A

Project Report

on

CLOUD BASED ONLINE NOTES SHARING.

Submitted in Partial Fulfillment of
the Requirements for the Degree
of

Bachelor of Engineering

in

Computer Engineering

to

Kavayitri Bahinabai Chaudhari
North Maharashtra University, Jalgaon

Submitted by

Dnyaneshwar V. Napte
Prasad V. Wagh
Prathmesh A. Talole
Sumit V. Patil
Chetan S. Sonawane

Under the Guidance of

Mr. Ashish T. Bhole

DEPARTMENT OF COMPUTER ENGINEERING
SSBT's COLLEGE OF ENGINEERING AND TECHNOLOGY,
BAMBHORI, JALGAON - 425 001 (MS)
2023 - 2024

SSBT's COLLEGE OF ENGINEERING AND TECHNOLOGY, BAMBHORI, JALGAON - 425 001 (MS)

DEPARTMENT OF COMPUTER ENGINEERING

CERTIFICATE

This is to certify that the project entitled *Cloud Based Online Notes Sharing.*, submitted by

Dnyaneshwar V. Napte
Prasad V. Wagh
Prathmesh A. Talole
Sumit V. Patil
Chetan S. Sonawane

in partial fulfillment of the degree of *Bachelor of Engineering* in *Computer Engineering* has been satisfactorily carried out under my guidance as per the requirement of Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon.

Date: 08/12/2023
Place: Jalgaon

Mr. Ashish T. Bhole
Guide

Dr. Manoj E. Patil
Head

Prof. Dr. G.K.Patnaik
Principal

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Dnyaneshwar V. Napte
Prasad V. Wagh
Prathmesh A. Talole
Sumit V. Patil
Chetan S. Sonawane

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Abstract

The online note-sharing project operates as a web-based platform designed for the convenient exchange of educational notes. Implemented with PHP and MySQL, users undergo a signup process to access the system. Once logged in, individuals are greeted with a personalized dashboard, offering insights into the quantity of available notes for a specific faculty. Users can seamlessly download and peruse notes, contribute by uploading their own, and manage profile details, including name and password. On the administrative front, the system allows oversight of all users, granting the admin authority to delete accounts. Notably, if a user uploads notes, the admin reviews and approves them for usability. Once approved, Notes become accessible to all users within the corresponding faculty, enhancing the collaborative and informative nature of the platform.

Chapter 1

Introduction

College Notes Gallery is a web based notes sharing and management system which helps students and teachers to share their notes online effectively. It reduces the wasting of time in manually distributing notes to each individual. It greatly overcomes the lack of availability and converts the manual old school paperwork to a fully automated and managed online system. College Notes Gallery allows it's users to securely register and log in to their individual accounts and create, read, update, delete notes according to their needs. It provides notes to everyone in a very secure manner. Multiple users can work in the system at the same time under centralized supervision by administrator. It is a very useful notes management system for Colleges, Schools and other Institutes to manage and share their notes in an secure, efficient and effective manner.

The organization of the chapter is as follows. Section 1.1 shows the Background of the project. Motivation of the project is represented in Section 1.2 . Section 1.3 shows the problem statement. Scope of the project is represented in Sections 1.4. 1.5 describes the Objective of project. selection of life cycle model is shown in 1.6. Section 1.7 shows the organisation of report. summary is mentioned in section 1.8.

1.1 Background

Empowering Education in the Digital Era: Online Notes Sharing Platform in PHP for Seamless Collaboration
The major goal of the Online Notes Sharing is to allow students to digitally exchange their notes/documents with their colleagues and teachers. Project is extremely handy for colleges or universities are now offering online classes as a result of the Pandemic. Because face-to-face classes are still prohibited, it is difficult for teachers and students to provide documentation or notes. However, with the use of Online Notes Sharing in PHP, they will now be able to share their notes/documents online. They can also change the profile's name, profile, and password.

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1.2 Motivation

The education landscape has changed dramatically, prompting institutions to shift to online instruction. Recognizing the obstacles, students and educators encounter when it comes to sharing important course materials, notes, and documents, Cloud-Based Online Notes Sharing Project emerges as a beacon of cooperation and accessibility.

1.Access Anytime, Anywhere: Develop a solution allowing users to access their notes from any device with an internet connection, providing convenience and flexibility.

2.Paperless Environment: Promote environmental sustainability by reducing the need for physical notebooks and papers through digital note-sharing.

3.Efficient Collaboration: Enhance the collaboration and productivity of students, colleagues, or team members by creating a platform for easy and secure sharing of notes and ideas.

1.3 Problem Statement

Develop a cloud-based platform for seamless online note-sharing among users, facilitating collaborative and accessible note management.

1.4 Scope

The Cloud-Based Online Notes Sharing project's scope includes the creation of sophisticated platform which will transform how students and educators collaborate in the digital education scene. The project will concentrate on developing a safe and user-friendly environment which

includes features such as strong user authentication, configurable profiles, and the option to change passwords for improved account management. The basic functionality entails making it easier to upload and share educational documents, supporting many formats, and implementing version control to track changes. The platform will focus user experience by providing an intuitive interface which ensures device compatibility.

