

# Personalized Notes Management System

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# Scope of the Project



**Objectives:** Develop a user-friendly interface for managing notes. Implement functionalities for adding, editing, searching, and deleting notes. Ensure data security and integrity. Provide a responsive design for accessibility on various devices.

## Features:

**Add Notes:** Users can create new notes with a title and content.

**Edit Notes:** Users can modify existing notes.

**Search Notes:** Users can search for notes using keywords.

**Delete Notes:** Users can remove notes they no longer need.

**User Authentication:** Secure login and registration system to protect user data.

**Responsive Design:** Ensure the application works well on desktops, tablets, and smartphones.

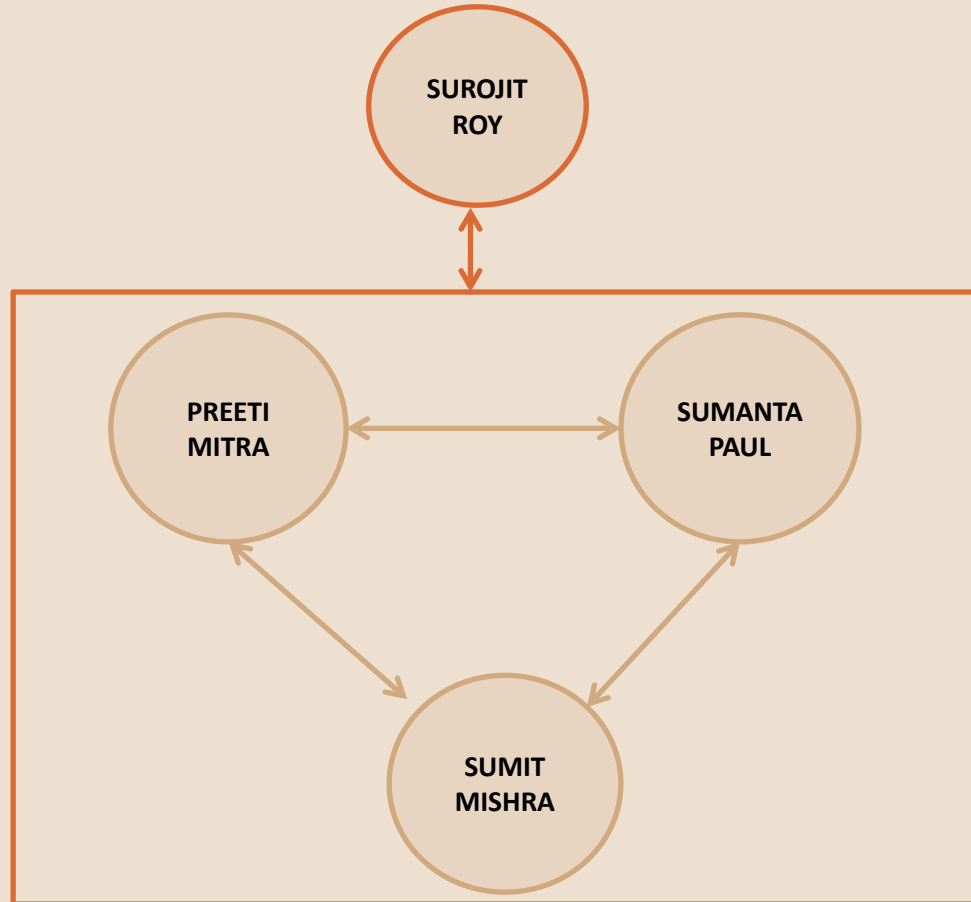
**Constraints:** Limited budget and resources.

Strict timeline for project completion.

Ensuring data security and privacy.



