# A PROJECT REPORT ON **NOTES WEB APPLICATION**

Submitted to



# **DIBRUGARH UNIVERSITY**

#### BY

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In fulfilment for Minor Project of 4th Semester

# BACHELOR OF COMPUTER APPLICATIONS CENTRE FOR COMPUTER SCIENCE AND APPLICATIONS DIBRUGARH UNIVERSITY DIBRUGARH – 786004, ASSAM, INDIA

BATCH (2021-2024)

#### **CERTIFICATE**

This is to certify that the project is titled **Notes Web Application**. This project is submitted by **Kunal Das (21992158)** and **Hussaini Abubakar Mustapha (21992154)**, Dibrugarh University in fulfilment of Minor Project of 4<sup>th</sup> Semester, Bachelor of Computer Applications. This is a bonafide record of the project work carried out by them under my supervision and guidance during the session Feb, 2023 – Jun, 2023. This project has not been submitted to any other institution for the award of a degree.

Guide:

(Dr Toralima Borah)

Dibrugarh University

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Chairperson (Prof. Tazid Ali) Dibrugarh University

#### **EXAMINATION CERTIFICATE**

This is to certify that the project report is titled **Notes Web Application**. This project is submitted by **Kunal Das (21992158)** and **Hussaini Abubakar Mustapha (21992154)** of Centre for Computer Science and Applications, Dibrugarh University and they have carried out the project work in a manner satifactory to warrant its acceptance and defended it successfully. I wish them all the success in their future endeavour.

**Examiners:** 

01. External Examiner:

02. Internal Examiner:

#### **DECLARATION**

We hereby declare that the dissertation work entitled **Notes Web Application** submitted to Dibrugarh University, Dibrugarh Assam, in fulfillment of Minor Project of 4<sup>th</sup> Semester, Bachelor of Computer Science and Applications. This is an original work done by us under the guidance of Dr. Toralima Borah and has not been submitted for the award of any degree.

# **Signature of Students**

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#### **ABSTRACT**

Notes Web Application is an web-based notes application aimed at providing users with a convenient and intuitive platform for creating, organizing, and managing their personal notes online. The app is designed to be accessible through web browsers, making it easily available across various devices without the need for additional installations.

The key features of the notes app include creating and editing notes. Users can create new notes with a rich text editor, allowing them to format their text and add checklists or bullet points.

The web-based notes app utilizes modern web technologies, including HTML5, CSS, and JavaScript, to provide a responsive and user-friendly interface. The backend of the app is built using PHP, and a database system like MySQL to store and retrieve user data securely.

# **CONTENTS**

1. SYSTEM REQUIREMENT 1-4
2. INTRODUCTION 5-6
3. SYSTEM DESIGN 7-10
4. SOURCE CODE SNIPPETS 11
5. SNAPSHOTS OF THE INTERFACE 12
6. FUTURE DIRECTION 13
7. CONCLUSION 14
8. REFERENCES 15
FIGURE INDEX
1. DATA FLOW DIAGRAM
. <b>DFD</b> : LEVEL 0 7
. <b>DFD</b> : LEVEL 1 8
2 ER DIAGRAM 9

# 1. SYSTEM REQUIREMENTS

#### 1.1 Software Used:

➤ Development Tool: VS Code and Sublime Text

➤ Backend: XAMPP

➤ Database: MySQL

#### 1.2 Language Used:

> HTML

> CSS

➤ Java Script

> PHP

#### • HTML

HTML (Hypertext Markup Language) is a fundamental language used for creating web pages. It provides a set of tags and elements that define the structure and content of a webpage. With HTML, developers can define headings, paragraphs, lists, images, links, tables, forms, and much more. By combining HTML with CSS, the presentation and layout of these elements can be customized to create visually appealing and interactive websites. HTML is the backbone of the World Wide Web, enabling the creation of of information-rich and interconnected web pages that can be accessed by users worldwide through web browsers.