1.5 Objective

To develop a robust and user-friendly platform which facilitates seamless sharing and collaboration on digital notes. The project aims to address the growing need for efficient information sharing among individuals or groups in an online environment. The overarching goal is to leverage cloud technology to create a secure, accessible, and organized system for users to store, share, and collaborate on their notes from anywhere with an internet connection.

- Cloud Storage: Integrate with cloud storage services (e.g., AWS, Google Cloud, or Azure) to securely store and retrieve notes. Implement version control to track changes and enable the recovery of previous versions.
- User-Friendly Interface: :Create an intuitive and user-friendly web or mobile application interface for note creation, storage, and sharing. Ensure cross-platform compatibility for a seamless user experience.
- Search and Filter: Implement a search and filter system to help users quickly find their notes based on keywords, tags, or other criteria.
- Sharing and Collaboration: Note sharing with other users or groups. Role-based access control to define permissions (view, edit) for shared notes. Real-time collaborative editing features.

1.6 Selection of Life cycle model

The Waterfall Model is the selected life cycle model for the project. The waterfall approach was the first SDLC (Software Development Life Cycle) Model to be widely used in software engineering to ensure the success of the project. Waterfall Model is the best-suited model for the project mentioned as shown in Figure 1.1.

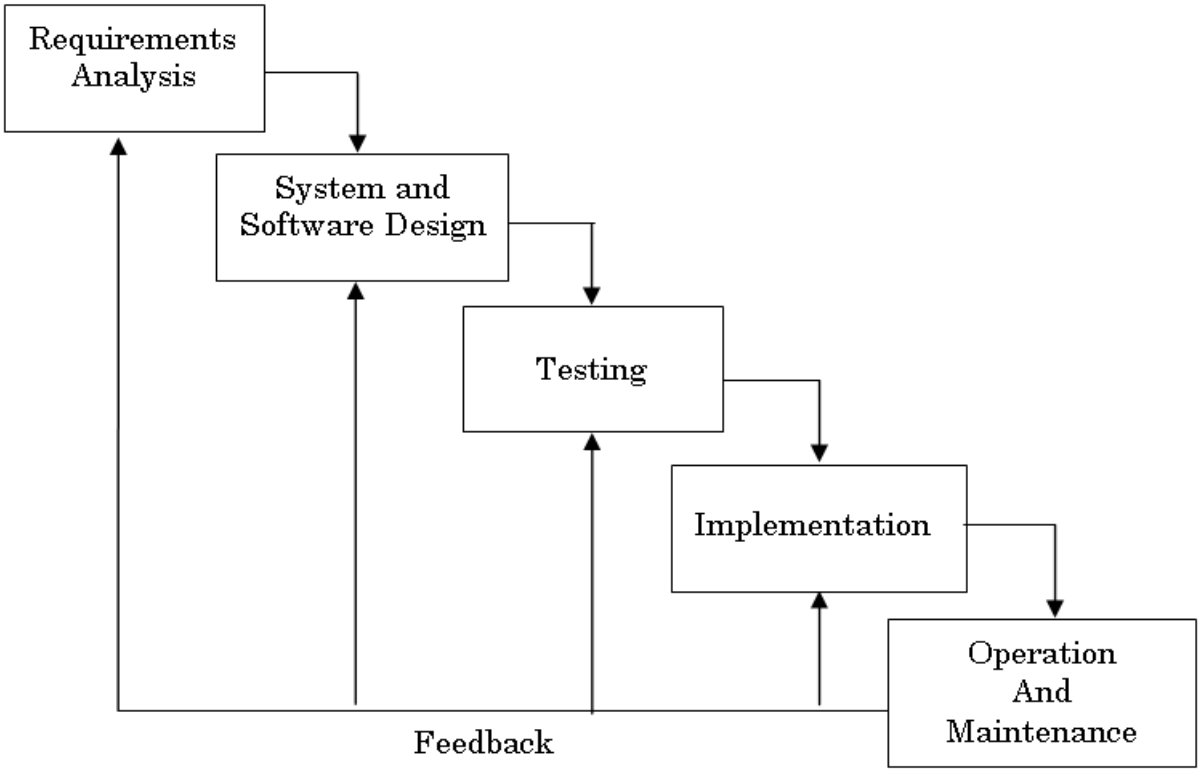

Figure 1.1 Waterfall Model for the project

Why the choice of the software life cycle as a Waterfall model:-

1. Because requirements are easily understandable and defined.
2. Define requirements in the early stage of development.
3. Less domain knowledge (new to the technology) is required.
4. Less experience on tools to be used.
5. User involvement in all phases is not necessary
6. Limited user participation.

1.7 Organization Of Report

Chapter 1 Entitled as Introduction describes the details about Background, Problem Definition, Scope, and Objective of the project, Identification of Software Development Process Model, and Organization of the report.

Chapter 2 Entitled Project Planning and Management consists of details about the Feasibility Study, Risk Analysis, Project Scheduling, Effort Allocation, and Cost Estimation of the project.

Chapter 3 Entitled as Analysis describes in detail, the Requirement Collection and Identification, H/w and S/w Requirements, Functional and Non-Functional Requirements and a Software Requirements Specification(SRS).

Chapter 4 Includes the design of System Architecture, Data Flow Diagram, and various UML Diagrams.

