers assistance and counseling to the needy students	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	Teacher imparts the practical knowledge concerned to the subject	<input type="radio"/>	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	Teacher leaves the class on time	*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments
Enter your comment here

- **Select Course**

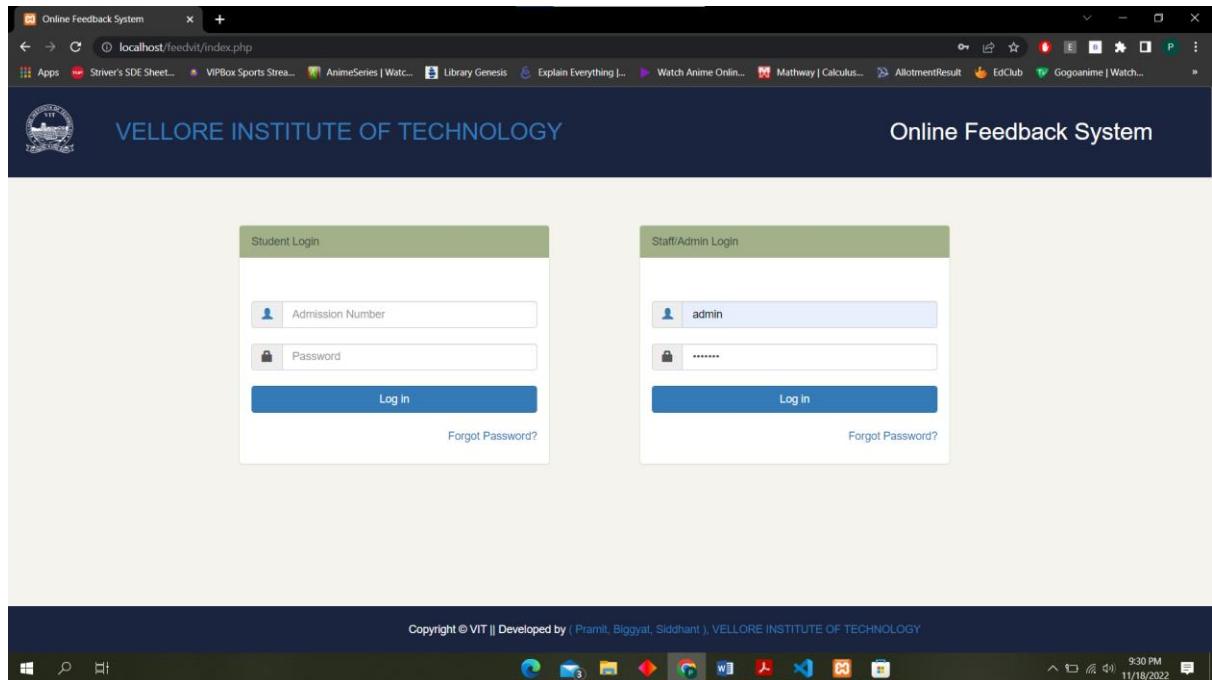
The screenshot shows the Vellore Institute of Technology Online Feedback System. At the top, the VIT logo and the text "VELLORE INSTITUTE OF TECHNOLOGY" are visible. Below this, a welcome message "Welcome 20BCE2896" is displayed. On the left, a sidebar menu includes "Feedback", "Change Password", and "Logout". The main content area shows a table with columns "S.No" and "Question". The first row of the table has an orange background and contains the text "Teacher comes to the". To the right of the table, a dropdown menu is open, listing several course names: "--Select--", "--Select--", "Internet Programming and Web Technologies", "Discrete Mathematics and Graph Theory", "Software Engineering", "Data Visualisation and Presentation", and "Information Security Analysis and Audit".