# Team Structure





# Function Point Analysis

Determine the Number of Components:

From the Level 0 DFD, we can identify the following components:

**External Inputs (EI):**

Total EI = 5

**External Outputs (EO):**

Total EO = 4

**External Inquiries (EQ):**

Total EQ = 3

**Internal Logical Files (ILF):**

Total ILF = 2

**External Interface Files (EIF):**

Total EIF = 0

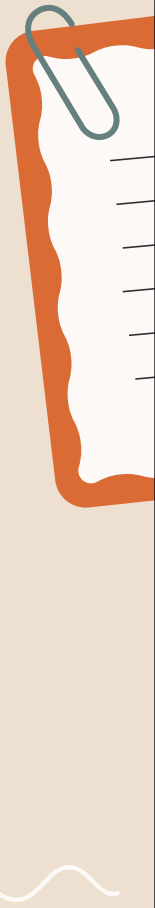
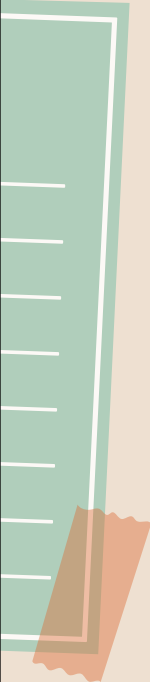




# Function Point Analysis

## Assigning Weights:

We estimate the complexity based on the details available.



| Function Type                  | Count | Weight | FP |
|--------------------------------|-------|--------|----|
| External Inputs (EI)           | 5     | 3      | 15 |
| External Outputs (EO)          | 4     | 4      | 16 |
| External Inquiries (EQ)        | 3     | 3      | 9  |
| Internal Logical Files (ILF)   | 2     | 7      | 14 |
| External Interface Files (EIF) | 0     | 5      | 0  |



# Function Point Analysis

Calculate Unadjusted Function Points (UFP)

**UFP = Sum of all weights**

$$\text{UFP} = 15 + 16 + 9 + 14 + 0 = 54$$

Determine Value Adjustment Factor (VAF)

