# CAREER-X Group 11

A Comprehensive Student Recruitment and Internship Management System

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#### PROBLEM STATEMENT

- The aim is to develop a robust and user-centric job bulletin board for Company X, providing an intuitive and visually appealing platform for students to explore job and internship opportunities. This solution seeks to improve upon current job board designs by enhancing efficiency, accessibility, and overall user experience.
- To address the challenges of presenting extensive job and internship data directly in the front-end interface, the Career-X project will focus on implementing a well-structured database and optimized scripts for secure and efficient data retrieval. This approach will ensure seamless data distribution, safeguard confidentiality, and deliver a scalable solution that meets the company's needs while prioritizing usability and security.

### REQUIREMENTS AND TARGET USE

- Our target audience includes companies that will use our platform to streamline their hiring processes and students who may lack experience and struggle to compete in the highly competitive job market. The platform focuses on providing these students with better access to job and internship opportunities, bridging the gap between them and potential employers.
- The system will allow a designated representative from each company to manage job and internship postings. This includes adding, updating, and deleting listings as needed. Additionally, administrators will have the authority to oversee platform operations, including posting important notices and events to keep users informed and engaged.
- This functionality ensures a seamless experience for both companies and students while maintaining administrative control to support platform usability and relevance.

#### **TOOLS AND TECHNOLOGIES**

To develop our platform, we have utilized the following tools and technologies:

#### **Frontend Development:**

- HTML, CSS: For structuring and styling the user interface, ensuring it is visually appealing and user-friendly.
- Bootstrap: For responsive design and prebuilt components to speed up development.

#### **Backend Development:**

• Django: A Python-based web framework used to manage the server-side logic, handle database interactions, and provide a secure and scalable backend.

#### **Database:**

• SQLite: A lightweight, inbuilt database in Django, used to store and manage data for job postings, internship applications, user accounts, and other platform information.

#### **TOOLS AND TECHNOLOGIES**

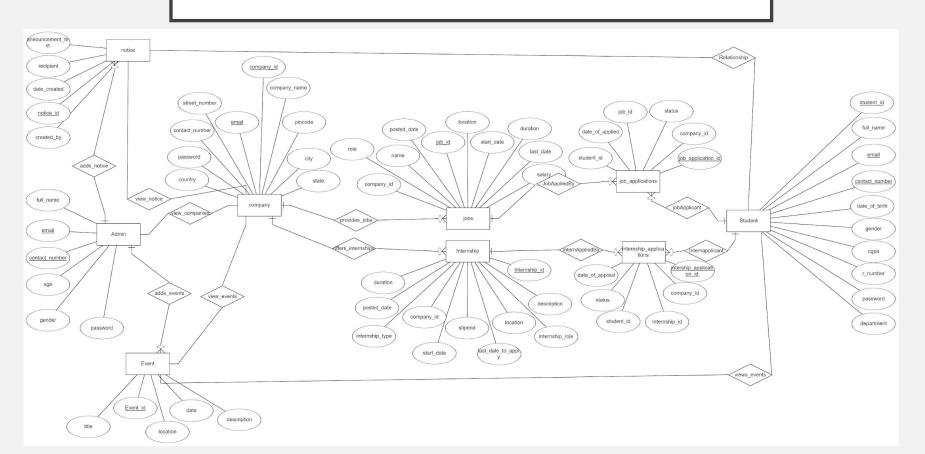
#### **Version Control:**

- Git: For tracking changes in the codebase and enabling collaboration among team members.
- GitHub: For hosting the project repository and managing version control.

#### **Development Environment:**

- Visual Studio Code: A powerful code editor with extensions and debugging tools to streamline development.
- Python: The primary programming language used for the backend and logic implementation.

#### **ER DIAGRAM**



### DATABASE MODELS AND THEIR ATTRIBUTES

#### • Student:

Attributes: student\_id, full\_name, email, contact\_number, date\_of\_birth, gender, r\_number, department, cgpa, password.

#### • Company:

Attributes: company\_id, company\_name, email, contact\_number, street\_number, city, state, country, pincode, password.

#### • Admin:

Attributes: full\_name, email, contact\_number, age, gender, password.

#### • Internship:

Attributes: internship\_id, internship\_role, description, internship\_type, location, stipend, start\_date, duration\_months, last\_date\_to\_apply, posted\_date, company(foreign key), created\_by(foreign key).