- **Change Password for Student**

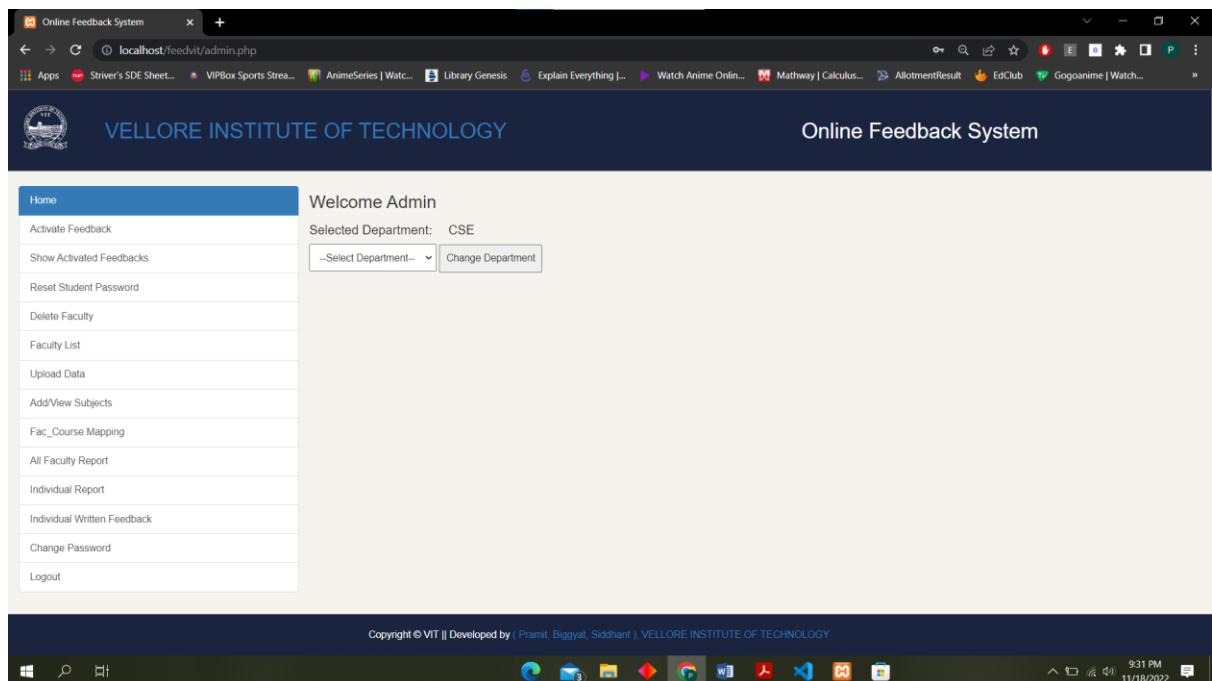
The screenshot shows the "Change Password" form within the Vellore Institute of Technology Online Feedback System. The form is titled "Change Password" and contains three input fields: "Current Password", "Enter New Password", and "Re-enter New Password". Below these fields is a blue "Go" button. The sidebar on the left, which was previously shown in the previous screenshot, now has "Change Password" selected. The bottom of the screen displays a copyright notice: "Copyright © VIT || Developed by (Pramit, Biggyat, Siddhant), VELLORE INSTITUTE OF TECHNOLOGY". The system status bar at the bottom right shows the time as 9:27 PM and the date as 11/18/2022.

12.3 Admin Module

- Login Page



- Home Page:



• Activate Feedback Page

Welcome Administrator

Online Feedback System

Select The Following

Select Branch: B.Tech (CSE) ▾

Select Regulation: ▾Select... ▾

Select year: ▾SELECT... ▾

Select Semester: ▾SELECT... ▾

From date & time: mm/dd/yyyy -- -- --

To date & time: mm/dd/yyyy -- -- --

Activate

• Show Activated Feedback Page:

Welcome Administrator

Online Feedback System

Selected Department: CSE

Course	Regulation	Year	Sem	Start Time	End Time	Status
B.Tech	15	II	II	2022-04-21T08:31	2022-04-21T09:21	Completed
B.Tech	15	II	II	2022-04-21T14:04	2022-04-21T15:52	Completed
B.Tech	15	II	II	2022-04-21T18:07	2022-04-21T19:11	Completed
B.Tech	15	II	II	2022-04-21T19:13	2022-04-23T19:13	Completed
B.Tech	15	II	II	2022-04-29T21:50	2022-04-30T21:50	Completed
B.Tech	15	III	I	2022-11-07T00:24	2022-11-07T23:18	Completed
B.Tech	15	II	II	2022-11-07T23:24	2022-11-07T23:25	Completed
B.Tech	15	II	II	2022-11-07T23:27	2022-11-08T23:27	Completed
B.Tech	15	III	I	2022-11-07T23:28	2022-11-08T23:28	Completed
B.Tech	15	III	I	2022-11-10T00:28	2022-11-11T00:28	Completed
B.Tech	15	III	I	2022-11-14T11:05	2022-11-14T22:03	Completed
B.Tech	15	III	I	2022-11-14T22:07	2022-11-15T22:07	Completed
B.Tech	15	III	I	2022-11-18T21:24	2022-12-03T21:24	Completed