**VAF =  $0.65 + (0.01 \times \text{Total GSC Rating})$**

$$\text{VAF} = 0.65 + (0.01 \times 35)$$

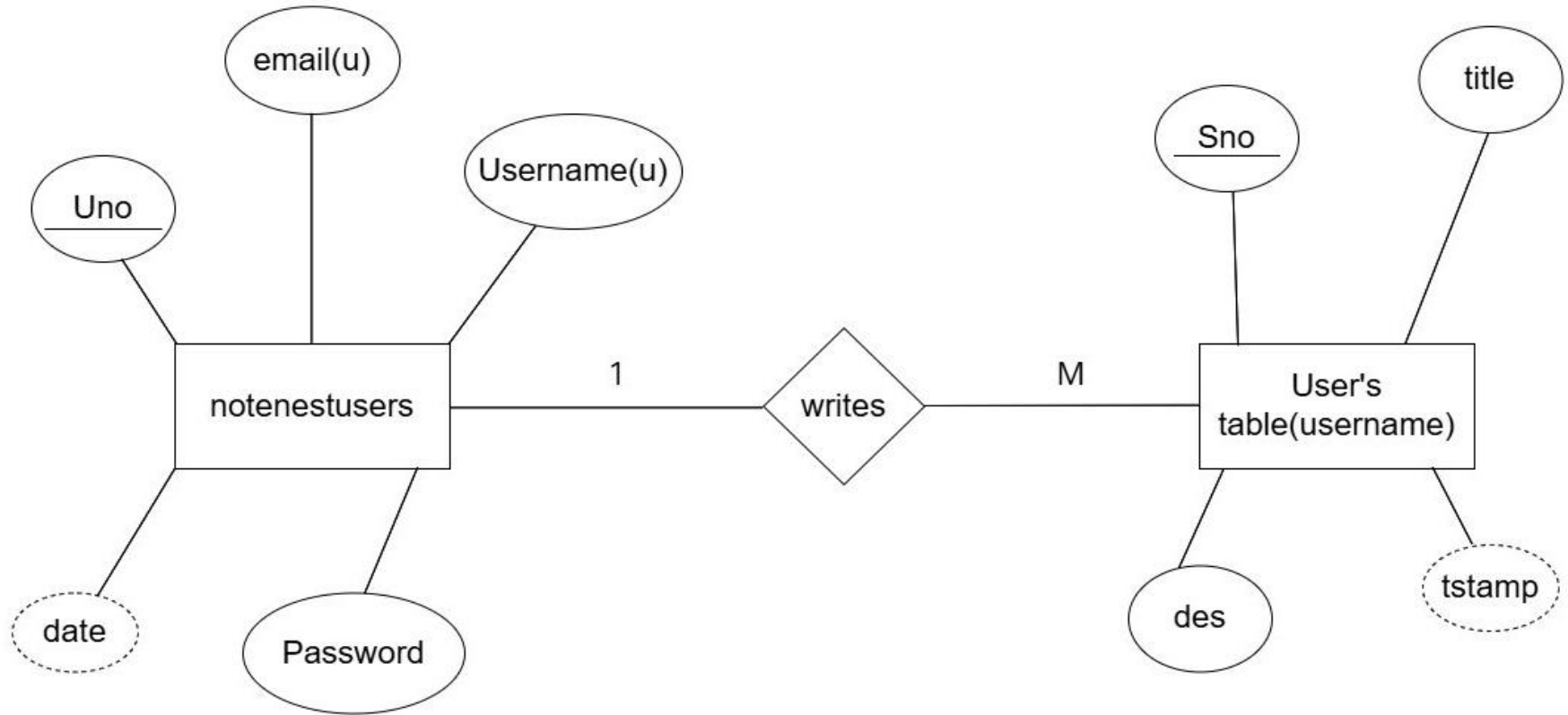
$$\text{VAF} = 0.65 + 0.35 = 1.0$$

Calculate Final Function Points

**FP = UFP  $\times$  VAF**

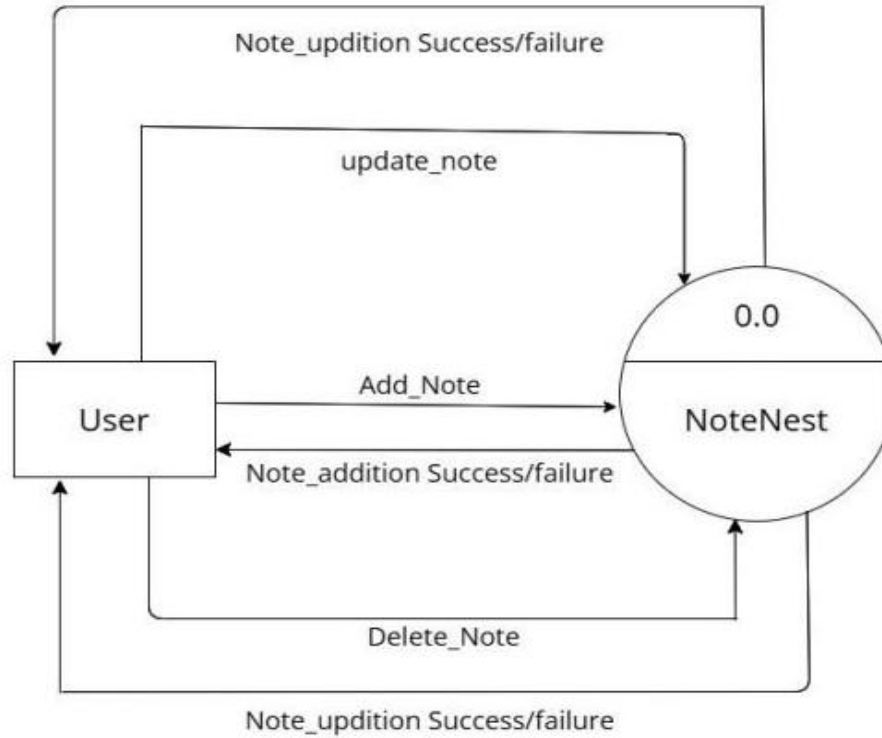
$$\text{FP} = 54 \times 1.0 = 54$$