#### CSS

CSS (Cascading Style Sheets) is a powerful language used for styling and formatting web pages. It works alongside HTML to define the visual presentation of elements on a website. With CSS, developers can control the colors, fonts, layouts, spacing, and other visual aspects of web pages, providing a consistent and appealing user experience. CSS separates the content and structure of a webpage from its design, allowing for easy maintenance and updates. It offers a wide range of selectors and properties that enable precise targeting and customization of individual or groups of elements. By using CSS, web designers can create responsive and mobile-friendly layouts, implement animations and transitions, and adapt the visual appearance of websites for different screen sizes and devices. CSS is a fundamental skill for front-end web development and plays a crucial role in creating visually stunning and user-friendly websites.

# Java Script

JavaScript is a versatile programming language used primarily for developing interactive and dynamic features on websites. It allows developers to add functionality, perform calculations, manipulate data, and respond to user interactions in real-time. JavaScript runs directly in the web browser, enabling it to enhance user experiences by enabling actions such as form validation, content updates, animation, and handling events like mouse clicks and keyboard input. It is also widely used for building web applications, creating dynamic user interfaces, and interacting with APIs to fetch and manipulate data from external sources. JavaScript is a key component of modern web development, playing a crucial role in making websites more engaging, responsive, and interactive. With its extensive library ecosystem and cross-platform compatibility, JavaScript is a powerful tool for both frontend and back-end web development.

#### PHP

PHP (Hypertext Preprocessor) is a server-side scripting language widely used for web development. It is embedded within HTML code and processed on the server before being sent to the client's web browser. PHP is known for its versatility and is commonly used for tasks such as generating dynamic web pages, handling form submissions, interacting with databases, and managing user sessions. It offers a wide range of functionalities, including file handling, encryption, string manipulation, and image processing. PHP is compatible with various database systems, making it easy to integrate with MySQL, PostgreSQL, Oracle, and more. Additionally, PHP has a vast ecosystem of frameworks and libraries, such as Laravel, Symfony, and CodeIgniter, which provide convenient tools for building robust and scalable web applications. PHP's ease of use, extensive documentation, and large developer community make it a popular choice for both beginners and experienced developers in the web development industry.

#### XAMPP

XAMPP is a popular software package that enables developers to set up a local web server environment for their web development projects. The acronym "XAMPP" stands for Cross-Platform, Apache, MySQL, PHP, and Perl, representing the key components included in the package. XAMPP simplifies the process of installing and configuring a complete web server stack, making it easy to develop and test websites or web applications locally before deploying them to a live server. It includes Apache as the web server, MySQL as the database management system, PHP as the server-side scripting language, and Perl as an optional programming language. XAMPP is available for multiple operating systems, allowing developers to create web applications in a cross-platform manner. With its user-friendly interface and pre-configured components, XAMPP provides a convenient solution for local web development environments.

#### MYSQL

MySQL is a widely used open-source relational database management system (RDBMS) that provides a robust and scalable solution for storing and managing structured data. It is known for its speed, reliability, and ease of use. MySQL utilizes a client-server architecture, where multiple clients can connect to a MySQL server to access and manipulate databases. It supports various platforms and operating systems, making it highly versatile. MySQL uses the SQL (Structured Query Language) language to interact with the database, allowing developers to create, modify, and query data efficiently. It offers advanced features such as data replication, transaction support, and security mechanisms to ensure data integrity and protection. With its wide adoption, extensive documentation, and active community, MySQL is a popular choice for building data-driven applications, ranging from small-scale projects to large enterprise systems.

# 1.3 Hardware Requirements:

- Computer: A desktop or laptop computer capable of running modern web browsers and development tools.
- Processor: A multicore processor with a minimum clock speed of 2 GHz or higher.
- RAM: At least 1 GB of RAM or higher for smooth performance during development and testing.

#### 1.4 Software Requirements:

- Operating System: Windows, macOS, or Linux, depending on the developer's preference and compatibility.
- Web Browser: Latest versions of popular web browsers like Google Chrome, Mozilla Firefox, or Safari for running the web application.