stop

- **Reset Student Password Page:**

The screenshot shows the Vellore Institute of Technology Online Feedback System interface. At the top, there is a dark blue header with the university's logo and name "VELLORE INSTITUTE OF TECHNOLOGY" on the left, and "Online Feedback System" on the right. Below the header, a welcome message "Welcome Administrator" is displayed. On the left, a vertical sidebar menu lists various administrative functions: Home, Activate Feedback, Show Activated Feedbacks, **Reset Student Password** (which is highlighted in blue), Delete Faculty, Faculty List, Upload Data, Add/View Subjects, Fac_Course Mapping, All Faculty Report, Individual Report, Individual Written Feedback, and Change Password. To the right of the sidebar, a modal window titled "Reset Student Password" contains a text input field labeled "Enter UserName/Roll_No :". Below the input field is a blue button labeled "Get Details".

- **Delete Faculty Page:**

The screenshot shows the Vellore Institute of Technology Online Feedback System interface. At the top, there is a dark blue header with the university's logo and name "VELLORE INSTITUTE OF TECHNOLOGY" on the left, and "Online Feedback System" on the right. Below the header, a welcome message "Welcome Administrator: CSE" is displayed. On the left, a vertical sidebar menu lists various administrative functions: Home, Activate Feedback, Show Activated Feedbacks, Reset Student Password, **Delete Faculty** (which is highlighted in blue), Faculty List, Upload Data, Add/View Subjects, Fac_Course Mapping, All Faculty Report, Individual Report, Individual Written Feedback, Change Password, and Logout. To the right of the sidebar, a modal window titled "Remove Faculty" contains a dropdown menu labeled "Select Faculty Name" with the option "-Select-". Below the dropdown is a blue button labeled "Delete". At the bottom of the page, there is a footer bar with the copyright notice "Copyright © VIT || Developed by (Pramit, Bigyat, Siddhant), VELLORE INSTITUTE OF TECHNOLOGY".

• Faculty List Page:

The screenshot shows the 'Faculty List' page of the Online Feedback System. At the top, there is a header with the VIT logo and the text 'VELLORE INSTITUTE OF TECHNOLOGY' on the left, and 'Online Feedback System' on the right. Below the header, a welcome message 'Welcome Administrator' is displayed. On the left, a sidebar menu lists various options: Home, Activate Feedback, Show Activated Feedbacks, Reset Student Password, Delete Faculty, Faculty List (which is selected and highlighted in blue), Upload Data, Add/View Subjects, Fac_Course Mapping, All Faculty Report, Individual Report, Individual Written Feedback, Change Password, and Logout. The main content area shows a table titled 'Selected Department: CSE'. The table has columns for 'S.No.', 'Name of the Faculty', and 'Average'. The data in the table is as follows:

S.No.	Name of the Faculty	Average
1	NALLAIAH M	8.86
2	VISHNU SRINIVASA MURTHY Y	7.79
3	KAUSER AHMED P	7
4	CHANDRA MOHAN	5.36

At the bottom of the page, there is a copyright notice: 'Copyright © VIT || Developed by (Pramit, Biggyat, Siddhant), VELLORE INSTITUTE OF TECHNOLOGY'.

