

# Internet Programming 622

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Qualification: BSc IT Year of Study: 2nd Semester: 2nd

Assignment due date: 28/05/26 Date submitted: 28/04/2026



## ASSIGNMENT INSTRUCTIONS

Please tick each box to confirm completion.

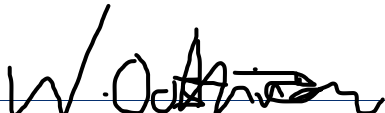
- ☒ Use Times New Roman font, size 12, with 1.5 line spacing throughout the document. Apply Harvard Referencing Style for all citations and references.

For essay-style assignments, please include the following sections:

- ☒ Table of Contents Introduction
- ☒ Main Body (with relevant subheadings) Conclusion
- ☒ References
- ☒ Submit the assignment in PDF format on Moodle. Use the specified cover page provided.
- ☒ Include a signed declaration of originality.

### DECLARATION OF ORIGINALITY:

I hereby declare that this assignment is my own work and has not been copied from any other source except where due acknowledgment is made. I affirm that all sources used have been properly cited and that this submission complies with the institution's policies on academic integrity and plagiarism.

Student Signature: 

Date: 28/04/2026

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## How to Run the Project

1. Extract the project folder into your local xampp/htdocs/ directory.
2. Open the XAMPP Control Panel and start both the Apache and MySQL modules.
3. Open phpMyAdmin and create a new, empty database named eventpro.
4. Import the provided eventpro\_db.sql file into this new database to generate the tables and dummy data.
5. If your local MySQL setup requires a specific password, please update it in the includes/db.php file. It is currently set to root / no password.
6. Navigate to <http://localhost/eventpro> in your browser to view the application.

## Security Features implemented

- SQL Injection Prevention: The database queries use MySQLi Prepared Statements.
- Cross-Site Scripting (XSS) Protection: All user generated content is sanitized using the htmlspecialchars().
- Password hashing: Passwords are encrypted using PHP's password\_hash() before inserted into the database.
- CSRF Protection: Secure tokens are generated with random\_bytes() and validated on forms such as the registration form.
- Access Control: Strict session validation has been implemented to kick unauthenticated users back to the login page.

## Database Structure

- The users table stores authentication and profile data.
- The events table stores all event details, it's linked to the users table with the user\_id as the Foreign Key.

- The messages table stores one on one chats that are linked to the users table via the sender\_id and the receiver\_id Foreign Keys.

## Sample Login Details

User 1:

Full Name: Waldo Oosthuizen

Email: [402415832@my.richfield.ac.za](mailto:402415832@my.richfield.ac.za)

Password: 12345

User 2:

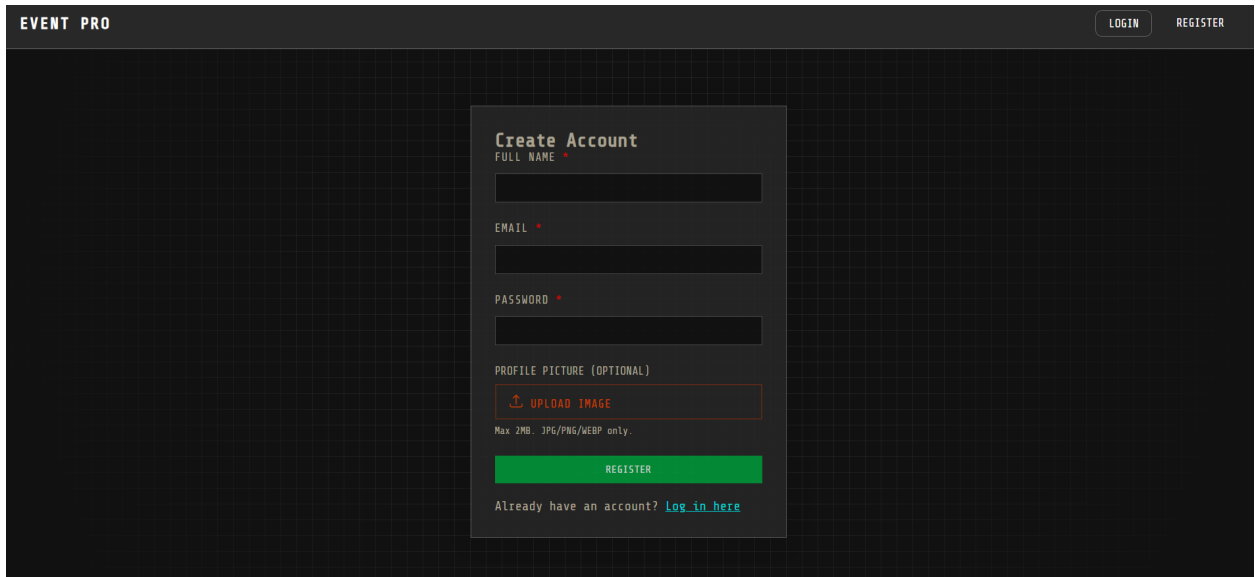
Full Name: Lily Smith

Email: [lily@example.com](mailto:lily@example.com)

Password: 56789

## Project Screenshots:

### Login Functionality



The screenshot shows a web application interface for 'EVENT PRO'. At the top right, there are 'LOGIN' and 'REGISTER' buttons. The main content area features a 'Create Account' form. The form includes input fields for 'FULL NAME', 'EMAIL', and 'PASSWORD', each with a red asterisk indicating a required field. Below these is an optional 'PROFILE PICTURE' section with an 'UPLOAD IMAGE' button and a note 'Max 2MB. JPG/PNG/WEBP only.'. A green 'REGISTER' button is at the bottom of the form. Below the button, it says 'Already have an account? [Log in here](#)'.

Figure 1: register.php page

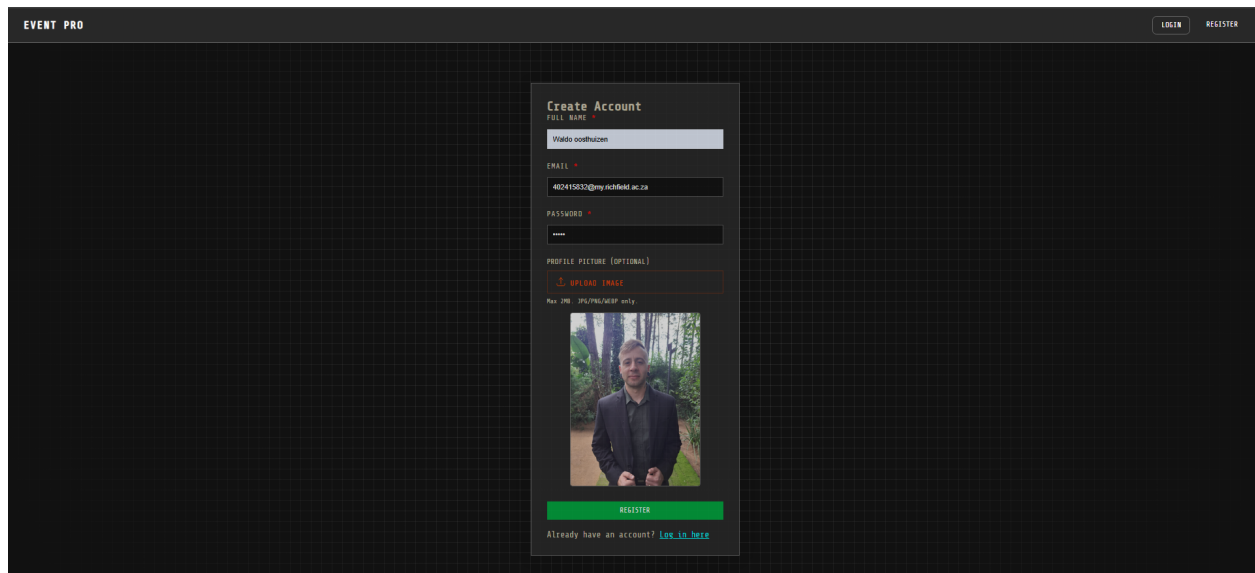


Figure 2: register.php page filled with first user's details (Zoomed out to fit in one screenshot).