Chapter 5 Titled conclusion and future work discusses the overall outcomes and future possibilities of the project.

1.8 Summary

In this chapter, the Introduction is presented. In the next chapter, project planning, and management will be discussed.

Chapter 2

Project Planning And Management

Project planning is a procedural step in project management. It is the practice of initiating,planning, executing, controlling, and closing the work team to achieve specific goals. Project planning and management are important because it ensures the right people do the right things, at the right time. It also ensures the proper project life cycle.

The organization of the chapter is as follows. Section 2.1 shows the Feasibility Study of the project. Risk Analysis of the project is represented in Section 2.2. Section 2.3 describes the Project Scheduling of project. The Effort Allocation and Cost Estimation are decsribed in Sections 2.4 and 2.5 respectively. Section 2.6 shows the Summary.

2.1 Feasibility Study

A feasibility study evaluates the project's potential for success; therefore, perceived objectivity is an important factor in the credibility of the study for potential investors and lending institutions. It must therefore be conducted with an objective, unbiased approach to provide information upon which decisions can be based. Taking into consideration the technical, operational, and economic feasibility as follows, the project can be anticipated as feasible overall. The feasibility study is a few types of feasibility exist. So, developers should take care of feasibility and take them into consideration.

2.1.1 Technical Feasibility

Project is built upon VS code Editor, a simple Web Application with PHP is the programming language and can be easily hosted on a cloud server. Also, all the other technologies used are capable of building such a project and serving as well as maintaining it for a longer period of time. All the required hardware and software are easily available in the market. Hence the project is technically feasible.

2.1.2 Operational Feasibility

The operational feasibility assessment focuses on the degree to which the proposed development project fits in with the existing business environment and objectives with regard to the development schedule, delivery date, corporate culture, and existing business processes. The application is operationally feasible since it is built with the idea of predicting Diabetes with various existing applications and systems.

2.1.3 Economical Feasibility

As the necessary hardware and software are easily available in the market at a low cost, the initial investment is the only cost incurred and does not need further enhancement. Hence it is economically feasible.

2.2 Risk Analysis

In the development of a cloud-based online notes sharing project, inherent hazards must be meticulously considered. Notably, the susceptibility to data breaches or unauthorized access poses a significant risk inherent in cloud-based systems. To address concern, robust security measures, including encryption and continuous monitoring, are slated for implementation. Another potential peril lies in the reliance on third-party platforms or cloud infrastructure, which may lead to service outages. To mitigate thorough contingency preparations and exploration of alternative hosting solutions are underway. Additionally, anticipated challenges in interfacing with other online learning systems necessitate close collaboration with respective development teams. The project acknowledges the importance of comprehensive testing and a flexible integration strategy to navigate potential complexities. Lastly, recognizing potential hurdles in user adoption underscores the significance of extensive user training initiatives and robust support channels to ensure a successful project outcome.

2.3 Project Scheduling

Generally, project scheduling can be stated as the estimated time required for any project from its time of beginning to its end of the project. In detail, for every task, a deadline because all the tasks for the completion of the project are planned earlier. each task is scheduled to a certain time limit. In short, in project management, a listing of project milestones, activities, and all from start to the end date, are considered in the project schedule. A schedule is generally used in project planning and management of the project

with some kind of attributes such as budget, task allocation and duration, resource allocation, and all.

2.4 Effort Allocation

Effort Allocation is necessary so every team member can give their best to the project. The project was divided into smaller modules and task forms, for simplification and easy understanding of the project overall. Some modules include every team associate's presence to take advantage of team decision-making skills, and some tasks include some individual members working on it with precision. The Effort Allocation for the Project is mentioned as follows in Table 2.2.

Divided the project into 6 modules.

1. Gathering of Information.
2. Planning / Requirement Analysis.
3. Study of included Stack and frameworks.
4. Selection of Life Cycle Model.
5. Planning and Management.
6. Analysis & Design UML.

Table 2.2 Effort Allocation for Project

		Team Associates				
Sr. no	Module	sumit	Prasad	chetan	prathmesh	Dnyaneshwar
1	Gathering Of Information	✓	✓	✓	✓	✓
2	Planing/Requirement Analysis	✓	X	✓	✓	X
3	Study of include stack and framework	✓	✓	X	X	✓
4	Selection of life cycle model	✓	✓	✓	✓	✓
5	Planning and Management	✓	✓	X	X	X
6	Analysis & Design UML	✓	X	✓	✓	X

2.5 Cost Estimate

The basic COCOMO estimation model is given by the following expressions:

Effort is E = a1 x $(KLOC)^{a2}$ PM ..... Eq.(1)

Time of development is Tdev = b1 x $(EFFORT)^{b2}$ Months ..... Eq.(2)

Productivity is P = $\frac{KLOC}{PM}$ ..... Eq.(3)

Where, KLOC is the estimated size of the software product indicated in a1,a2,b1, and b2 are constants for each group of software products, Tdev is the estimated time to develop the software, expressed in months, Effort is the total effort required to develop the software product, expressed in person-months (PMs) in Table 2.3.