• Upload Data Page:

The screenshot shows the 'Upload Data' page of the Online Feedback System. The layout is similar to the previous page, with the VIT logo, 'VELLORE INSTITUTE OF TECHNOLOGY' in the header, and 'Online Feedback System' on the right. A welcome message 'Welcome Administrator' is at the top. The sidebar menu on the left includes: Home, Activate Feedback, Show Activated Feedbacks, Reset Student Password, Delete Faculty, Faculty List, Upload Data (selected and highlighted in blue), Add/View Subjects, Fac_Course Mapping, All Faculty Report, Individual Report, Individual Written Feedback, Change Password, and Logout. The main content area contains two sections: 'Import Students Details' and 'Import Faculty Details'. Each section has a 'Choose File' button with the message 'No file chosen' and a green 'Import' button. At the bottom of the page is a copyright notice: 'Copyright © VIT || Developed by (Pramit, Biggyat, Siddhant), VELLORE INSTITUTE OF TECHNOLOGY'.

• Add and View Subject Page:

The screenshot shows the 'Welcome Administrator' page of the VIT Online Feedback System. On the left, a sidebar menu includes options like Home, Activate Feedback, Show Activated Feedbacks, Reset Student Password, Delete Faculty, Faculty List, Upload Data, Add/View Subjects (which is selected), Fec_Course Mapping, All Faculty Report, Individual Report, Individual Written Feedback, Change Password, and Logout. The main content area has a title 'Select The Following' with dropdown menus for Select Regulation (15), Select Department (CSE), Select Course Type (B.Tech (CSE)), Select year (III), and Select Semester (I). It also has a 'Subject Name' input field and an 'ADD' button. To the right, a section titled 'Added Subjects' lists nine subjects with red delete 'X' icons: Operating System, Computer Networks, Object Oriented Analysis & Design, Principles of Programming Language, Software Testing, Introduction to Big Data, Information Security Analysis and Audit, Internet Programming and Web Technologies, and Software Engineering.

• Faculty Course Mapping Page:

The screenshot shows the 'Welcome Administrator' page of the VIT Online Feedback System. The sidebar menu is identical to the previous screenshot. The main content area has a title 'Select The Following' with dropdown menus for Select Regulation (15), Select Department (CSE), Select Course Type (B.Tech), Select year (III), Select Semester (I), Select subject (dropdown showing '-Select-'), and Select Faculty (dropdown showing '-select-'). It also has an 'ADD' button. Below this, a section titled 'Added Subjects' lists three subjects with their respective faculty names and red delete 'X' icons: Internet Programming and Web Technologies (KAUSER AHMED P), Discrete Mathematics and Graph Theory (NALLAIAH M), and Software Engineering (Ramesh Babu K).

- All Faculty Report Page:

The screenshot shows the 'Online Feedback System' interface for an administrator. On the left, a sidebar lists various administrative functions. The 'All Faculty Report' option is highlighted in blue. A central form titled 'Select The Following' contains dropdown menus for 'Select Regulation' (15), 'Select Program' (B.Tech), 'Select Specialization' (B.Tech (CSE)), 'Select year' (III), 'Select Semester' (I), and 'Select Feedback Time' (14-11-2022 - 14-11-2022). A 'Get Report' button is at the bottom of the form. At the bottom of the page, a copyright notice reads: 'Copyright © VIT || Developed by (Pramit, Bigyat, Siddhant), VELLORE INSTITUTE OF TECHNOLOGY'.

- Overall Report Page:

The screenshot shows the 'Online Feedback System' interface for an administrator. On the left, a sidebar lists various administrative functions. The 'All Faculty Report' option is highlighted in blue. In the center, a bar chart titled 'Overall feedback of B.Tech (CSE) – III Year I Sem' displays two bars. The first bar for 'CHANDRA MOHAN' has a value of 58.57 for the course 'Information Security Analysis and Audit'. The second bar for 'KAUSER AHMED P' has a value of 72.86 for the course 'Internet Programming and Web Technologies'. Below the chart is a 'Download Individual Reports' button. At the bottom of the page, a copyright notice reads: 'Copyright © VIT || Developed by (Pramit, Bigyat, Siddhant), VELLORE INSTITUTE OF TECHNOLOGY'.