# Entity Relationship Diagram

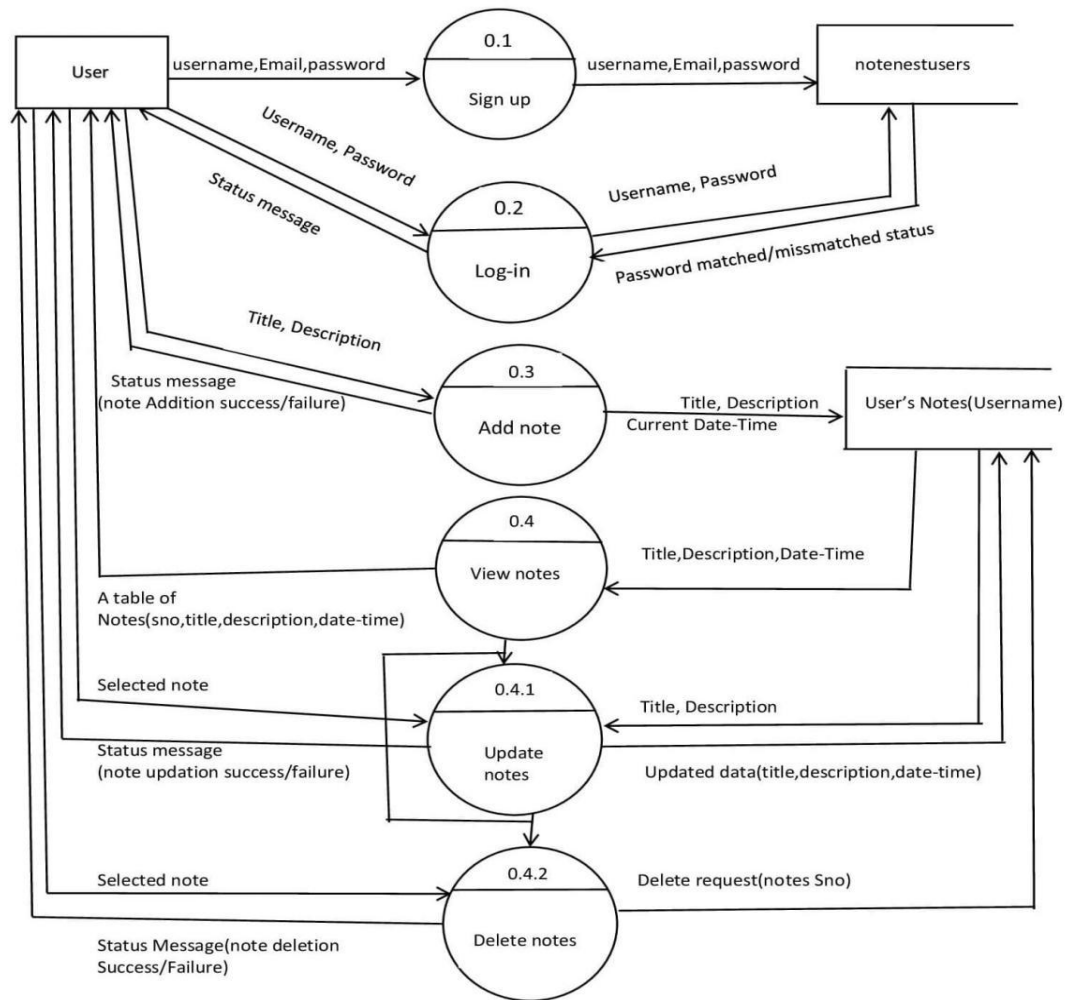




# Data Flow Diagram





Level 0



## Level 1

# Result Set Analysis

 NoteNest [Notes](#) [About](#) [Contact Us](#) [Login](#)

 **Sign Up**

Username

Username should not be empty or contain only spaces.