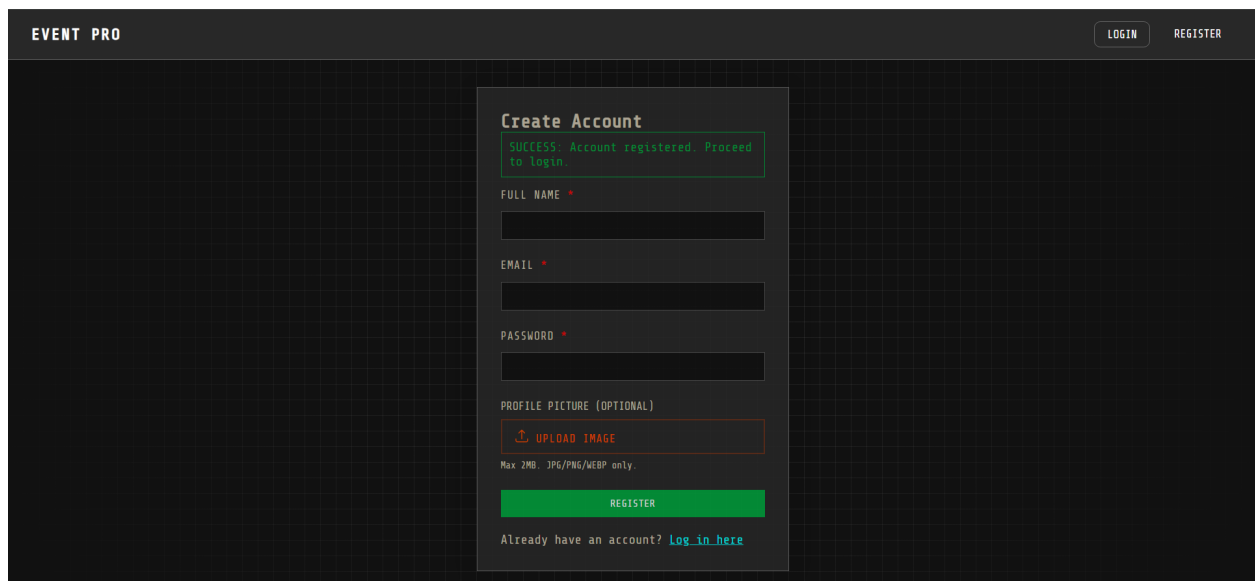


Figure 3: User 1 successfully registered.

EVENT PRO

LOGIN REGISTER

### Create Account

FULL NAME \*

Lily Smith

EMAIL \*

lily@example.com

PASSWORD \*

PROFILE PICTURE (OPTIONAL)

UPLOAD IMAGE

Max 2MB. JPG/PNG/WEBP only.

REGISTER

Already have an account? [Log in here](#)

Figure 4: register.php page filled with second user's details (Zoomed out to fit in one screenshot).

EVENT PRO

LOGIN REGISTER

### Create Account

SUCCESS: Account registered. Proceed to login.

FULL NAME \*

EMAIL \*

PASSWORD \*

PROFILE PICTURE (OPTIONAL)

UPLOAD IMAGE

Max 2MB. JPG/PNG/WEBP only.

REGISTER

Already have an account? [Log in here](#)

Figure 5: User 2 successfully registered.

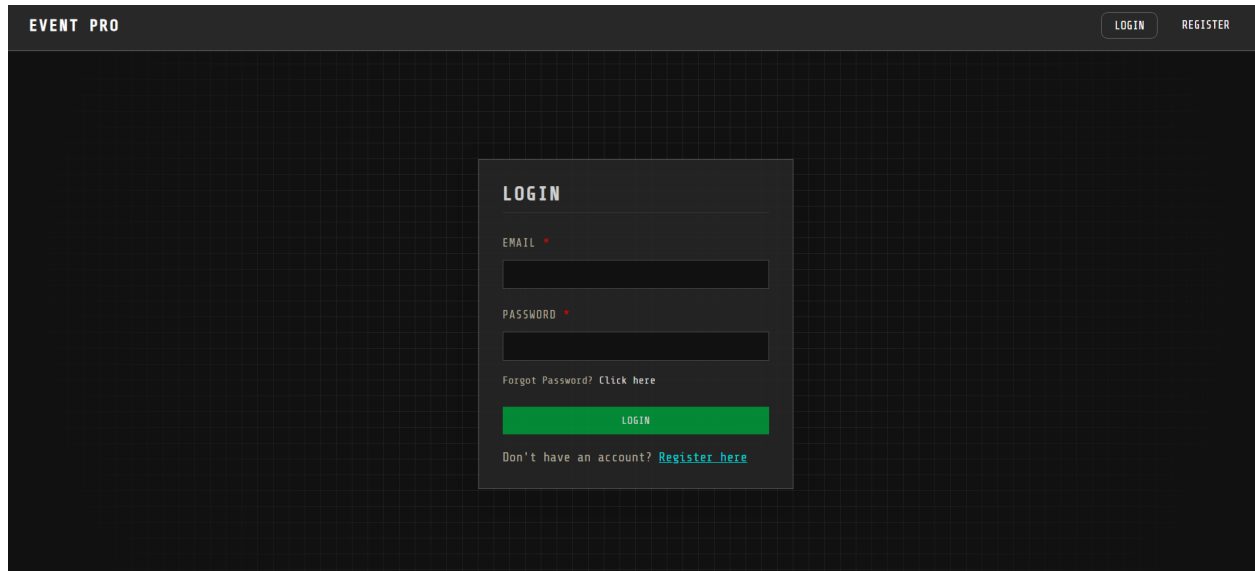


Figure 6: The login page, *index.php*.

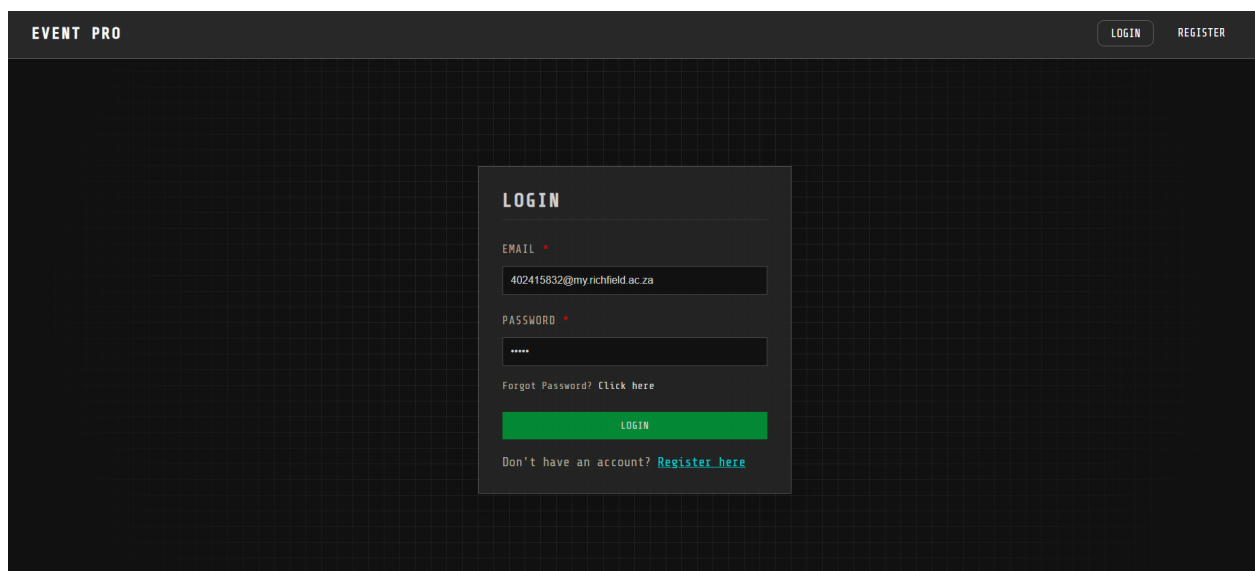


Figure 7: Login in first user filled.