# 2. INTRODUCTION

The web-based note app project aims to develop a user-friendly and intuitive platform for creating, organizing, and managing personal notes online. In today's digital era, where information is abundant and constantly evolving, a reliable and efficient note-taking system is essential for individuals to stay organized and enhance productivity.

#### 2.1 Problem Definition

The traditional approach of using physical notebooks or scattered digital files for note-taking often leads to disorganization, difficulty in searching for specific information, and limited collaboration capabilities. Additionally, individuals frequently switch between multiple devices, making it challenging to access and sync notes seamlessly across platforms. These issues result in decreased productivity, loss of important information, and hindered collaboration among users.

#### 2.2 OBJECTIVE

The objective of the web-based note app project is to develop a user-friendly and feature-rich web application that addresses the limitations of traditional note-taking methods. The app aims to provide a centralized and accessible platform for users to create, manage, and organize their notes effectively, ultimately enhancing productivity and simplifying the management of personal and professional information.

#### **2.3 SCOPE**

- ➤ Developing a functional and scalable web application.
- > Creating a user-friendly interface for note creation, editing, and organization.
- ➤ Implementing features for categorizing and tagging notes for efficient organization.
- > Ensuring cross-platform accessibility for users on different devices.
- ➤ Optimizing the app for compatibility with popular web browsers.
- ➤ Focusing on core features such as rich text editing, organization, search, and collaboration.
- ➤ Considering future enhancements like encryption, user management, and integration with external services.
- ➤ Delivering a comprehensive and efficient note-taking solution to enhance productivity and simplify information management.

# 3. SYSTEM DESIGN

# 3.1 **DFD** (Data Flow Diagram)

#### 3.1.1 **DFD** Level-0

The diagram below is a level-0 DFD that shows the flow of data between the user entity and the system. Here, it displays how the user interacts with the application.

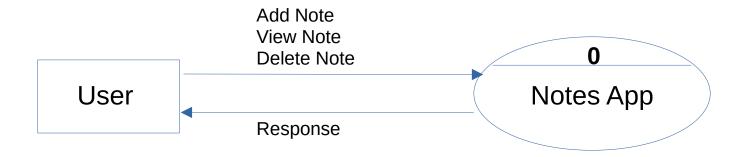
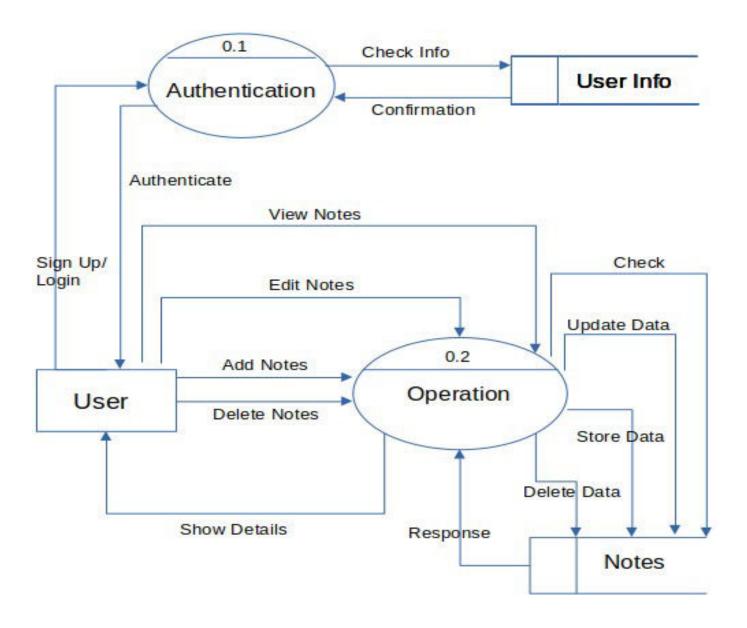