Email

Please enter a valid email address.

Password

Password must be at least 8 characters long.

Confirm Password

Confirmed Password isn't matching with initial password.

Sign Up


Already have an account? [Login here](#)

Activate Windows


Go to Settings to activate Windows.

Signup with invalid inputs

# Result Set Analysis

 NoteNest [Notes](#) [About](#) [Contact Us](#)

Login

 **Sign Up**

Username

MinorProject

Email

group11@gmail.com

Password

\*\*\*\*\*

Confirm Password

\*\*\*\*\*

Sign Up

Already have an account? [Login here](#)

Activate Windows  
Go to Settings to activate Windows.

Signup with valid inputs

# Testing

| Test Case ID | Test Case Description  | Test Steps   | Expected Result   | Actual Result                              | Status |
|--------------|------------------------|--|---|--|--------|
| TC1          | Add a new note         | 1. Navigate to the “Add Note Page”.<br>2. Enter a title and content.<br>3. Click “Save”.                       | Note is saved and displayed in the list of notes.                   | Note is saved and displayed correctly.     | Pass   |
| TC2          | Edit an existing node. | 1. Select a note from the list.<br>2. Click “Edit”.<br>3. Modify the title and/or content.<br>4. Click “Save”. | Changes are saved and reflected in the note.                        | Changes are saved and displayed correctly. | Pass   |
| TC3          | Search for a note      | 1. Enter a keyword in the search bar.  | Notes containing the keyword in the title or content are displayed. | Relevant notes are displayed.              | Pass   |
| TC4          | Delete a note          | 1. Select a note from the list.  | Note is removed from the list and database.                         | Note is deleted successfully.              | Pass   |

| Test Case ID | Test Case Description               | Test Steps   | Expected Result  | Actual Result                         | Status |
|--------------|-------------------------------------|--|--|---------------------------------------|--------|
| TC5          | User login                          | 1. Navigate to the login page.<br>2. Enter valid credentials.<br>Click "Login".                                | User is authenticated and redirected to the dashboard.       | User is logged in successfully.       | Pass   |
| TC6          | User login with invalid credentials | 3. Navigate to the login page.<br>4. Enter invalid credentials.<br>5. Click "Login".                           | Error message is displayed indicating invalid credentials.   | Error message is displayed correctly. | Pass   |
| TC7          | Add note with missing title         | 1. Navigate to the "Add Note" page.<br>2. Leave the title field empty.<br>3. Enter content<br>4. Click "Save". | Error message is displayed indicating the title is required. | Error message is displayed correctly. | Pass   |

# Future Scope

## 1. Advanced Search and Filtering

Implement advanced search capabilities, such as full-text search, tag-based filtering, and date range filtering. Use natural language processing (NLP) to improve search accuracy and relevance.

## 2. Enhanced Security

Implement advanced security features such as two-factor authentication (2FA) and encryption of notes. Regularly update security protocols to protect user data.

## 3. AI and Machine Learning

Use AI to provide smart suggestions, such as auto-tagging notes and recommending related notes. Implement machine learning algorithms to analyze user behavior and improve the user experience.

## 4. Customization and Personalization

Allow users to customize the interface with themes and layouts. Provide personalized recommendations based on user preferences and usage patterns.

## 5. Voice and Handwriting Recognition

Implement voice-to-text functionality to allow users to dictate notes. Integrate handwriting recognition for users who prefer to write notes by hand.

# Conclusion

In conclusion, Personalized Notes Management System project has the potential to be a highly functional and user-friendly tool for managing notes. By adhering to coding standards and making clear assumptions, you can ensure a solid foundation for development. Comprehensive testing, including unit testing, integration testing, and performance testing, will help maintain the system's reliability and security.

Looking ahead, there are numerous opportunities for enhancing the system, such as implementing advanced search features, adding collaboration tools, developing a mobile app, and integrating AI and machine learning. These enhancements can significantly improve the user experience and expand the system's capabilities.