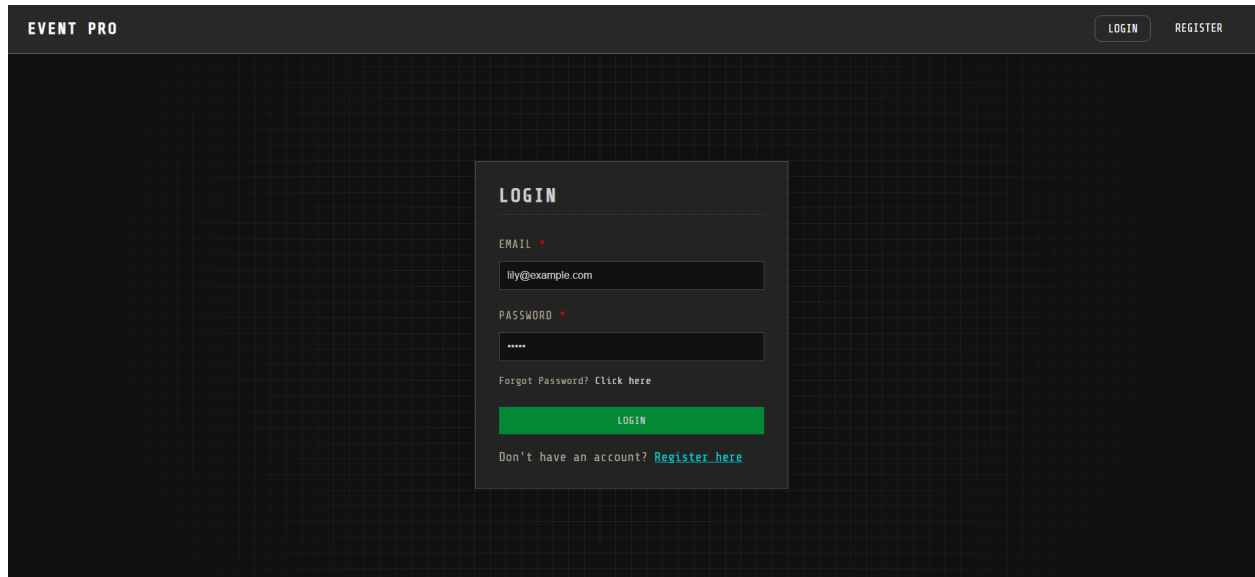


Figure 8: Login second user filled.

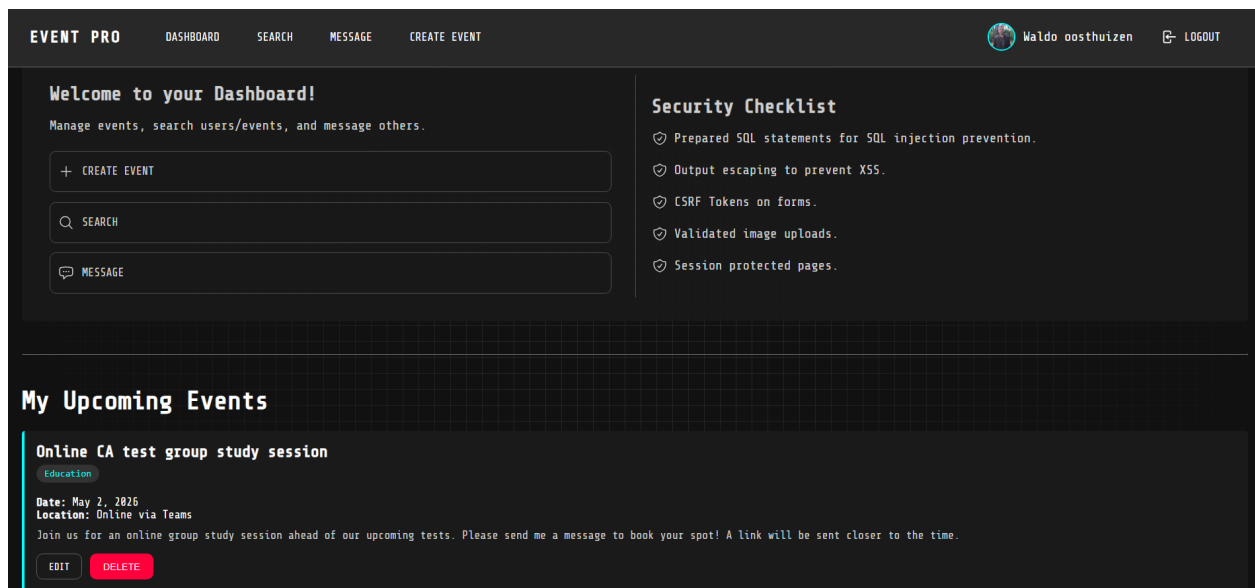


Figure 9: First user has logged into their dashboard (dashboard.php).

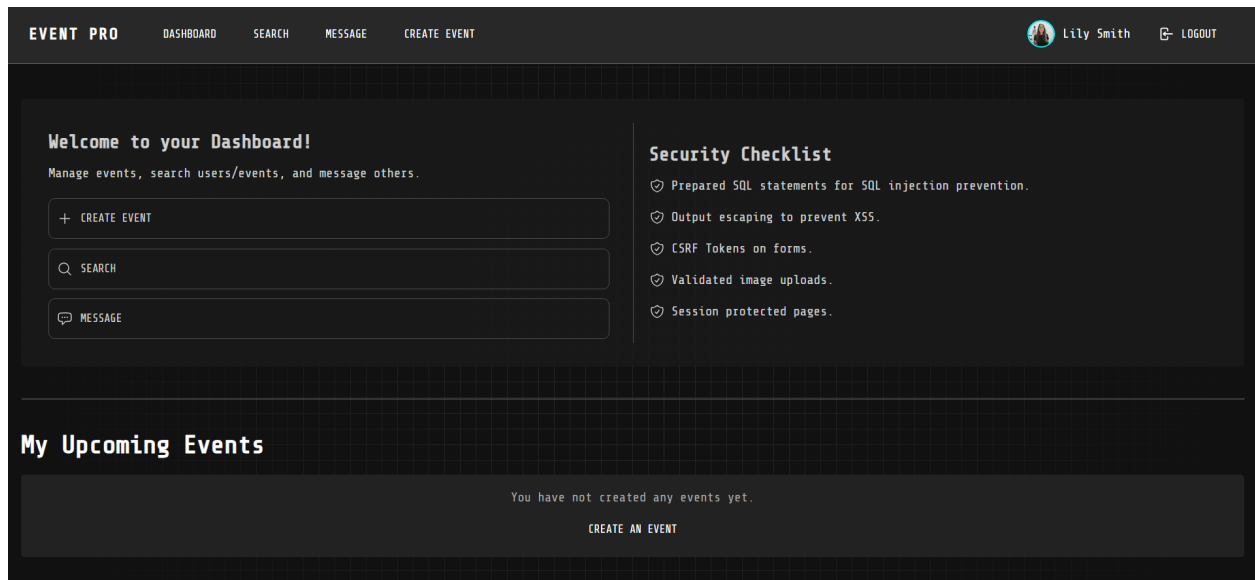


Figure 10: Second user has logged into their dashboard (dashboard.php).