• Individual Report

The screenshot shows the 'Online Feedback System' interface for an administrator. On the left, a sidebar lists various administrative functions: Home, Activate Feedback, Show Activated Feedbacks, Reset Student Password, Delete Faculty, Faculty List, Upload Data, Add/View Subjects, Fac_Course Mapping, All Faculty Report, Individual Report (which is selected), Individual Written Feedback, Change Password, and Logout. The main content area has a blue header 'Select The Following' containing dropdown menus for 'Select Program' (B.Tech), 'Select Faculty Name' (KAUSER AHMED P), and 'Select subject' (CSE - III - I - Internet Programming and Web Technologies - 14-11-2022). A large blue button labeled 'Get Feedback' is at the bottom of this section. At the very bottom of the page, there is a copyright notice: 'Copyright © VIT II Developed by : Pramid, Bhavesh, Siddharth | VELLORE INSTITUTE OF TECHNOLOGY'.

• Report Page:

This screenshot displays the report page for a specific teacher. The top navigation bar includes the university logo, 'VELLORE INSTITUTE OF TECHNOLOGY', and 'Online Feedback System'. The sidebar on the left is identical to the one in the previous screenshot. The main content area shows the following details: Subject: Internet Programming and Web Technologies (CSE), Faculty name: KAUSER AHMED P, Overall rating: 72.86%, and No.of students submitted: 1. Below this, a table lists 12 questions rated by students, each accompanied by a green progress bar indicating the percentage of responses. The questions are: 1. Teacher comes to the class on time (80%), 2. Teacher speaks clearly and audibly (60%), 3. Teacher plans lesson with clear objective (80%), 4. Teacher has got command on the subject (80%), 5. Teacher writes and draws legibly (80%), 6. Teacher asks qstions to promote interaction and effective thinking (60%), 7. Teacher encourages,compliments and praises originality and creativity displayed by the student (80%), 8. Teacher is courteous and impartial in dealing with the students (80%), 9. Teacher covers the syllabus completely (80%), 10. Teacher evaluation of the sessional exams answer scripts,lab records etc is fair and impartial (80%), 11. Teacher is prompt in valuing and returning the answer scripts providing feedback on performance (60%), and 12. Teacher offers assistance and counseling to the needy students (80%).

- **Change Password Page:**

The screenshot shows the 'Change Password' page of the Online Feedback System. At the top, there is a header with the VIT logo and the text 'VELLORE INSTITUTE OF TECHNOLOGY' on the left, and 'Online Feedback System' on the right. Below the header, a welcome message 'Welcome Administrator' is displayed. On the left, a vertical menu bar lists various options: Home, Activate Feedback, Show Activated Feedbacks, Reset Student Password, Delete Faculty, Faculty List, Upload Data, Add/View Subjects, Fac_Course Mapping, All Faculty Report, Individual Report, Individual Written Feedback, Change Password (which is highlighted in blue), and Logout. In the center, a 'Change Password' form is presented with three input fields: 'Current Password', 'Enter New Password', and 'Re-enter New Password'. A 'Go' button is located at the bottom of the form. At the very bottom of the page, a copyright notice reads 'Copyright © VIT || Developed by (Pramit, Bigyat, Siddhart), VELLORE INSTITUTE OF TECHNOLOGY'.

12.4 Faculty MODULE:

- **Faculty Get Report Page:**

The screenshot shows the 'Select The Following' page of the Online Feedback System. At the top, there is a header with the VIT logo and the text 'VELLORE INSTITUTE OF TECHNOLOGY' on the left, and 'Online Feedback System' on the right. Below the header, a welcome message 'Welcome KAUSER AHMED P' is displayed. On the left, a vertical menu bar lists 'Get Report' (which is highlighted in blue), 'Get Comments', 'Change Password', and 'Logout'. In the center, a form titled 'Select The Following' contains three dropdown menus: 'Select Faculty Name', 'Select Program', and 'Select subject'. A 'Get Feedback' button is located at the bottom of the form. At the very bottom of the page, a copyright notice reads 'Copyright © VIT || Developed by (Pramit, Bigyat, Siddhart), VELLORE INSTITUTE OF TECHNOLOGY'.