By continuously iterating and incorporating user feedback, you can create a robust and versatile Notes Management System that meets the evolving needs of its users.





# Reference & Bibliography

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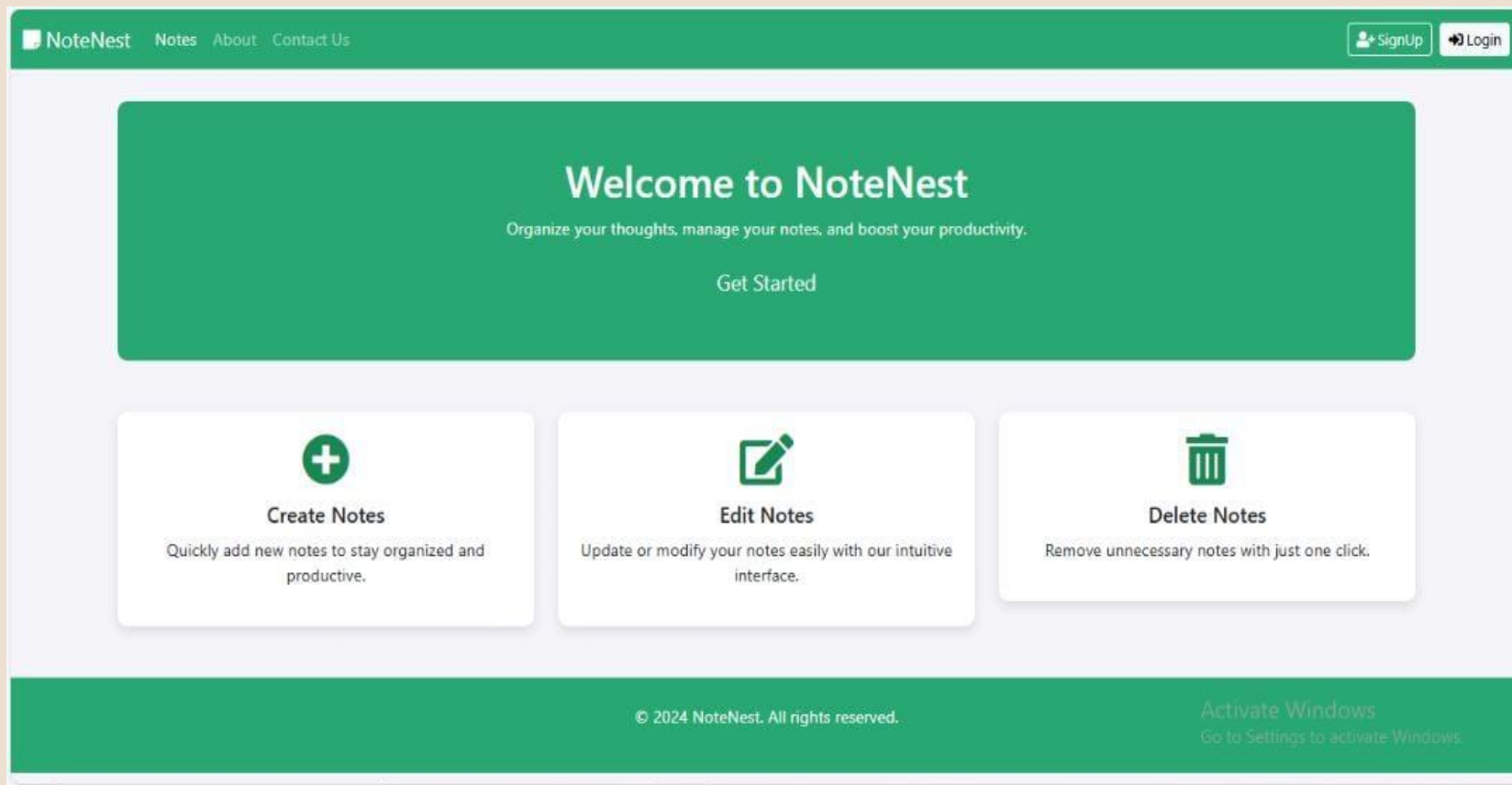
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# Appendix




## Home Page

# Appendix

 **NoteNest** [Notes](#) [About](#) [Contact Us](#)

Login

 **Sign Up**

Username

Email

Password

Confirm Password

Sign Up

Already have an account? [Login here](#)


Activate Windows  
Go to Settings to activate Windows.