## Dashboard functionality

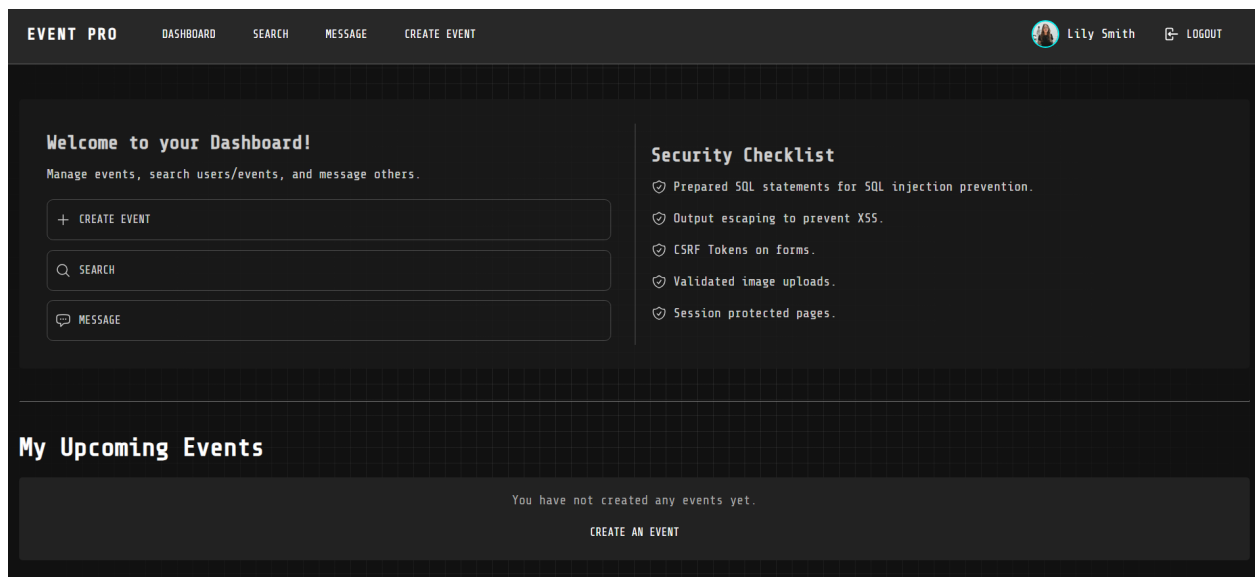


Figure 11: Main dashboard.

The screenshot shows the 'CREATE A NEW EVENT' form in the 'EVENT PRO' application. The form is empty, with the following fields and options:

- EVENT TITLE**: A text input field.
- CATEGORY**: A dropdown menu with the option 'Select a category...'.
- DATE**: A date input field with the placeholder 'yyyy/mm/dd'.
- LOCATION**: A text input field.
- DESCRIPTION**: A text area for a longer description.
- SAVE EVENT**: A prominent green button at the bottom.
- Back to Dashboard**: A link below the save button.

Figure 12: Create event form.

The screenshot shows the 'CREATE A NEW EVENT' form in the 'EVENT PRO' application, filled with sample data:

- EVENT TITLE**: Graduation Celebration 2026
- CATEGORY**: Education
- DATE**: 2027/12/12
- LOCATION**: Richfield, Bryanston Campus
- DESCRIPTION**: Join us to celebrate the graduation! Dnes code is form, remember to bring your student ID. The programme includes speeches, awards, group photos and refreshments.
- SAVE EVENT**: A prominent green button at the bottom.
- Back to Dashboard**: A link below the save button.

Figure 13: Create event form filled in.

The screenshot shows the 'CREATE A NEW EVENT' form in the Event Pro dashboard. The form is set against a dark background with a light grid. At the top, a green success message reads: 'SUCCESS: Event created! [View Dashboard](#)'. Below this, the form fields are: 'EVENT TITLE' (text input), 'CATEGORY' (dropdown menu with 'Select a category...' selected), 'DATE' (text input with 'yyyy/mm/dd' placeholder and a calendar icon), 'LOCATION' (text input), and 'DESCRIPTION' (text area). A large green 'SAVE EVENT' button is at the bottom, with a 'Back to Dashboard' link below it.

Figure 14: Event successfully created.

The screenshot shows the Event Pro dashboard. The top navigation bar includes 'EVENT PRO', 'DASHBOARD', 'SEARCH', 'MESSAGE', and 'CREATE EVENT'. The user 'Lily Smith' is logged in. The main content area is divided into two columns. The left column, titled 'Welcome to your Dashboard!', contains links for '+ CREATE EVENT', 'SEARCH', and 'MESSAGE'. The right column, titled 'Security Checklist', lists five items with checkmarks: 'Prepared SQL statements for SQL injection prevention.', 'Output escaping to prevent XSS.', 'CSRF Tokens on forms.', 'Validated image uploads.', and 'Session protected pages.'. Below these columns is a section titled 'My Upcoming Events'. It features a card for 'Graduation Celebration 2026' with a tag 'Education'. The card details the date as 'December 12, 2027' and the location as 'Richfield, Bryanston Campus'. It includes a description: 'Join us to celebrate the graduation! Dress code is formal, remember to bring your student ID. The programme includes speeches, awards, group photos and refreshments.' At the bottom of the card are 'EDIT' and 'DELETE' buttons.

Figure 15: Event showing on the dashboard and showing the event before edit.

EVENT PRO

DASHBOARD

SEARCH

MESSAGE

CREATE EVENT

 Lily Smith

 LOGOUT

EDIT EVENT

EVENT TITLE

Graduation Celebration 2026

CATEGORY

Education

DATE

2027/12/12

LOCATION

Richfield, Bryanston Campus

DESCRIPTION

Join us to celebrate the graduation! Dress code is form, remember to bring your student ID. The programme includes speeches, awards, group photos and refreshments.

SAVE EDIT

[Back to Dashboard](#)

Figure 16: Event edit page.

EVENT PRO

DASHBOARD

SEARCH

MESSAGE

CREATE EVENT

 Lily Smith

 LOGOUT

EDIT EVENT

EVENT TITLE

Graduation Celebration 2026 (Updated)

CATEGORY

Education

DATE

2027/12/19

LOCATION

Wits Linder Auditorium, JHB

DESCRIPTION

Join us to celebrate the graduation! Dress code is form, remember to bring your student ID. The programme includes speeches, awards, group photos and refreshments.

SAVE EDIT

[Back to Dashboard](#)

Figure 17: Edit has been made.

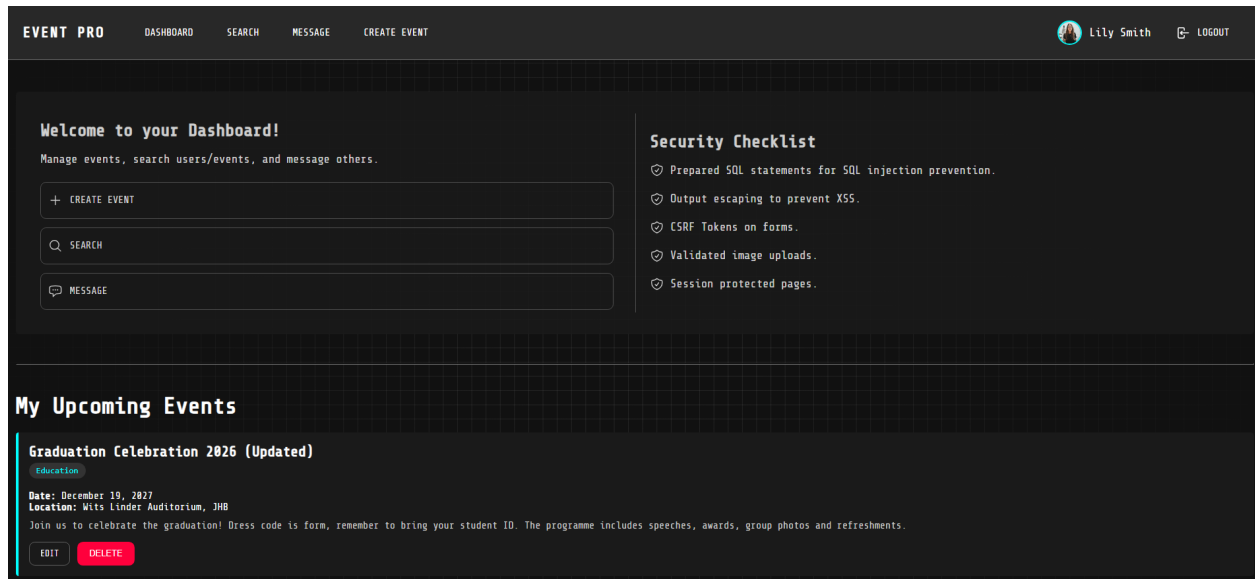


Figure 18: Edit was successfully made.