• Faculty Report Page:

The screenshot shows the Online Feedback System interface for a faculty member. At the top, it displays the Vellore Institute of Technology logo and name. On the right, it says "Online Feedback System". The left sidebar has links for "Get Report", "Get Comments", "Change Password", and "Logout". The main content area shows the following details:
Subject : Internet Programming and Web Technologies (CSE)
Faculty name: KAUSER AHMED P
Overall rating : 72.86%
No.of students submitted: 1

S.No	Question	Rating	Percentage
1	Teacher comes to the class on time	<div style="width: 80%;"></div>	80%
2	Teacher speaks clearly and audibly	<div style="width: 60%;"></div>	60%
3	Teacher plans lesson with clear objective	<div style="width: 80%;"></div>	80%
4	Teacher has got command on the subject	<div style="width: 80%;"></div>	80%
5	Teacher writes and draws legibly	<div style="width: 80%;"></div>	80%
6	Teacher asks qstions to promote interaction and effective thinking	<div style="width: 60%;"></div>	60%
7	Teacher encourages,compliments and praises originality and creativity displayed by the student	<div style="width: 80%;"></div>	80%
8	Teacher is courteous and impartial in dealing with the students	<div style="width: 80%;"></div>	80%
9	Teacher covers the syllabus completely	<div style="width: 80%;"></div>	80%
10	Teacher evaluation of the sessional exams answer scripts,lab records etc is fair and impartial	<div style="width: 80%;"></div>	80%
11	Teacher is prompt in valuing and returning the answer scripts providing feedback on performance	<div style="width: 60%;"></div>	60%
12		<div style="width: 90%;"></div>	90%

• Get Comment Page:

The screenshot shows the Online Feedback System interface for getting comments. At the top, it displays the Vellore Institute of Technology logo and name. On the right, it says "Online Feedback System". The left sidebar has links for "Get Report", "Get Comments", "Change Password", and "Logout". The main content area shows the following details:
Subject : Internet Programming and Web Technologies (CSE)
Faculty name: KAUSER AHMED P
Overall rating : 74.29%
No.of students submitted: 1

Comments Not Found. I

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- Faculty Change Password:

The screenshot shows the 'Online Feedback System' interface for a faculty member named KAUSER AHMED P. The top navigation bar includes the VIT logo, the text 'VELLORE INSTITUTE OF TECHNOLOGY', and the 'Online Feedback System'. A sidebar on the left lists options like 'Get Report', 'Get Comments', 'Change Password' (which is highlighted in blue), and 'Logout'. The main content area displays a 'Change Password' form with fields for 'Current Password', 'Enter New Password', and 'Re-enter New Password', along with a 'Go' button. At the bottom of the page, there is a copyright notice: 'Copyright © VIT || Developed by (Pramit, Bigyat, Siddham), VELLORE INSTITUTE OF TECHNOLOGY'.

12.5 HOD Module:

- Change Password Module:

The screenshot shows the 'Online Feedback System' interface for a HOD named Ramesh Babu K. The top navigation bar includes the VIT logo, the text 'VELLORE INSTITUTE OF TECHNOLOGY', and the 'Online Feedback System'. A sidebar on the left lists options like 'Home', 'Activate Feedback', 'Show Activated Feedbacks', 'Add/View Subjects', 'Fac_Course Mapping', 'All Course Report', 'Individual Report', 'Change Password' (which is highlighted in blue), and 'Logout'. The main content area displays a 'Change Password' form with fields for 'Current Password', 'Enter New Password', and 'Re-enter New Password', along with a 'Go' button. At the bottom of the page, there is a copyright notice: 'Copyright © VIT || Developed by (Pramit, Bigyat, Siddham), VELLORE INSTITUTE OF TECHNOLOGY'.

13. TESTING

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies and/or a finished product it is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

Use Case Name: Admin login

Test case ID: Online Feedback Management System

Test Case: To manage Feedback
Test Objective: To create the users, to view the Feedback
Test Description: Admin can view the ledger, can edit the wrong data and have some edit access rights to him only, if he wants to delete the users, he can also do it.
Requirement Verified: Yes
Test Environment: System should connect to network and server should be in on
Test setup/precondition: Receive should be in connection with accept state
Actions: Admin login into the page and create or delete the users
Expected Results: Feedback will be shown, Ledger can be viewed
Pass: Yes Fail: No
Problems: NILL Note: Successfully Executed

This report is the test report for admin login that shows an error message if either an invalid login id or an invalid password is entered, the main actions included for admin are adding users, if he wants then he can delete the users also and the ledger of the students can also be viewed.