Fig: DFD Level-0

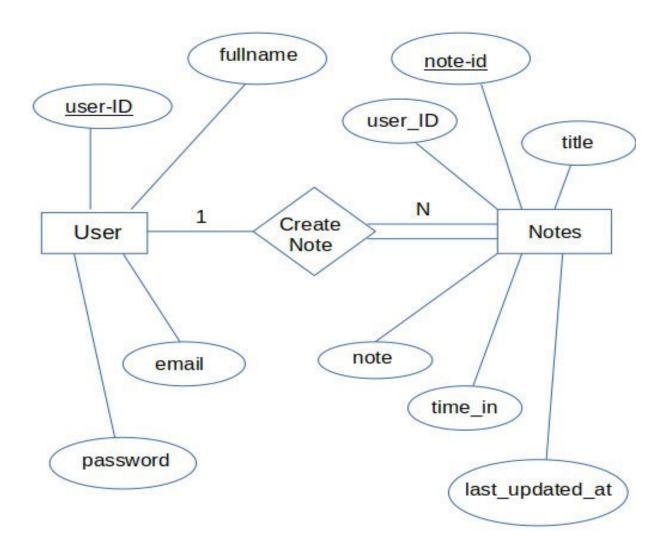
#### **3.1.2 DFD Level-1**

The Diagram below shows a level-1 DFD that shows the flow of data between the user entity and the system. Here, the Notes App process is further expanded to show the flow of data between the user and the different process.

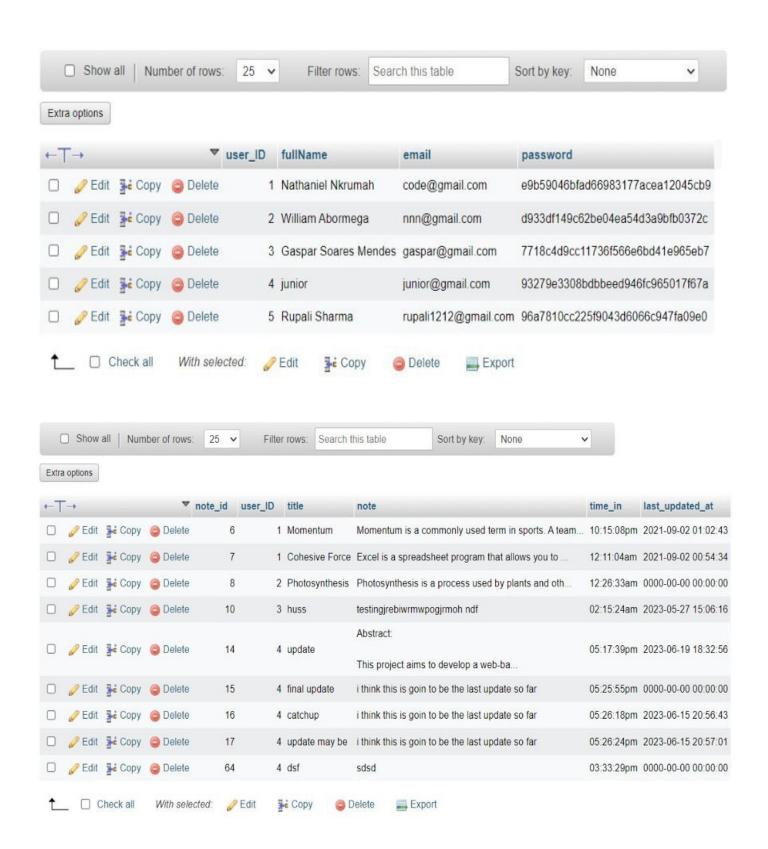


# 3.2 ER (Entity Relationship) Diagram

The Entity Relational Model is a model for identifying entities to be represented in the database and representation of how those entities are related. Here the diagram below shows the relationship between the two entities User and Notes.