#### • Internship Applications:

Attributes: internship\_application\_id, internship(foreign key), student(foreign key), date\_of\_applied, status.

### DATABASE MODELS AND THEIR ATTRIBUTES

#### • Job:

Attributes: job\_id, job\_role, description, job\_type, location, salary, start\_date, last\_date\_to\_apply, posted\_date, company (foreign key), created\_by (foreign key).

#### • Job Applications:

Attributes: job\_application\_id, job (foreign key), student (foreign key), date\_of\_applied, status.

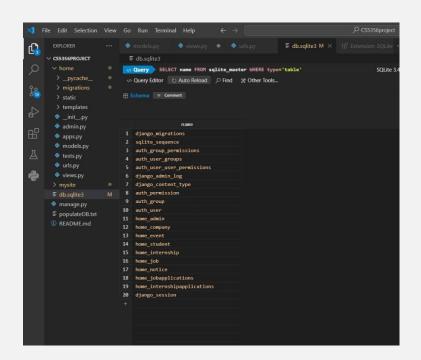
#### • Notice:

Attributes: notice\_id, announcement\_text, created\_by (foreign key), recipient (foreign key), date\_created.

#### • Event:

Attributes: event\_id, title, description, date, and location.

### **MODELS**



### **OPERATIONS FOR USERS**

Users	Internship	Job	Events	Notice	IntershipApplicants	JobApplicants
Admin	• View	• View	<ul><li>Add</li><li>View</li><li>Update</li><li>Delete</li></ul>	<ul><li>Add</li><li>View</li><li>Update</li><li>Delete</li></ul>		
Student	• View • Apply	• View • Apply	• View	• View		
Company	<ul><li>Add</li><li>View</li><li>Update</li><li>Delete</li></ul>	<ul><li>Add</li><li>View</li><li>Update</li><li>Delete</li></ul>	• View	• View	• View • Update	• View • Update

### **INDEX PAGE**

• The Index Page is the home page of the web application and serves as the entry point for all users. It provides navigation to key functionalities such as login and registration for companies and students. This is the first page displayed when the application is run on the Django development server.



### **LOGIN**

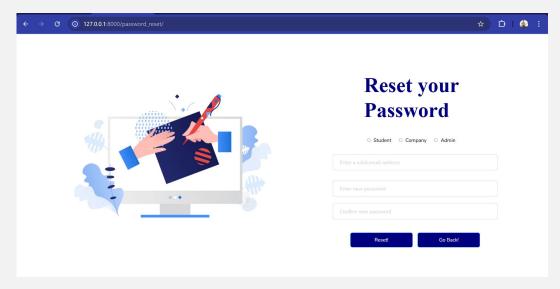
- Email Field: Enter the email ID for login.
- Password Field: Enter the password for authentication.
- User Type: Select from Student, Company, or Admin using radio buttons.
- "Let me in!" Button: Logs in and redirects to the appropriate dashboard.
- "Go Back!" Button: Returns to the Index Page.
- "Can't access account?" Button: Opens the password reset page.



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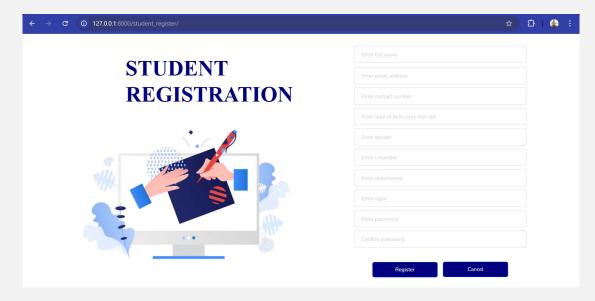
### **PASSWORD RESET**

- User Type: Select from Student, Company, or Admin using radio buttons.
- Email Field: Enter the email ID of the user.
- New Password Field: Enter the new password.
- Confirm New Password Field: Re-enter the new password for confirmation.
- "Reset" Button: Resets the password and updates it in the system.
- "Go Back" Button: Navigates back to the Login Page.



### STUDENT REGISTRATION

- The Student Registration Page includes fields for R Number, Full Name, Email, Contact Number, Date of Birth, Gender, Department, CGPA, and Password, which are required to register the student.
- The page also features two buttons: "Let me in!", which logs the student in and redirects them to the Student Dashboard, and "Go Back", which takes them back to the Index Page. These buttons enable easy navigation after registration.