From eq.1 calculate the Effort required for software production.

$$\text{Effort} = \text{a1 x } (KLOC)^{a2} \text{ PM}$$
$$= 2.5 \text{ x } (1500)^{1.05}$$
$$= 21554.48 \text{ PM}$$

From eq.2 Calculate the estimated time to develop Software.

$$\text{Tdev} = \text{b1 x } (Effort)^{b2} \text{ M}$$
$$= 2.5 \text{ x } (21554.48)^{0.38}$$
$$= 110.83 \text{ Months}$$

From eq.3 Calculate the Productivity of the Project.

$$\text{Productivity} = \frac{KLOC}{PM}$$
$$= \frac{1500}{21554.48}$$
$$\text{P} = 0.2599 \ \frac{KLOC}{PM}$$

Table 2.3 Cost Estimation

1	Total number of persons working on the project	5 Person
2	Time Needed (in months)	5 Months
3	Total Time Allocated per Day (in terms of hrs)	5 hrs
4	Actual Working Hours	750 hrs
5	Cost per hour	Rs 30
6	Total Estimated Project Cost for a Person	Rs 22,500
7	Total Estimated Project Cost For 5 Person	Rs 1,12,500
8	Total Estimated Project Cost For Total Project	Rs 1,22,337.81

2.6 Summary

In this Chapter, Project Planning and Management are presented. The next chapter, Analysis will be discussed.

Chapter 3

Analysis

The project aims to expedite information interchange and cooperation by establishing a cloud-based online notes sharing platform.Users may securely store, view, and share their notes from anywhere, enabling real-time collaboration for college students and instructors. The system focuses user-friendly interfaces and strong security measures in order to ensure data integrity and confidentiality. The platform improves teamwork and knowledge distribution by including features such as version control and collaborative editing. Furthermore, the cloud architecture allows for scalability to handle rising user bases and changing needs. The project meets today's demand for efficient and accessible information sharing, making it a vital tool for educational institutions, enterprises, and individuals alike.

The organization of the Chapter is as follows. Section 3.1 represents Requirement Collection and Identification. Software Requirements and Specification are described in the Section 3.2. Section 3.3 describes a summary of the chapter.

3.1 Represent Requirement Collection And Identification

The administrator has the authority to delete users and approve uploaded notes. Class notes can be downloaded from the classroom or Study Guide tab. However, class questions, responses, and bookmarks are not included in the downloaded notes. The notes include timestamp and slide number, which are synced to a location. Uploading involves transmitting a file from one computer system to another, usually a larger one. From a network user's perspective, uploading sends the file to another computer set up to receive it. However, in practice, "upload" is often used to mean "send" and "download" to mean "receive."

3.2 Software Requirement Specification (SRS)

Software Specification will provide a broad understanding of the requirement specification of the system. Also, understand the features of the system along with the requirements. Software Requirement Specification documents guide the developers in the development process and it will help to reduce the ambiguity of the requirements provided by the end-user. It's used to provide critical information to multiple team's development, quality assurance, operations, and maintenance. Keeps everyone on the same page.

The product features are high-level attributes of a software or product such as software performance, user-friendly interface, security portability, etc. Attributes are defined according to the product.

3.2.1 Product Features

The product features are high level attributes of a software or product such as software performance, user-friendly interface, security portability, etc. Attributes defined according to the software product.

- User-Friendly Interface: Create an intuitive and user-friendly web or mobile application interface for note creation, storage, and sharing. Ensure cross-platform compatibility for a seamless user experience.
- Search and Organization: Incorporates powerful search and organizational tools to help users easily locate specific notes and information within the platform.

3.2.2 Operating Environment

Software and hardware environment are referred as operating environment for the project.

- Operating System: Standard Dual Core Processor.

- Any browser supporting HTML5 ,CSS, JavaScript , PHP And MYSQL.
- Any system with at least 4 GB RAM.

3.2.3 Assumption

An external factor which is very important for the realization of the results, the project purpose and the overall objective of the project. Vital concept for achieving a successful implementation of the project idea.

- Internet Connectivity: It is assumed users have consistent access to the internet when using the prediction model. Online accessibility is essential for software to upload and download the notes as well as user profile registration .
- Collaboration Intent: The project assumes users want to collaborate on notes, so they should be willing to share and work on shared documents

3.2.4 Functional Requirement

Functional requirements are the functions which are expected from the software or platform. Functional requirements along with requirement analysis help identify missing requirements. They help clearly define the expected system service and behavior.

- Data Collection and Input Handling.
- Users can search and download the notes.
- software need user registration before use.
- Website sharing online notes across the users.

3.2.5 Non Functional Requirement

Non-functional Requirement is mostly quality requirement. Non functional requirement stipulates how well the portal does, and what it has to do. Other than functional requirements in practice, would entail a detailed analysis of issues such as availability, security, usability, and maintainability.

- Increase the user readability
- Very easy to use.
- easy to download

3.2.6 External Interfaces

The proposed system has several options for users to interact with. Following are the user interfaces available:

- User Interfaces

  The proposed system has several options for users to interact with. Following are the user interfaces available: (a) Website : Google Chrome or any other similar browser (b) Operating System : Windows 7, 10, 11 or any other compatible OS The website will be available so the user can input body vitals and download report from it.

- Software Interfaces

  1)Front-end: HTML5, CSS3, JavaScript, jQuery, Bootstrap,PHP .