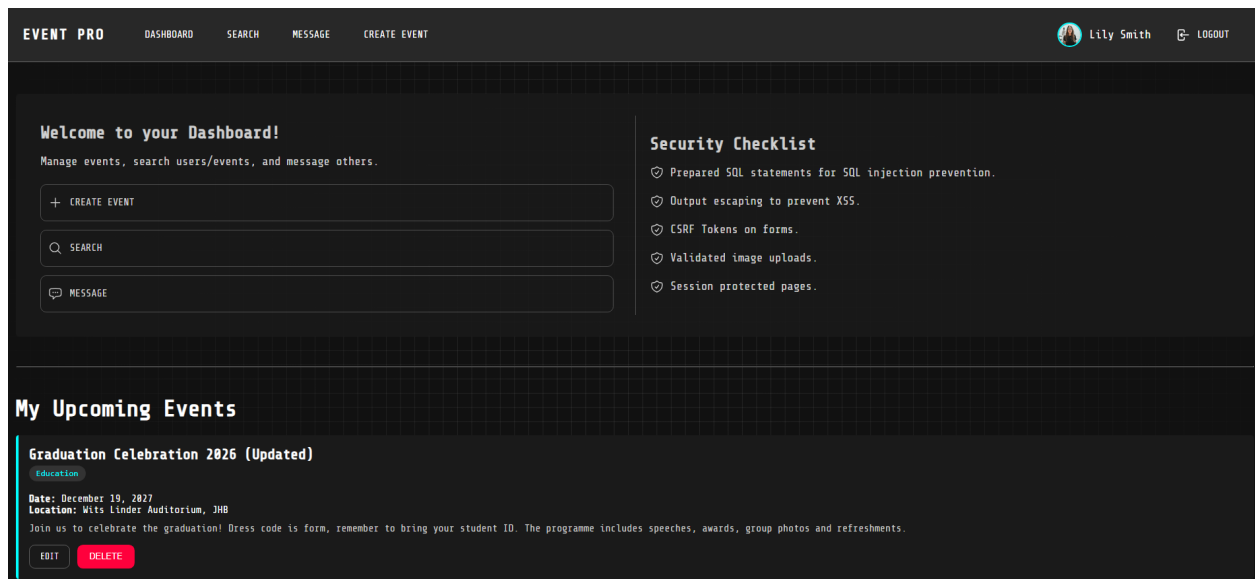


Figure 19: Event before delete.

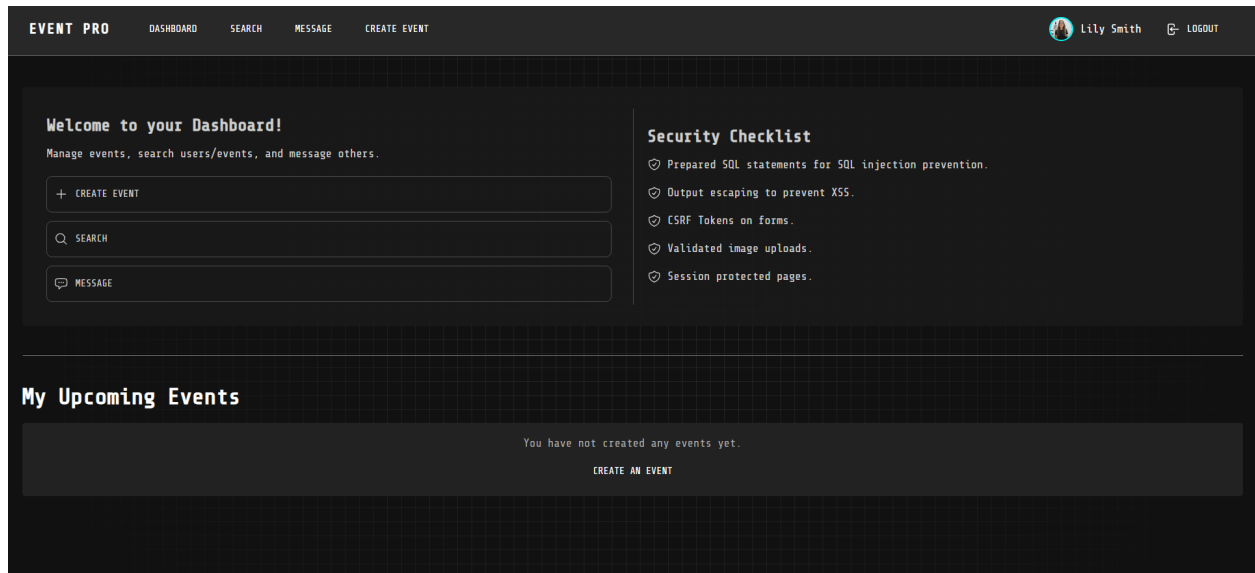


Figure 20: Event deleted success.

## Profile and Search Functionality

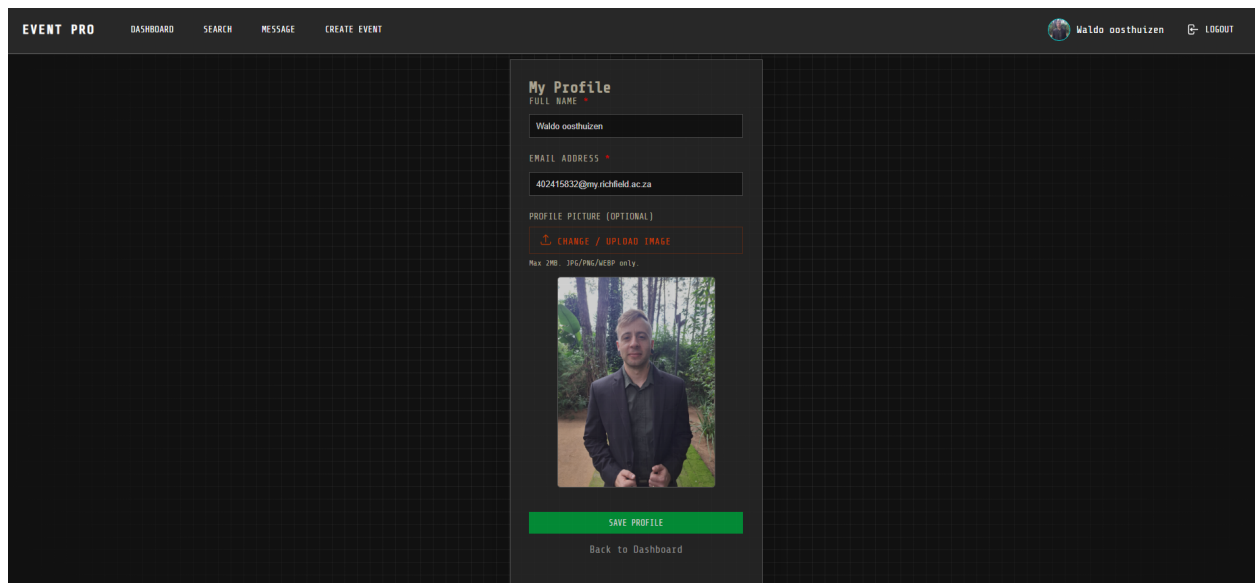


Figure 21: profile.php page.