### **COMPANY REGISTRATION**

- The Company Registration Page includes input fields for Company Name, Email, Contact Number, Street Number, City, State, Country, Pincode, and Password. These details are required to register the company.
- The page also features two buttons: "Let me in!", which logs the company in and redirects them to their Company Dashboard, and "Go Back", which takes the user back to the Index Page. These buttons allow easy navigation after completing the registration.



#### STUDENT DASHBOARD

The Student Dashboard Page features several buttons for easy navigation to different sections of the platform

- Profile Button: Redirects to the Student Profile Page, where students can view and update their personal information.
- Internship Button: Redirects to the Apply Internship Page, where students can view and apply for available internships.
- Job Button: Redirects to the Apply Job Page, where students can browse job listings and apply for available positions.
- Notices Button: Redirects to a page where students can view important notices posted by companies or admins.
- Events Button: Redirects to a page where students can check upcoming events, such as job fairs or career workshops.
- Companies Button: Redirects to the Company Page, where students can view details about various companies, including job and internship opportunities.
- LogOut Button: Logs the student out of their session and returns them to the Index Page.



### STUDENT PROFILE

• The Student Profile Page displays the student's details, such as Full Name, Email, Contact Number, Department, CGPA, and other personal information. The page allows the student to view and update their profile.

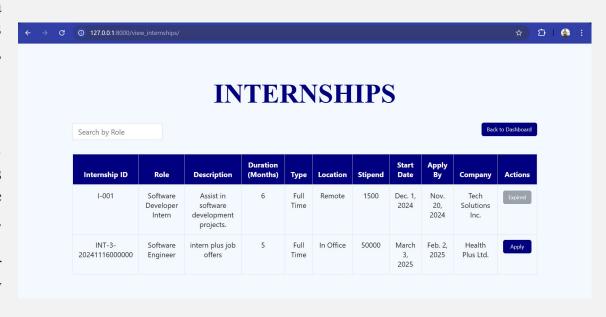
#### There are two buttons on the page:

- Update Button: This button enables the student to edit their details. Once clicked, the fields become editable, and the button changes to a Save Button.
- Go Back Button: Redirects the student back to the Student Dashboard page.



#### APPLY INTERNSHIP

- The Apply Internship Page displays all internships posted by companies in a table format. The table includes columns for Internship ID, Role, Description, Duration (Months), Type, Location, Stipend, Start Date, Last Date to Apply, Company, and Actions.
- The Actions column contains a button to apply for the internship. If a student has already applied, the column displays the status of their application (e.g., Pending, Accepted, or Rejected). A Dashboard Button at the bottom redirects the user back to the Student Dashboard for easy navigation.
- Search bar lets one filter internships according to roles.



#### **APPLY JOB**

- The Apply Job Page displays all job postings by companies in a table format. The table includes columns for Job ID, Job Role, Description, Type, Location, Salary, Start Date, Last Date to Apply, Company, and Actions.
- The Actions column contains a button to apply for the job. If a student has already applied, the column displays the status of their application (e.g., Pending, Accepted, or Rejected). A Dashboard Button at the bottom redirects the user back to the Student Dashboard for easy navigation.
- Search bar lets one filter jobs according to roles.



### **NOTICES**

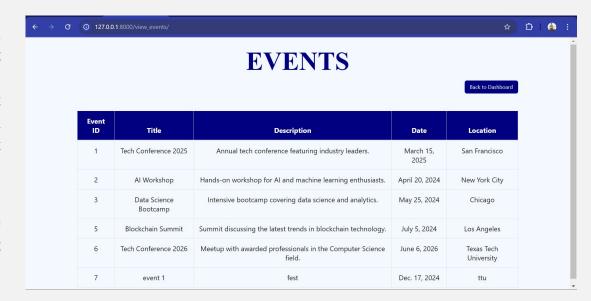
#### **Notice page:**

• A page where students can view the notifications posted by an admin.



### **EVENTS**

- The Events Page displays a table with details of all events, including Event ID, Title, Description, Date, and Location. Default values in the Event model ensure that fields are populated even if specific details are not provided.
- A Dashboard Button at the bottom redirects users back to their respective dashboards, such as the Student Dashboard, for further navigation.