  2)Back-end :MySQL

  3)Editor: Vs code,

- Hardware Requirements

  1)4GB or more

  2)CORE i3 Processor and higher

  3)Storage 128GB or more

- Communications Interfaces

  Communications Interfaces means the interfaces and protocols which enable software, directories, networks, Operating Systems.

3.3 Summary

In this Chapter, Analysis is presented. In the next chapter, Design will be discussed.

Chapter 4

Design

Design is the activity of designing and modeling the various components of a software system. The system design provides the understanding and procedural details necessary for implementing the system. Design is helpful for a better understanding of the project. It contains UML diagrams and data flow diagrams. UML is a modeling language is used to document object-oriented analysis and design.

The organization of the Chapter is as follows. Section 4.1 describes the system architecture of the project. DFD of the project is represented in Section 4.2. Section 4.3 represents UML Diagrams (Use case Diagram, Class Diagram.) of the project. Finally, the Summary is described in the last Section 4.4.

4.1 System Architecture

Systems Architecture is a generic discipline to handle objects (existing or to be created) called "systems", it supports reasoning about the structural properties of objects. The system architecture is the conceptual model defines a system's structure, behavior, and views. An architecture description is a formal description and representation of a system. It provides a broad understanding of the portal. In the system, the architecture database provides functionality like getting information, selecting criteria, etc. to users. The System architecture diagram is mentioned as follows in Figure 4.1.

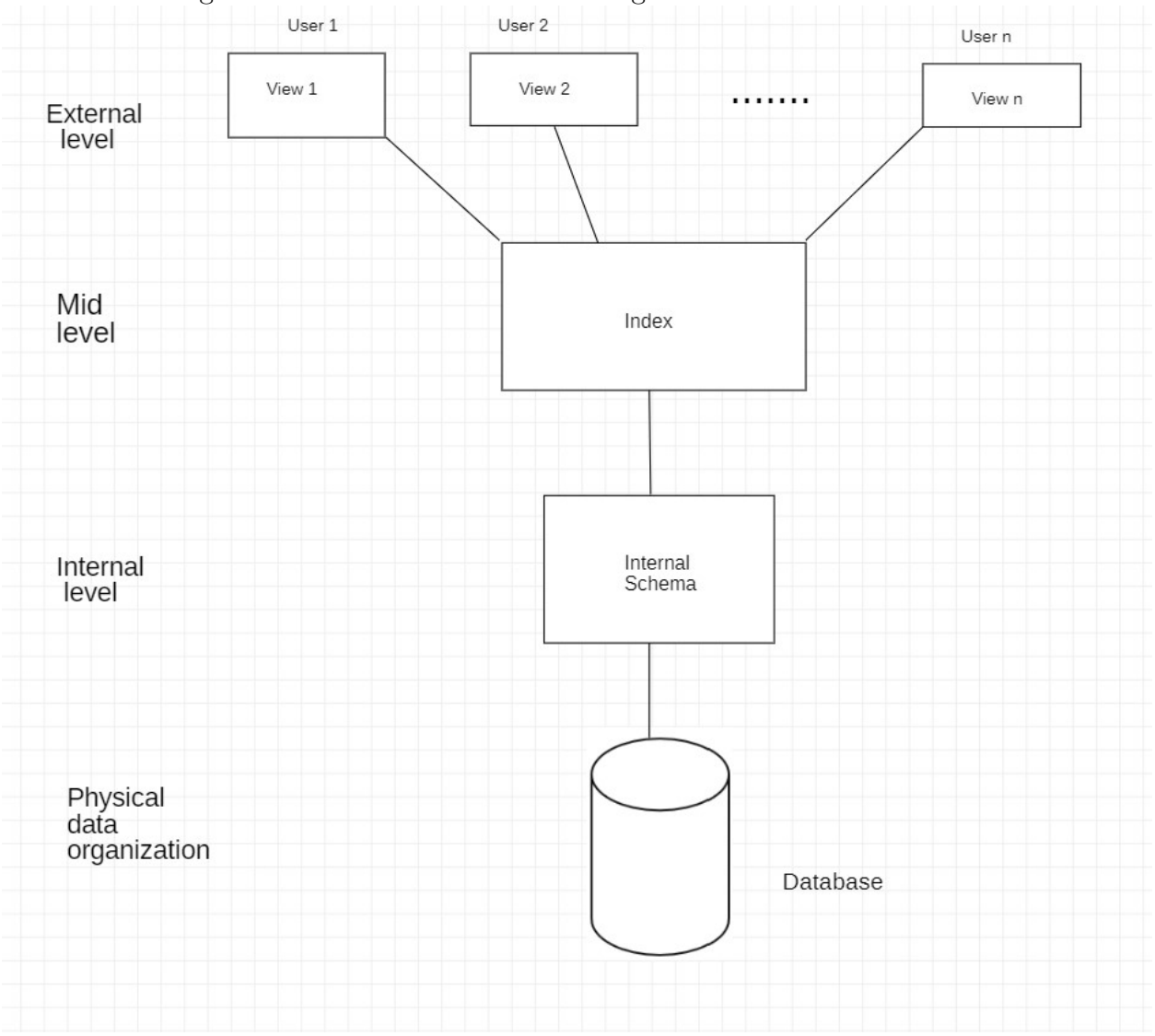

Figure 4.1 System Architecture

4.2 Data Flow Diagram

A data flow diagram (DFD) is a graphical representation of the 'flow' of data through an information system, modeling its process aspects. A DFD is often used as a preliminary

step to create an overview of the system, which can later be elaborated. DFDs can also be used for the visualization of data processing (structured design). A DFD shows what kind of information will be input into and output from the system, where the data will come from and go to, and where the data will be stored.