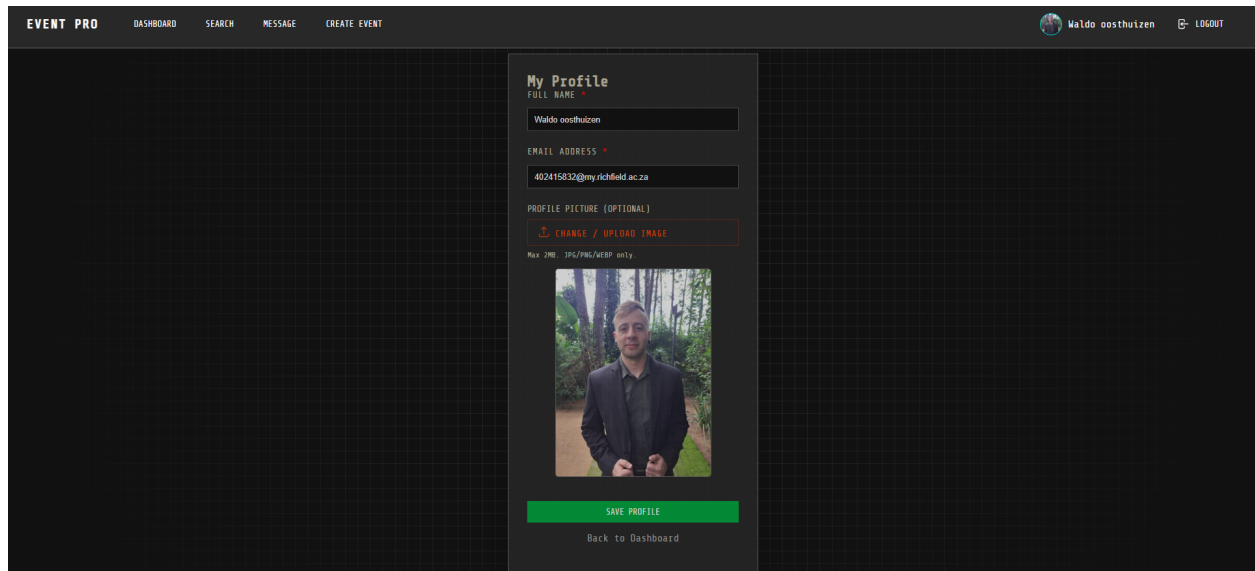


Figure 22: Profile before update.

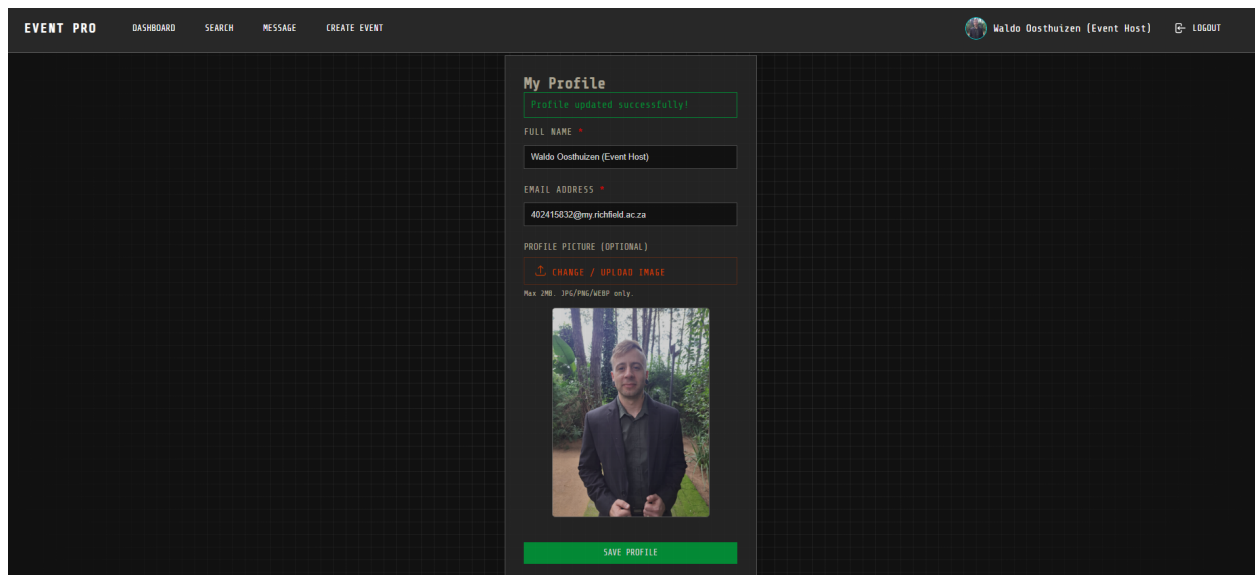


Figure 23: Profile after update.

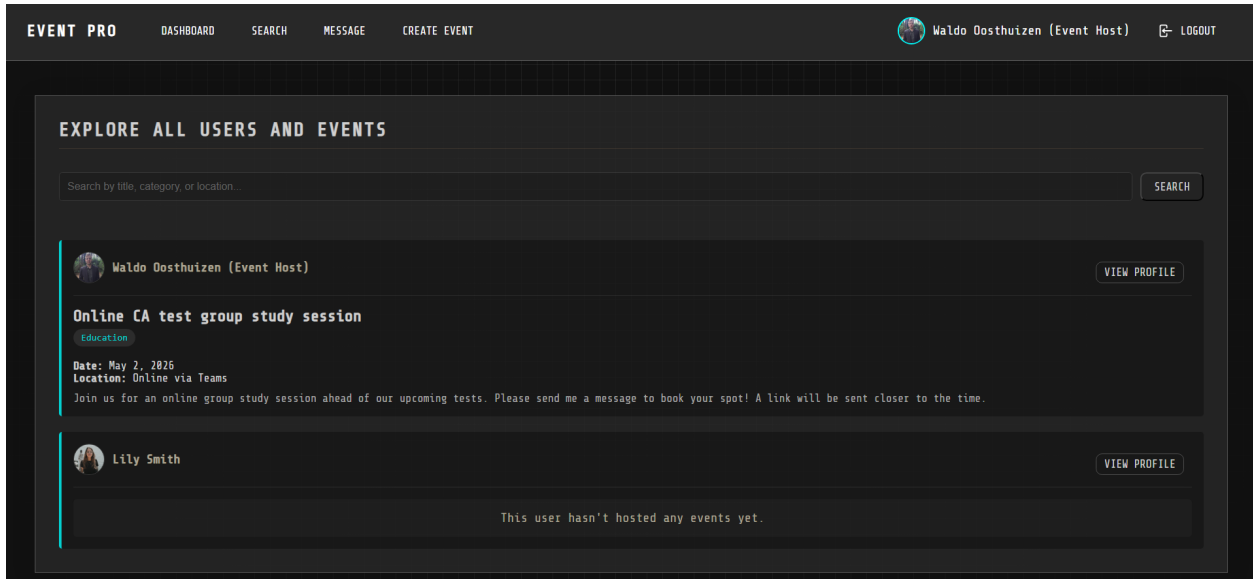


Figure 24: Search page (search.php).