#### **COMPANY DASHBOARD**

The Student Dashboard Page features several buttons for easy navigation to different sections of the platform

- Profile Button: Redirects to the Company Profile Page, where company can view and update their personal information.
- Internship Button: Redirects to the Add Internship Page, where companies can view and add, update and delete internships.
- Job Button: Redirects to the Add Job Page, where companies can view and add, update and delete jobs.
- Notices Button: Redirects to a page where companies can view important notices posted by admins.
- Events Button: Redirects to a page where companies can check upcoming events, such as job fairs or career workshops.
- Companies Button: Redirects to the Company Page, where students can view details about various companies, including job and internship opportunities.
- LogOut Button: Logs the company out of their session and returns them to the Index Page.



### **COMPANY PROFILE PAGE**

• The Company Profile Page displays the companies details, such as Company Name, Email, Contact Number, Street, City, State, Country and Zipcode. The page allows the company to view and update their profile.

#### There are two buttons on the page:

- Update Button: This button enables the company to edit their details. Once clicked, the fields become editable, and the button changes to a Save Button.
- Go Back Button: Redirects the company back to the Company Dashboard page.



### **MANAGE INTERNSHIPS**

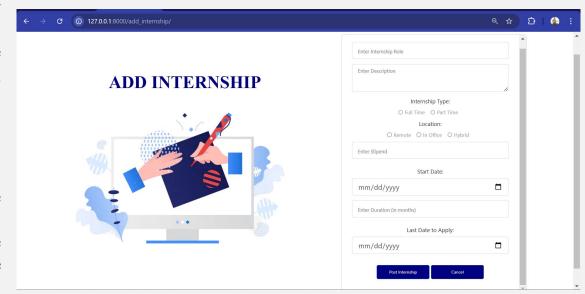
- The Manage Internship Page allows companies to view all internships posted by all companies in a table format. The table includes columns for Internship ID, Role, Description, Duration (Months), Type, Location, Stipend, Start Date, Last Date to Apply, Company, and Actions.
- In the Actions column: Companies can edit or delete only the internships they have posted.
- Internships posted by other companies are view-only. Search bar lets one filter internships according to roles.
  - The page also includes two additional buttons:
- 1. Add New Internships: Redirects to the Add Internship Page, allowing the company to post a new internship.
- Dashboard Button: Redirects to the Company Dashboard for easy navigation.



#### **ADD INTERNSHIP**

The Add Internship Page features a form for companies to create and post new internships. The form includes fields corresponding to the attributes of the Internship model, such as Role, Description, Duration (Months), Type, Location, Stipend, Start Date, Last, Date to Apply.

- The page has two buttons:
  - a. Post Internship Button: Submits the form to add the new internship to the platform.
  - b. Cancel Button: Redirects to the Manage Internship Page without making any changes.



### **MANAGE JOBS**

The Manage Job Page allows companies to view all job postings by all companies in a table format. The table includes columns for Job ID, Job Role, Description, Type, Location, Salary, Start Date, Last Date to Apply, Company, and Actions.

In the Actions column: Companies can edit or delete only the jobs they have posted.

Jobs posted by other companies are view-only

The page also includes two buttons:

- Add Button: Redirects to the Add Job Page, allowing the company to post a new job.
- Dashboard Button: Redirects to the Company Dashboard for easy navigation.
- Search bar lets one filter internships according to roles.

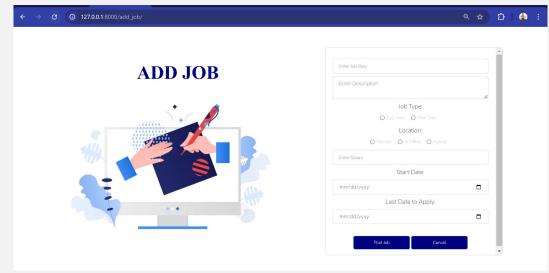


### **ADD JOB**

The Add Job Page features a form for companies to create and post new jobs. The form includes fields corresponding to the attributes of the Job model, such as Job Role, Description, Type, Location, Salary, Start Date, and Last Date to Apply.

#### The page has two buttons:

- Post Job Button: Submits the form to add the new job to the platform.
- Cancel Button: Redirects to the Manage Job Page without making any changes.



#### **APPLICANTS**

The Applicants Page displays two tables: Job Applicants and Internship Applicants. Each table includes the following columns:

- Type: Indicates whether it is a job or internship application.
- Role: Displays the job role or internship role.
- Applicant: Shows the name of the applicant.
- Date Applied: Displays the date the application was submitted
- Status: Provides a dropdown field to update the application's status (e.g., Pending, Accepted, Rejected). This feature allows company users to change the status of the applicant.
- Actions: Includes a Save button to save any changes made to the applicant's status.