Use Case Name: Student

Test Case ID: Online Feedback Management System

Test Case: Student
Test Objective: To give Feedback.
Test Description: Here Student is responsible to give Feedback to the Faculty.
Requirement Verified: Yes
Test Environment: System should connect to network and server should be in on
Test setup/precondition: Receive should be in connection with accept state
Actions: Students can get the info of Faculty. And Feedback is given to the Faculty.
Expected Results: satisfied
Pass: Yes
Fail: No
Problems: NILL
Note: Successfully Executed

It represents the test report for students and his login shows an error message

due to either an invalid login or an invalid password is entered and main actions included are getting job Notifications posted by Online Feedback management officers.

13.1 Test Cases

13.1.1 Login:

Test Case#	Test Title	Test Summary	Test Steps	Test Data	Expected Result	Actual Result	Status	Notes
test Case#1	Student Login	Student enters credentials ,if credentials are valid,student will login or else it will show invalid.	1) User name 2) Password 3)Valid/Invalid	Student no 1 Student123@ 123456	Valid Valid	Valid Valid	pass	nil
test Case # 2	Admin login	Admin enters credentials ,if credentials are valid, admin will login or else it will show invalid.	1)Admin name 2)Password 3)Valid/Invalid	Admin no1 Admin789@ 123456	valid valid	valid valid	pass	nil

13.1.2 Activated Feedback:

13.1.3 Upload Data:

13.1.4 Report:

13.1.5 Feedback:

Test Case#	Test Title	Test Summary	Test Steps	Test Data	Expected Result	Actual Result	Status	Notes
test Case#1	Give feedback	Student logged in and provide feedback about faculties.	1) Select subject name 2)Select class 3)Select branch 4)Select faculty name 5)Fill feedback form 6)Provide comments	C programming CSE faculty1 Select options Add comment	Feedback received successfully	Feedback received successfully	pass	nil
test Case # 2	View feedback	HOD will login to view feedback of faculties from students.	1)Select faculty name 2) Select program 3)Select Subject 4)Get feedback	Faculty1 CSE C programming	Display feedback	Display feedback	pass	nil

13.2 Preferred Testing Tool

GUI Testing Tool

GUI (Graphical User Interface) testing tool is used to find the defects that happened in the design phase, which enhance the quality of the software. With the help of these tools, we can identify the loopholes quickly rather than performing GUI testing manually. We will test the application based on application performance, which is related to mouse and keyboard actions, and some of the GUI items like buttons, toolbars, Dialog boxes, Menu bars, and the edit fields.

Following are some essential strategies that we can perform under GUI testing:

Navigation validation, verify the check screens, data integrity validation, verification of usability situations, and also check the numeric, date field formats.

One of the GUI testing tool is as follows:

- **Ranorex Studio**

It is the most widely used GUI Test Automation tool, which is developed by **Ranorex GmbH**, and it is used to test the mobile, desktop, and web-based applications. It supports the development of the automated test modules, which are written in VB.NET and C# programming languages. It will provide cross-browser testing for multiple browsers like Safari, Chrome, Firefox, Internet Explorer, and Microsoft Edge.

Features Ranorex Studio

- It can execute on the Windows Server and Microsoft Windows.
- It supports various web technologies like JavaScript, HTML, Flash, Ajax, HTML5, and Silverlight, and so on.
- Ranorex Studio will support native Android and iOS mobile applications.

- It will produce the customize test reports with the video reporting of the test execution.
- It will provide consistent object identification.
- It will generate the reusable code modules, shareable object repository, and also reduce the maintenance cost.

14. CONCLUSION AND FUTURE ENHANCEMENTS

The Project “Online Feedback Management System” is designed in order reduce the burden of maintaining bulk of records of all the students feedback details of who study in an Educational Institution. Inserting, retrieving and updating the feedback details of a student are easy when it is compared to the manual feedback and storing. Maintaining the project is also easy which can be easily understandable. Maintaining the details in the database is manageable.

This project Online Feedback Management System has been developed in such a manner, that the future requirements of the user are met. The project is flexible to adapt the changes efficiently without affecting the present system. In future, there can be a provision to adjust the questions and to import new student names and faculty through the portal. It is also planned to implement the app on various other mobile platforms like Windows and IOS. This is the future scope of this project.

15. REFERENCES

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