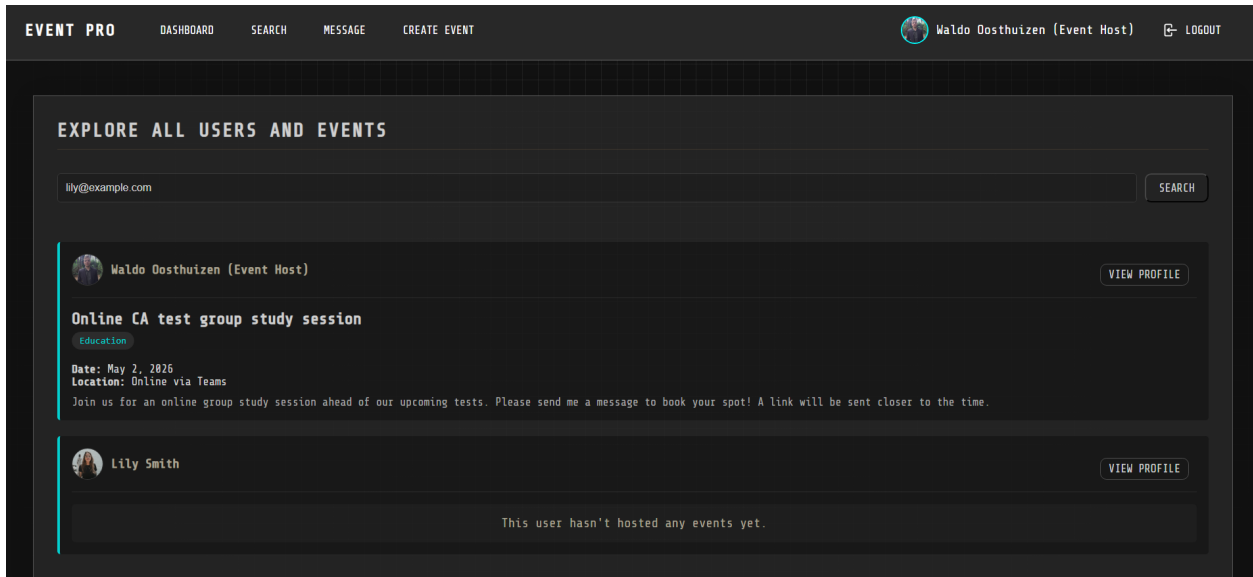


Figure 25: Search query entered.

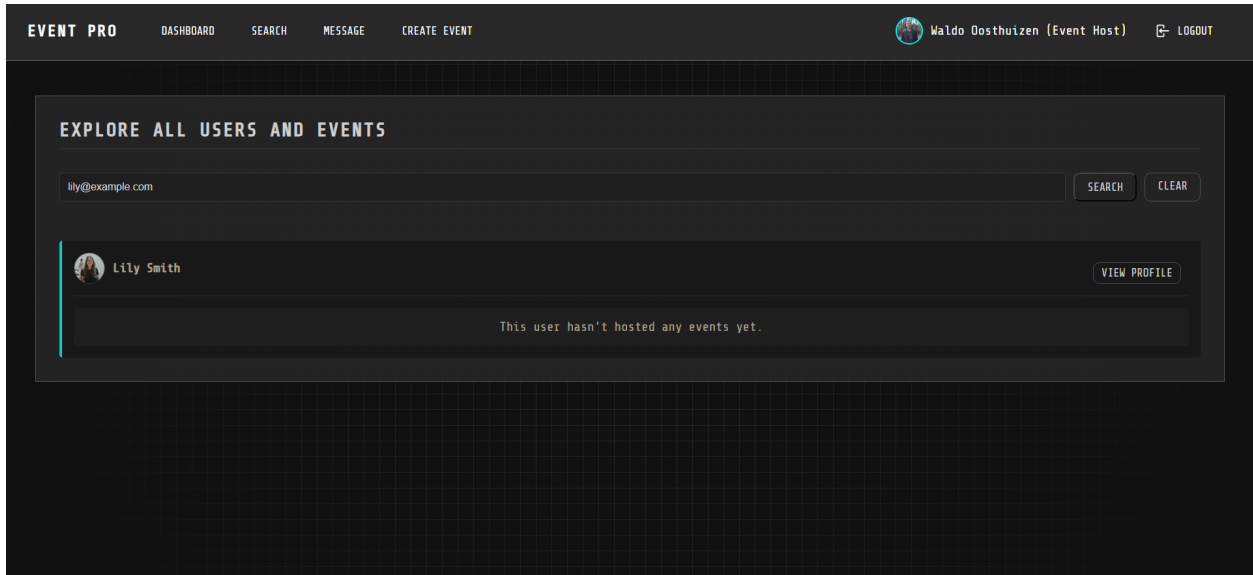


Figure 26: Search result

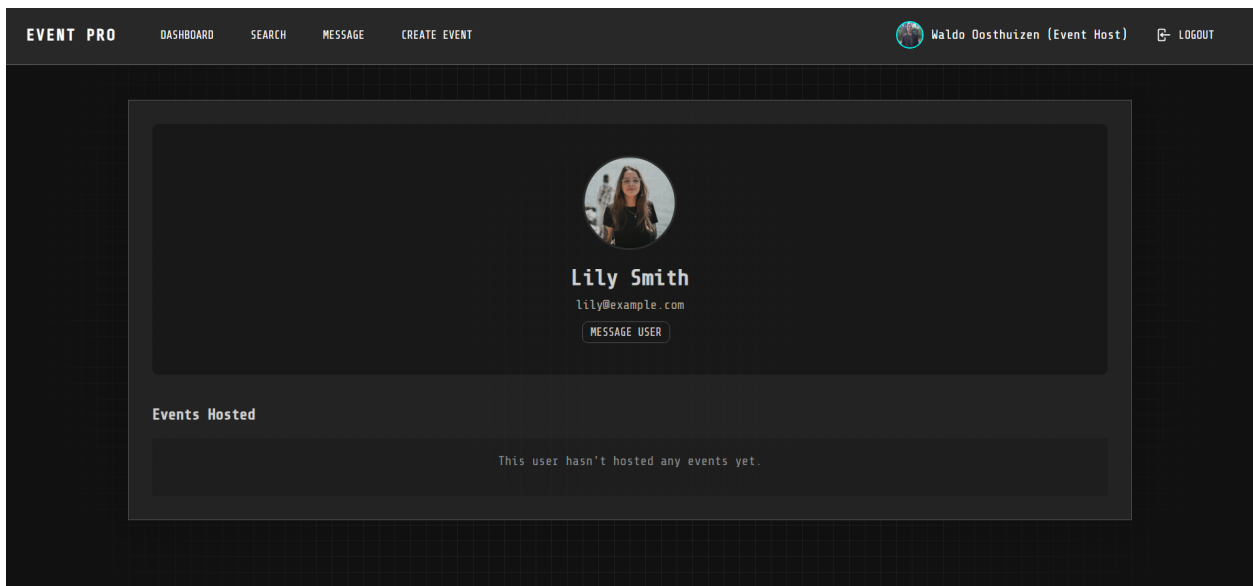
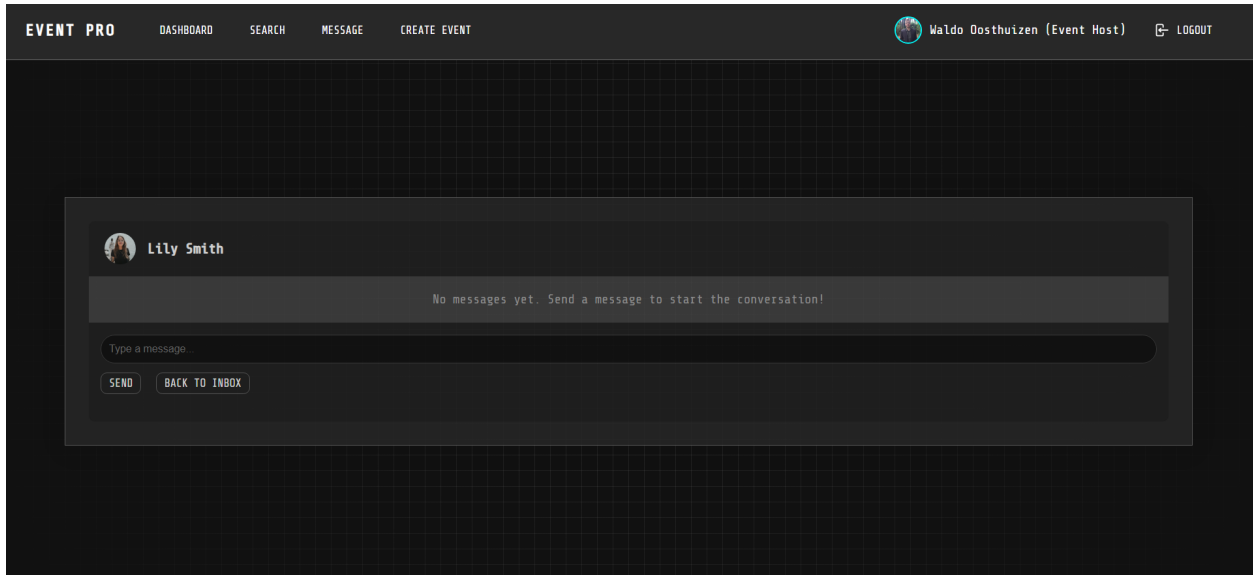
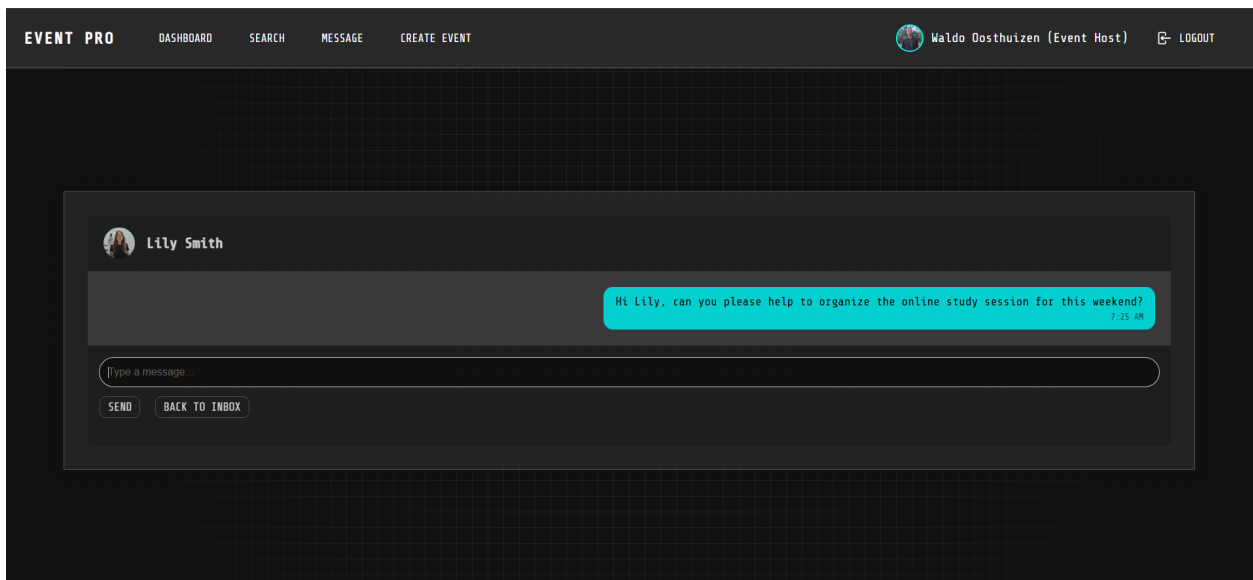