At the bottom of the page, there is a Dashboard Button to navigate back to the Company Dashboard. This page ensures efficient management of job and internship applications by allowing companies to review and update applicant statuses directly.



### **ADMIN DASHBOARD**

The Admin Dashboard serves as a central hub for managing the platform efficiently. It provides administrators with quick access to key functionalities:

- Events: Navigate to the Events management page to create, update, or view events.
- Companies: Access the Companies section to view company profiles and related details.
- Jobs: Open the Jobs management page to view job postings and applications.
- Internships: View internship opportunities and applications posted for student users.
- Notices: Go to the Notices section to create or manage important announcements.
- Logout: Log out of the Admin Dashboard and end the current session.

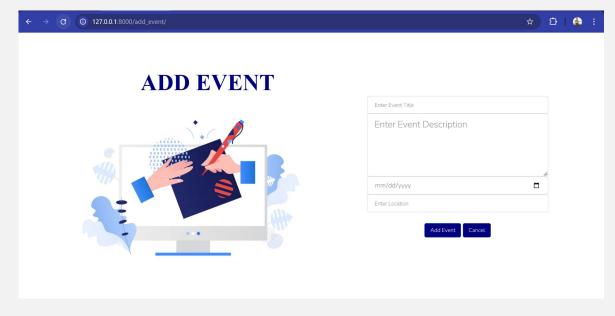
This page ensures seamless navigation for administrators, allowing them to manage platform components with ease.



#### **ADD EVENT**

The Add Event Page enables administrators to create event posts for all users. This functionality is restricted to administrators, allowing them to create global posts about events that are of interest to everyone.

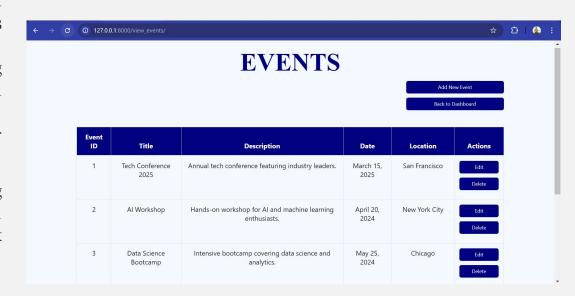
- Add Event Button: Confirms that all required fields are filled and creates the event post.
- Cancel Button: Cancels the action and redirects the user to the Events display page.



#### MANAGE EVENTS

The Events Page in the Admin Dashboard enables administrators to manage events efficiently. All users can view a table displaying details of all events, including Event ID, Title, Description, Date, and Location. Administrators, however, will have an additional column, Actions, for event management.

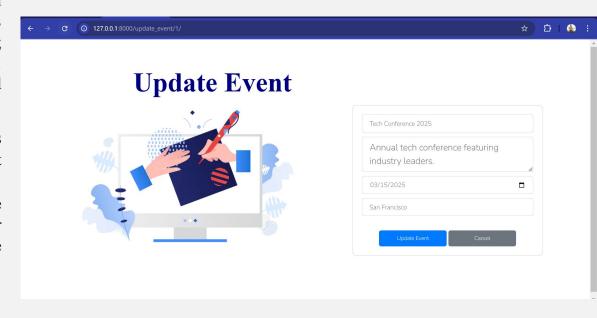
Admins can add new events, edit existing ones, or delete events as needed. A Dashboard Button is available for quick navigation back to the Admin Dashboard.



#### **UPDATE EVENT**

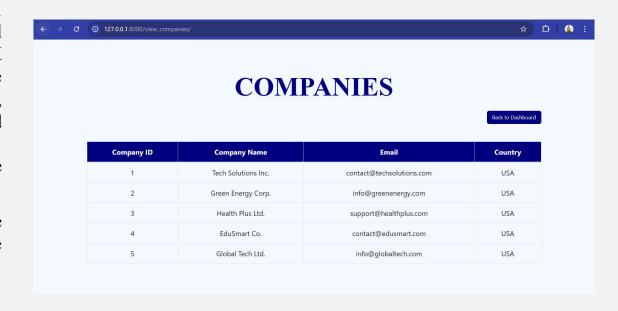
The Update Event Page allows administrators to edit the details of an existing event. This functionality is restricted to administrators, enabling them to update event information such as the title, description, date, and location.