4.2.1 Level 0 DFD

Level 0 contains one input and one output. The system provides information to the user means the system is the input and the user is the output. Following Figure 4.2 shows the Level 0 DFD of the project.

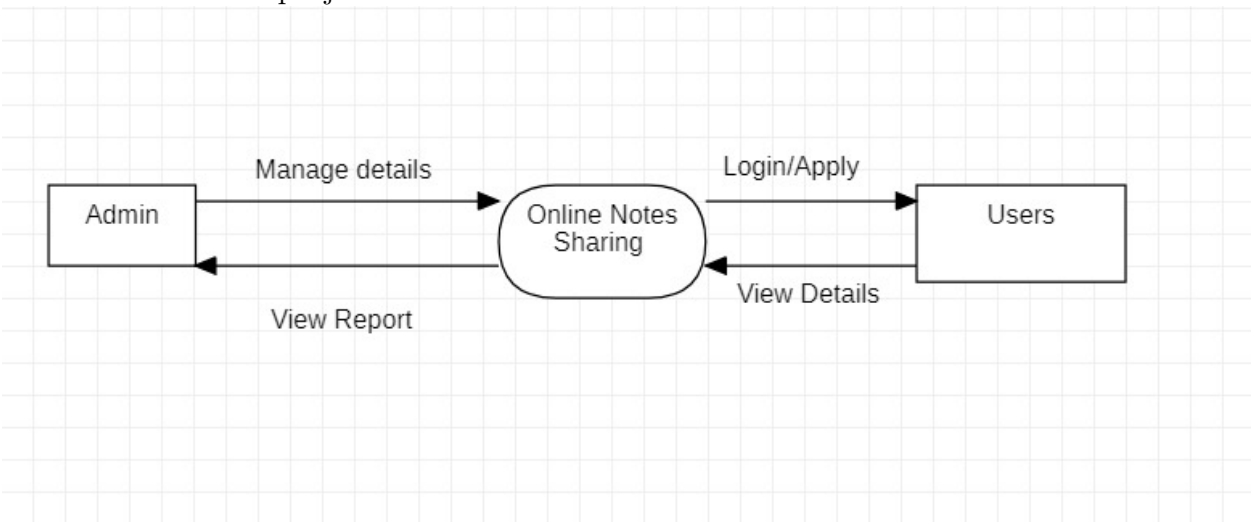

Figure 4.2 Level 0 DFD Diagram

4.2.2 Level 1 DFD

A level 1 DFD notates each of the main sub-processes together form the complete system. Think of a level 1 DFD as an "exploded view" of the context diagram. Following Figure 4.3 shows the Level 1 DFD of the project.

