





#### **NEXT GEN EMPLOYABILITY PROGRAM**

**Creating a future-ready workforce** 

**Team Members** 

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#### **CAPSTONE PROJECT SHOWCASE**

### **Project Title**

**Notes Sharing Web Application using Django Framework** 

Abstract | Problem Statement | Project Overview | Proposed Solution | Technology Used | Modelling & Results | Conclusion



#### **Abstract**

Our project focuses on building a robust notes sharing web application leveraging Python and the Django framework. Through this platform, users can effortlessly create, manage, and exchange notes, fostering a collaborative learning environment. With features like version control and access permissions, the application ensures data integrity and security, empowering users to streamline their note-taking process and enhance productivity.



#### **Problem Statement**

Real-Time Collaboration Feature: Integrate real-time collaboration features into the application to enable multiple users to edit and view notes simultaneously, fostering better teamwork and productivity.



#### **Project Overview**

The proposed solution aims to develop a robust notes sharing web application using Python with the Django framework. This application will facilitate seamless sharing and collaboration on notes among users, providing a user-friendly interface and robust security measures.

Our Notes Sharing Web Application built on Python with the Django framework has laid a strong foundation for collaborative note-taking and sharing. However, to ensure its continued relevance and competitiveness in the ever-evolving landscape of digital collaboration tools, we propose several future enhancements aimed at enriching user experience, enhancing functionality, and optimizing performance.



#### **Proposed Solution**

- ✓ Implement a robust search functionality allowing users to easily find specific notes based on keywords, tags, or categories.
- ✓ Provide users with customizable profiles where they can manage their preferences, view shared notes, and connect with other users.
- ✓ Employ best practices for security, including encryption of sensitive data, protection against common web vulnerabilities such as CSRF and XSS attacks, and secure storage of user credentials.
- ✓ Develop a responsive web design ensuring the application is accessible and functional across various devices and screen sizes.
- ✓ Provide an admin dashboard with tools to manage users, monitor activity, and moderate content.



#### **Technologies Used**

**Frontend** 



#### **Backend**





#### **Modelling & Results**

- **Python:** Utilize Python as the primary programming language for backend development due to its simplicity, versatility, and extensive libraries.
- Django Framework: Leverage the Django framework for rapid development, built-in security features, and scalability.
- HTML/CSS/JavaScript: Use these technologies for frontend development to create an intuitive and interactive user interface.
- SQLite/PostgreSQL: Employ SQLite during development for its simplicity and switch to PostgreSQL for production for better scalability and performance.
- **RESTful API:** Develop a RESTful API to facilitate communication between the frontend and backend, enabling seamless integration with other platforms and services.



### **Home Page**





### SignUp Page

| project   | Home | <b>♣</b> Sign up | <b>→</b> DLog in |
|---|------|------------------|------------------|
|   |      |                  |                  |
|   |      |                  |                  |
| Username:   |      |                  |                  |
| Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only. Email:   |      |                  |                  |
| Phone no: Password:   |      |                  |                  |
| <ul> <li>Your password can't be too similar to your other personal information.</li> <li>Your password must contain at least 8 characters.</li> <li>Your password can't be a commonly used password.</li> <li>Your password can't be entirely numeric.</li> </ul> |      |                  |                  |
| Password confirmation:  |      |                  |                  |
| Enter the same password as before, for verification. First name:  Last name:  |      |                  |                  |
| <b>⊠</b> sign up  |      |                  |                  |
| Already have an account?  |      |                  |                  |
|   |      |                  |                  |
|   |      |                  |                  |
|   |      |                  |                  |



### **Login Page**

| project |                             | Home | <b>♣</b> Sign up | Ð |
|---------|-----------------------------|------|------------------|---|
|         |                             | 7    |                  |   |
|         |                             |      |                  |   |
|         | Username: Password:         |      |                  |   |
|         | <b>→</b> login              |      |                  |   |
|         | don't have account, sign up |      |                  |   |
|         |                             |      |                  |   |



### Files Uploading Page

|           | Ul                | oload Files                            |        |
|-----------|-------------------|--|--------|
| File upl  | oaded successfull | y.                                     |        |
| File upl  | oaded successfull | y.                                     |        |
| File Name | 2                 |  |        |
| File      |                   |  |        |
| Choose    | File No file cho  | osen                                   |        |
| Submit    |                   |  |        |
|           |                   | View File                              |        |
| S.No      | File Name         | File                                   | Delete |
| 1         | DSA               | <u>Digital Signature Algorithm.pdf</u> | Delete |
| 2         | DSA               | Digital Signature Algorithm 2KTNsvu.po | Delete |



### **Files Deleting Page**

|                | Upload Files   |
|----------------|----------------|
| File deleted s | successfully.  |
| File Name      |                |
| File           |                |
| Choose File    | No file chosen |
| Submit         |                |



#### **Future Enhancements**

#### 1.Real-time Collaboration:

- Implement real-time collaborative editing features using technologies like WebSocket.
- 2. Enable multiple users to simultaneously edit and view notes, with changes reflected instantly across all devices.

#### 2. Rich Text Editing:

- 1. Integrate a rich text editor (such as CKEditor or Quill) to enable users to format text, add images, create lists, and embed multimedia content within their notes.
- 2. Provide support for markdown syntax for users preferring a simpler text formatting approach.



#### Conclusion

The Notes Sharing Web Application is poised to revolutionize the way users create, manage, and share notes online. With its intuitive interface, powerful features, and robust architecture, the application promises to streamline workflows, foster collaboration, and elevate productivity. Through continuous improvement and user feedback, we aim to create a platform that meets the evolving needs of our users and remains a valuable tool for personal and professional use.



# **Thank You!**