## Signup Page

# Appendix

NoteNest

NotesAboutContact Us

 Sign Up

 Login

Username

Enter your Username

Password

Enter your password


Login

Don't have an account? [Sign up here](#)


Activate Windows  
Go to Settings to activate Windows.

## Login Page

# Appendix

 **NoteNest**

[Notes](#) [About](#) [Contact us](#)

 sumanta [Logout](#)

## Add a Note

**Note Title**

**Note Description**

Write note description

Add note

View Notes

Activate Windows

Go to Settings to activate Windows.

Add Note

# Appendix

NoteNestNotesAboutContact ussumantaLogout

10 entries per page

| S.No | Title         | Description                               | Date-Time           | Actions                                     |
|------|---------------|---|---------------------|---|
| 1    | Sumanta Paul  |   | 24-12-01 01:48:54   | <a href="#">Edit</a> <a href="#">Delete</a> |
| 2    | Roll          |   | 24-12-01 01:49:13   | <a href="#">Edit</a> <a href="#">Delete</a> |
| 3    | Department    |   | 24-12-01 01:49:32   | <a href="#">Edit</a> <a href="#">Delete</a> |
| 4    | Address       | Bantul, Bagnan, Howrah.                   | 2024-12-01 01:50:07 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 5    | Minor Project | Project group 11                          | 2024-12-01 01:51:38 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 6    | Quick Notes   | Capture your thoughts instantly.          | 2024-12-01 01:53:48 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 7    | Idea Vault    | Secure your brilliant ideas here.         | 2024-12-01 01:54:06 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 8    | Daily Journal | Record your everyday moments effortlessly | 2024-12-01 01:54:32 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 9    | Work Tasks    | Stay on top of your to-do list            | 2024-12-01 01:54:48 | <a href="#">Edit</a> <a href="#">Delete</a> |

Search:

Edit Note

Note Title

Quick Notes

Note Description

Capture your thoughts instantly.

Update note

Close

Edit Note

# Appendix

NoteNest

NotesAboutContact us

SumantaLogout

Your Notes

Add a note

10 entries per page

Search:

| S.No | Title         | Description                               | Date-Time           | Actions                                     |
|------|---------------|---|---------------------|---|
| 1    | Sumanta Paul  | Techno Main Salt Lake, 2nd year student.  | 2024-12-01 01:48:54 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 2    | Roll          | 13071023044                               | 2024-12-01 01:49:13 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 3    | Department    | MCA                                       | 2024-12-01 01:49:32 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 4    | Address       | Bantui, Bagnan, Howrah.                   | 2024-12-01 01:50:07 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 5    | Minor Project | Project group 11                          | 2024-12-01 01:51:38 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 6    | Quick Notes   | Capture your thoughts instantly.          | 2024-12-01 01:53:48 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 7    | Idea Vault    | Secure your brilliant ideas here.         | 2024-12-01 01:54:06 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 8    | Daily Journal | Record your everyday moments effortlessly | 2024-12-01 01:54:32 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 9    | Work Tasks    | Stay on top of your to-do list.           | 2024-12-01 01:54:48 | <a href="#">Edit</a> <a href="#">Delete</a> |
| 10   | Recipe Keeper | Save and organize your favorite recipes.  | 2024-12-01 01:55:18 | <a href="#">Edit</a> <a href="#">Delete</a> |

Showing 1 to 10 of 13 entries

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## List of Notes

**Thank You**