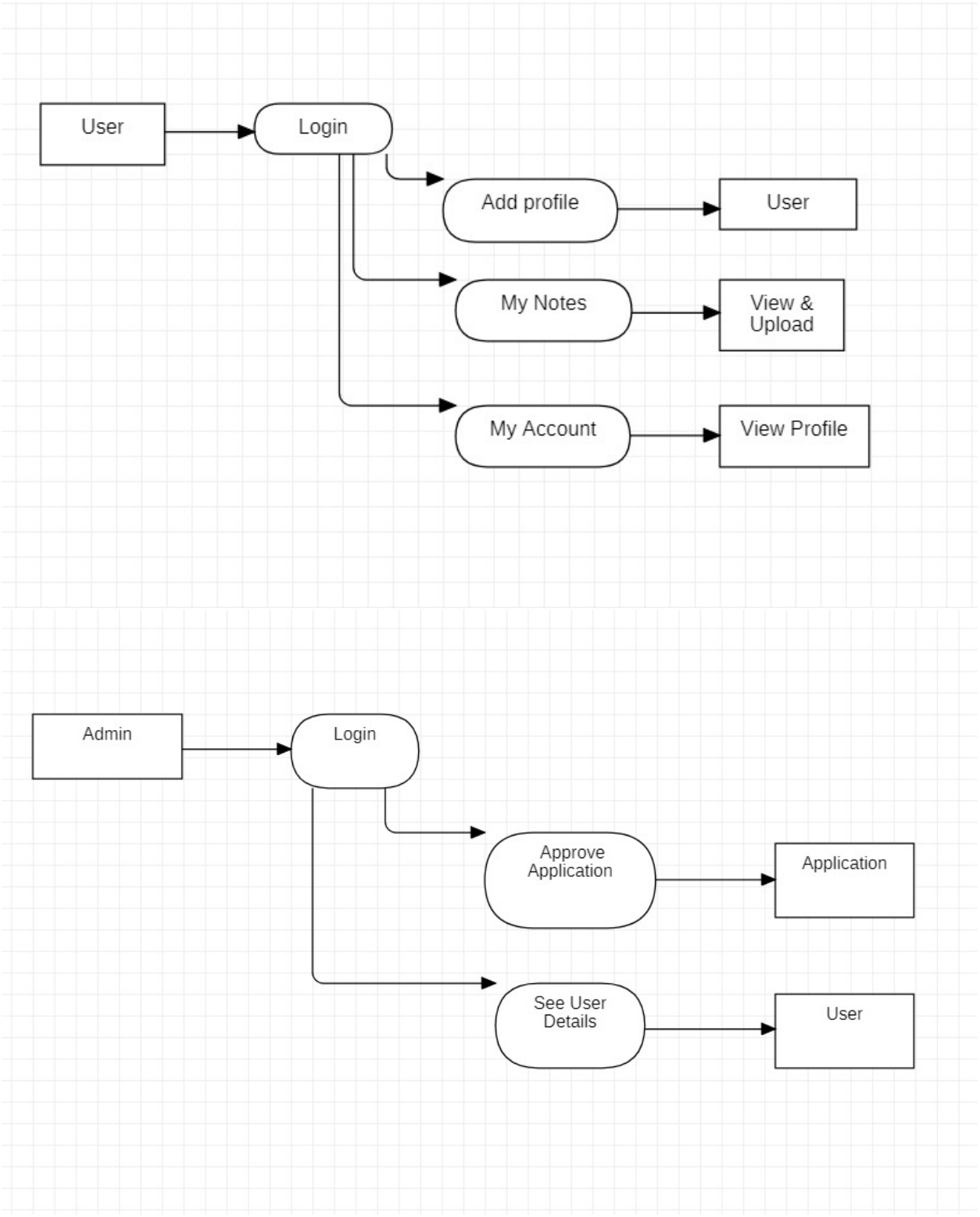

Figure 4.3 Level 1 DFD Diagram

4.3 UML Diagrams

A UML diagram is a diagram based on the UML (Unified Modeling Language) with the purpose of visually representing a system along with its main actors, roles, actions, artifacts or classes, in order to better understand, alter, maintain, or document information about the system.

4.3.1 UseCase Diagram

The use case diagram shows the interaction between the Use case which represents system functionality and the actor which represents the user or admin. Figure 4.5 shows the Use Case Diagram For the diagram for cloud based online notes sharing.

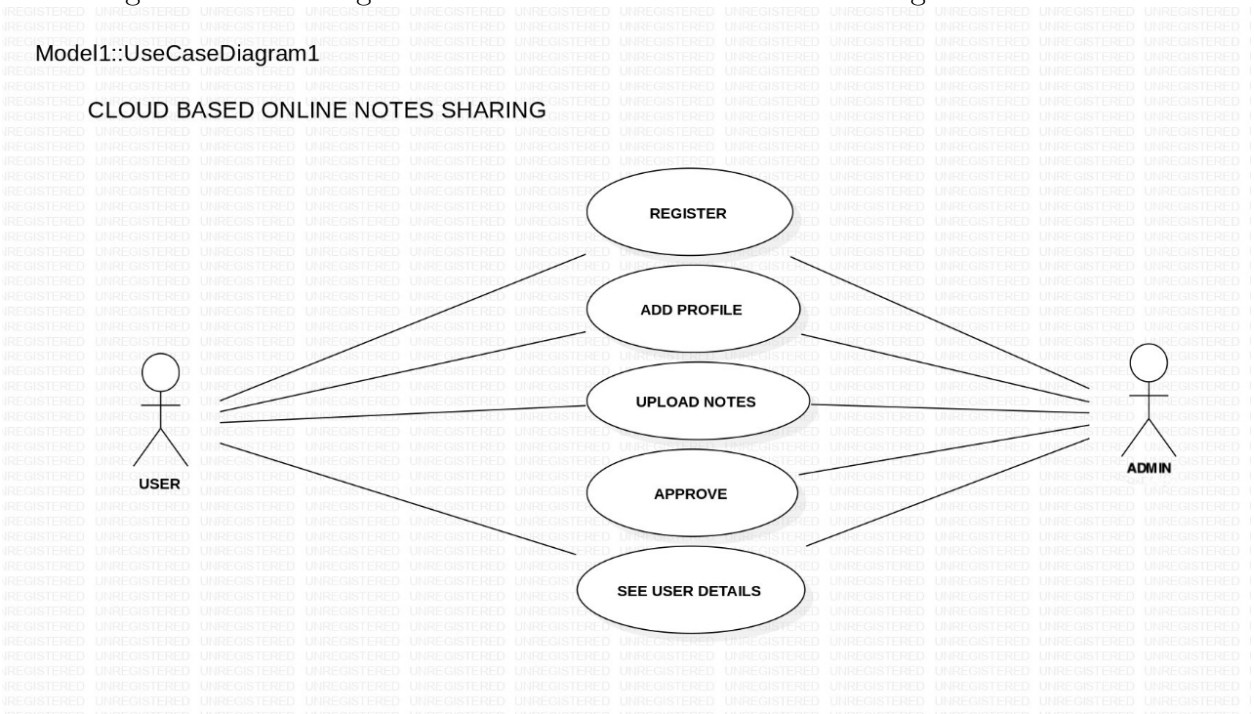

Figure 4.5 Use Case diagram

4.3.2 Class Diagram

The class diagram is the primary building block of object-oriented modeling. It is used for general conceptual modeling of the application's structure and for detailed modeling translating the models into programming code. Class diagrams can also be used for data modeling. Figure 4.6 shows the Class Diagram For the Cloud Based Online Notes Sharing.