- Update Event Button: Confirms the changes made to the event and saves the updated details.
- Cancel Button: Cancels the action and redirects the user back to the Events display page without making any changes.



### **VIEW COMPANIES**

- The Companies Page in the Admin Dashboard displays details of all companies registered on the CareerX platform. The page features a table with columns for Company ID, Company Name, Email, and Country, providing Admin users with a quick overview of the available companies.
- This page helps admin users explore different registered companies on the platform.

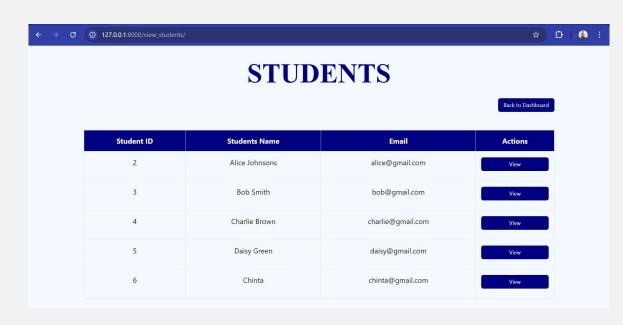


#### **VIEW STUDENTS**

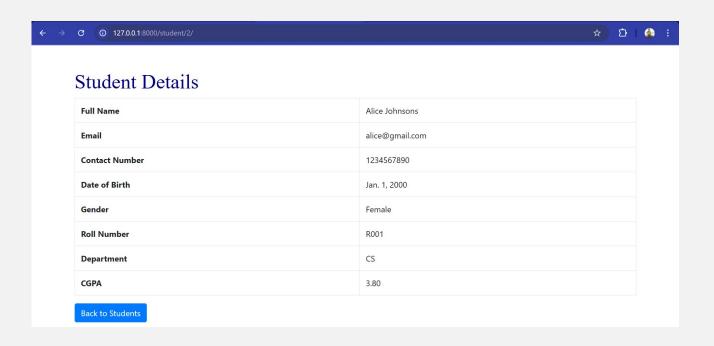
The Students Page provides a table displaying a list of students and their details for administrative purposes. The table includes the following columns:

- Student ID: Displays the unique identification number for each student.
- Student Name: Shows the name of the student.
- Email: Lists the email address of the student.
- Actions: Contains a View button for each row, allowing administrators to view detailed information about the respective student.

At the top right, there is a Back to Dashboard button that redirects administrators to the main Admin Dashboard for seamless navigation. This page ensures efficient management and access to student information.



### **VIEW STUDENTS**



### **MANAGE NOTICES**

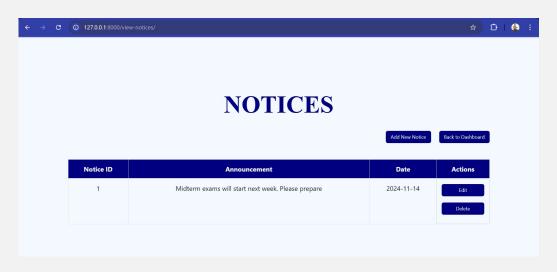
The Notices Page allows administrators to manage announcements efficiently. It includes a table displaying the following details:

- Notice ID: Displays the unique identification number for each notice.
- Announcement: Shows the content of the announcement.
- Date: Displays the date when the notice was created or scheduled.
- Actions: Includes the following buttons:
  - Edit: Allows administrators to modify the content of the notice.
  - Delete: Enables administrators to remove the notice.

At the top, there are two navigation buttons:

- Add New Notice: Redirects to the page for creating a new notice.
- Dashboard: Redirects back to the Admin Dashboard.

This page ensures efficient management of notices for all users.



#### **ADD NOTICE**

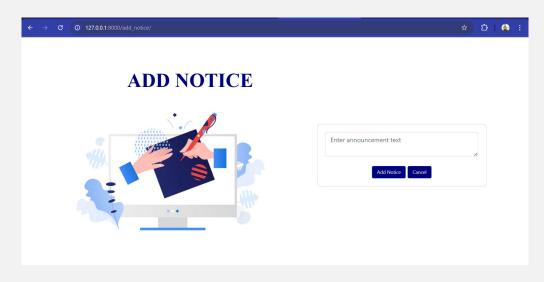
The Add Notice Page enables administrators to create and send a notice to students. It includes the following fields:

- Enter Announcement Text: A text box to input the content of the notice.
- Select Student: A dropdown menu to select the recipient student for the notice.