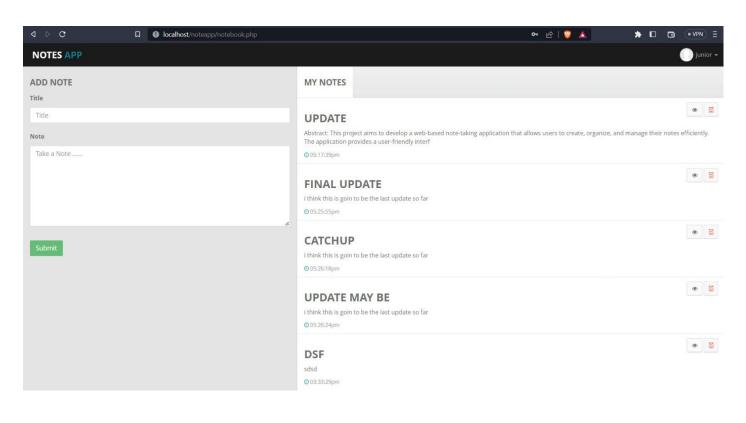


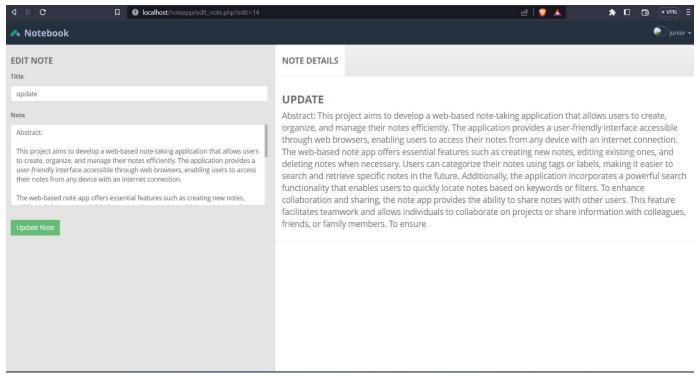
#### **DATABASE:**



# 4. SOURCE CODE SNIPPETS

#### 5. SNAPSHOTS OF THE INTERFACE





#### 6. FUTURE DIRECTIONS

- ➤ **Mobile Application Development:** Expanding the project to include mobile application, allowing users to access and interact with their notes on their smartphones and tablets.
- ➤ **Integration with Cloud Services:** Adding integration capabilities with popular cloud storage and synchronization services like Google Drive, Dropbox, or OneDrive. This would enable users to sync their notes across multiple devices and ensure seamless access and backup of their data.
- ➤ **User Personalization:** Providing customization options for users to personalize the app's interface, such as themes, font styles, and layouts, to suit their preferences and improve the overall user experience.
- ➤ Machine Learning and Natural Language Processing: Exploring the use of machine learning and natural language processing techniques to enhance note organization, searchability, and extraction of insights from the user's notes. This could include automated tagging, sentiment analysis, or intelligent suggestion features.
- ➤ **Integration with Productivity Tools:** Integrating the note app with popular productivity tools such as task management systems, calendar applications, or project management platforms. This would allow users to seamlessly link their notes to relevant tasks, events, or projects, enhancing productivity and task organization.
- ➤ **Enhanced Security Features:** Strengthening the security of the note app by implementing advanced encryption techniques to protect user data, providing options for two-factor authentication, and ensuring compliance with data protection regulations.

#### 7. CONCLUSION

In conclusion, the web-based note app project has successfully developed a user-friendly and feature-rich platform for creating, organizing, and managing personal notes. The project aimed to address the limitations of traditional note-taking methods and provide a centralized and accessible solution for individuals to enhance their productivity and organization. The project scope covered the core functionalities required for a comprehensive note-taking application and has laid a solid foundation for continuous development, ensuring that the note app remains a valuable tool for users in their information management journey.

Looking ahead, there are numerous possibilities for future directions, such as mobile application development, integration with cloud services, advanced collaboration features, enhanced security measures, and integration with other productivity tools. These future directions would further enrich the note app and cater to evolving user needs in the digital note-taking landscape.

# 8. REFERENCES

- 1. W3Schools
- 2. MDN Web Docs
- 3. YouTube
- 4. ChatGPT