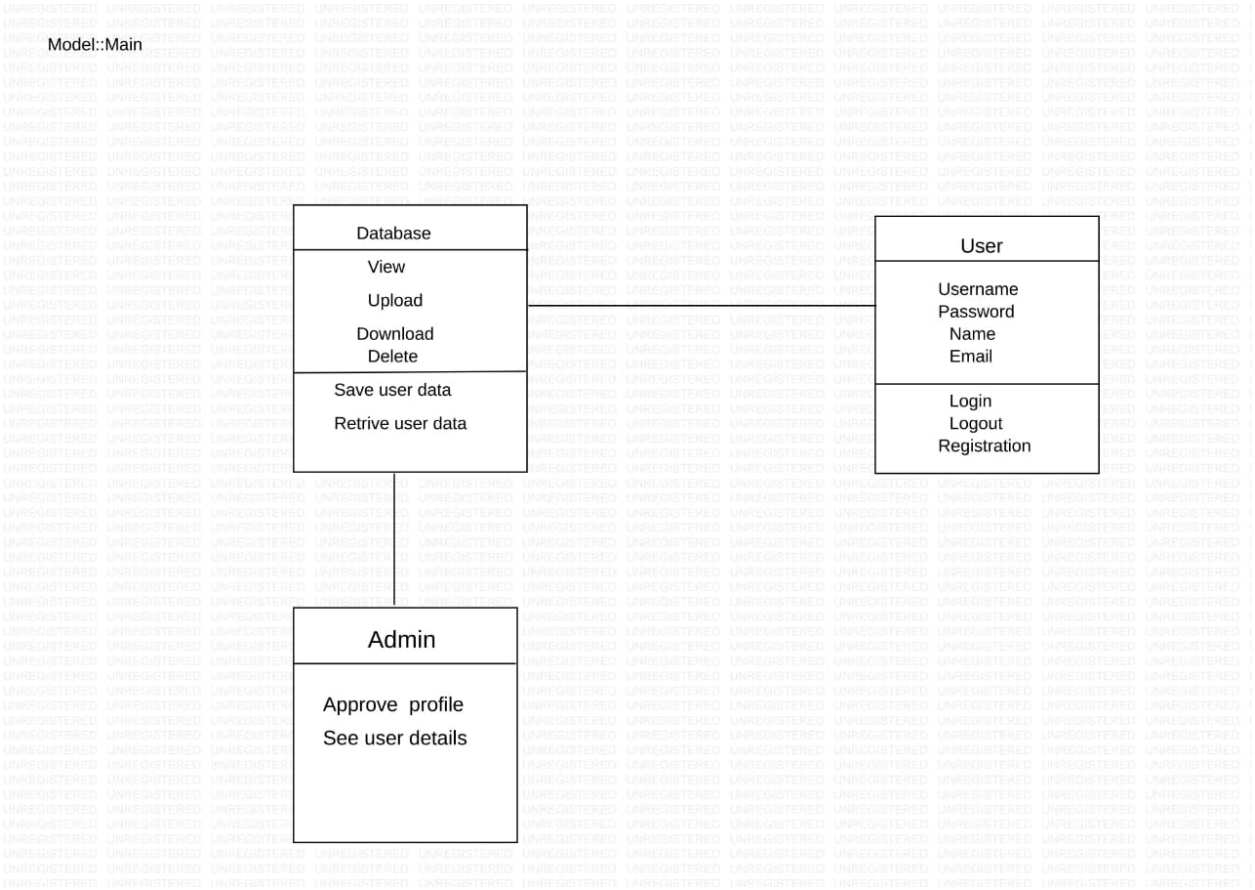

Figure 4.6 Class Diagram

4.4 Summary

In this Chapter, Design is presented. In the next chapter, the Conclusion will be discussed.

Conclusion

Managing the levels of the project is easy and so is storing the notes. It is easy to maintain up to subject. Also, manual tracking is not required. The project has an exceptionally tremendous scope in future. because it is exceptionally adaptable in the term of development. Hence run the complete work in a much superior, precise and mistake freeway. The following are long term scope for the project. Only a specific association individual can use the system. Special ID of students and instructors will be generated by the system.

Future work

The project's future plans involve enhancing cross-departmental note management, introducing advanced features for improved efficiency, and strengthening security measures. The team aims to achieve smoother user login and registration experiences by integrating new technologies. Additionally, they are exploring innovative methods to foster eco-friendly, paper-free collaboration.

Bibliography

1. Wang Wei. Embedded Microcontroller MC9S08AW60 Principles and Application [M]. Beijing: Beijing Aerospace University Press, 2008. s

2. Caulton, David A."Relaxing the homogeneity assumption in usability testing." Behaviour Information Technology 20, no.1 (2001): 1-7.

3. McConnell, S. (2004). Code Complete, 2nd edition. Microsoft Press, 2004. ISBN1-55615-484-4.

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