#### At the bottom, there are two buttons:

- Add Event: Confirms and sends the notice to the selected student.
- Cancel: Cancels the action and redirects back to the Notices page or dashboard.

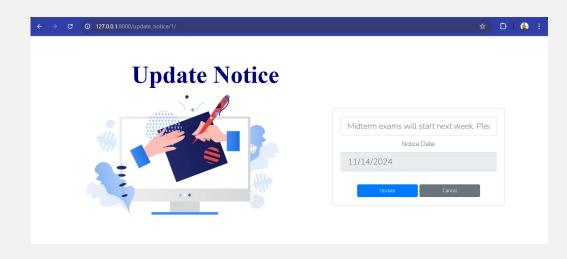
This page provides a focused approach for sending personalized notices to individual students.



### **UPDATE NOTICE**

The Update Notice Page allows administrators to edit the details of an existing notice. This functionality is restricted to administrators, enabling them to update notice information.

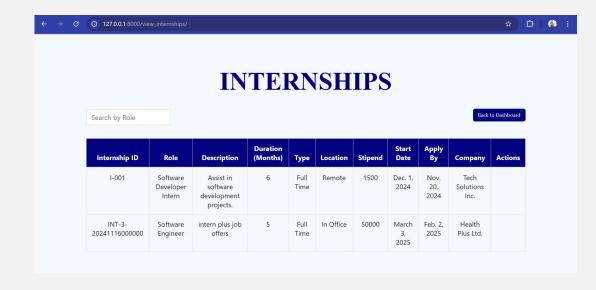
- Update Button: Confirms the changes made to the event and saves the updated details
- Cancel Button: Cancels the action and redirects the user back to the Notice display page without making any changes.



### **VIEW INTERNSHIPS**

The View Internship Page on the Admin Dashboard displays a table with details of all internships, including columns for Internship ID, Role, Description, Duration (Months), Type, Location, Stipend, Start Date, Last Date to Apply, Company, and Actions.

• In the Admin Dashboard, the Actions column does not include any buttons for applying or updating the status. It is simply for viewing the details of the internships posted by companies. A Dashboard Button is provided to navigate back to the Admin Dashboard for easy access to other administrative tasks.



### **VIEW JOBS**

The View Job Page on the Admin Dashboard displays a table with details of all job postings, including columns for Job ID, Job Role, Description, Type, Location, Salary, Start Date, Last Date to Apply, Company, and Actions.

• Similar to the View Internship Page, the Actions column does not include any buttons for applying or updating the status. It is purely for viewing the details of job postings made by companies. A Dashboard Button is available to navigate back to the Admin Dashboard for easy access to other tasks.



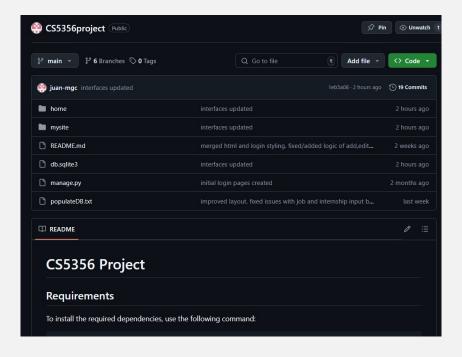
#### **CONTRIBUTIONS**

- Sruthi Mandalapu: Worked on the first iteration of the login page and implemented functionalities related to user authentication, including creating a user and managing password changes. Populated the database with dummy data to support testing. Contributed to the design of CRUD operations for potential future extensions and participated in testing the overall functionality.
- Sankeerthana Madaga: Focused on frontend development, particularly styling and defining the initial structure of HTML pages. Contributed to shaping the user interface and visual appeal of the project. Assisted with final testing and slides.
- Imran Mohammad Shaik: Designed the prototype models for Job, Internship, and their respective applications. Created slides and diagrams to illustrate the project's architecture and flow. Participated in testing and validation.
- Juan Marcelo Gutierrez: Implemented the backend logic for all pages accessed by users post-login, including connecting the frontend to the database. Implemented and debugged functionalities in post-login HTMLs, refining models, and merging as well as enhancing code from all team members. Participated in testing and debugging.

### PROJECT REPOSITORY

https://github.com/juan-mgc/CS5356project.git

README file provided in the repository.



## THANK YOU!!