Figure 27: View other user's profiles.

## Private Messaging Functionality



*Figure 28: Message conversation page.*



*Figure 29: First user sent first message.*

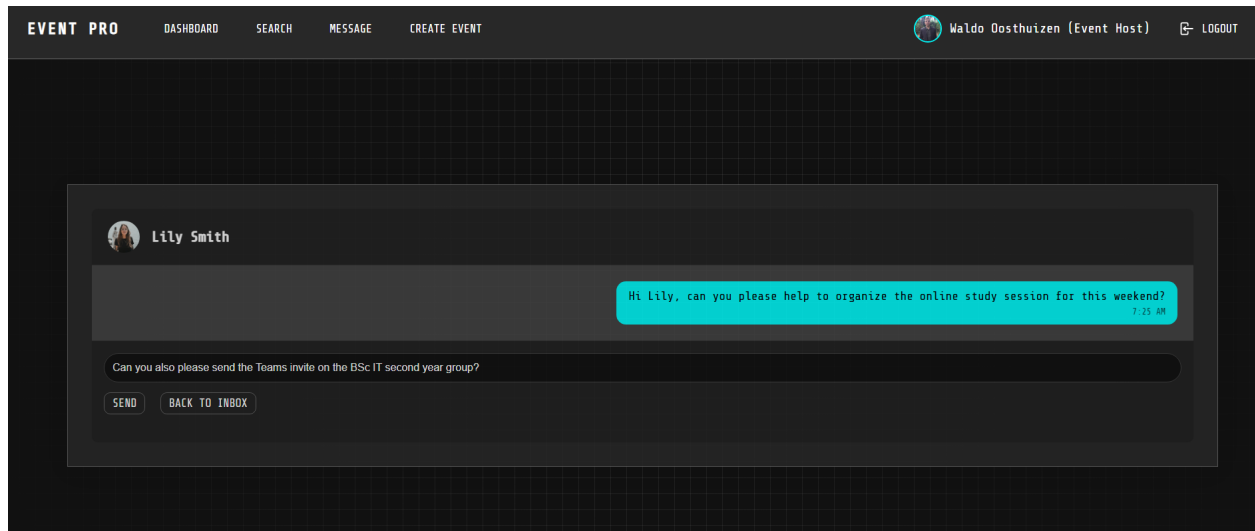


Figure 30: First user second message typed.

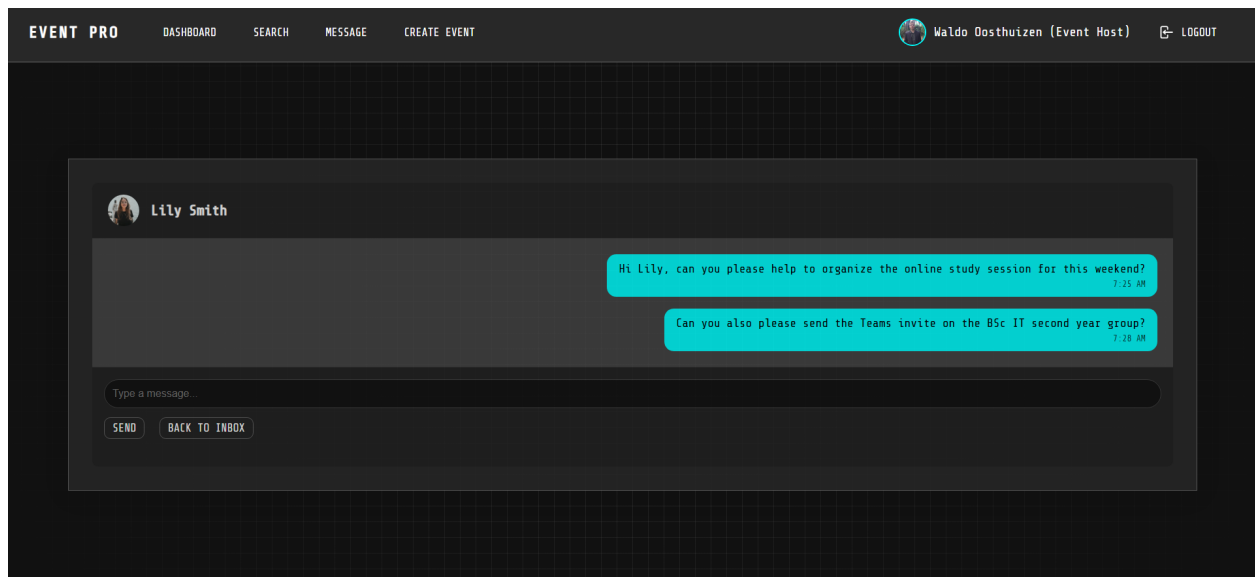


Figure 31: First user second message sent.

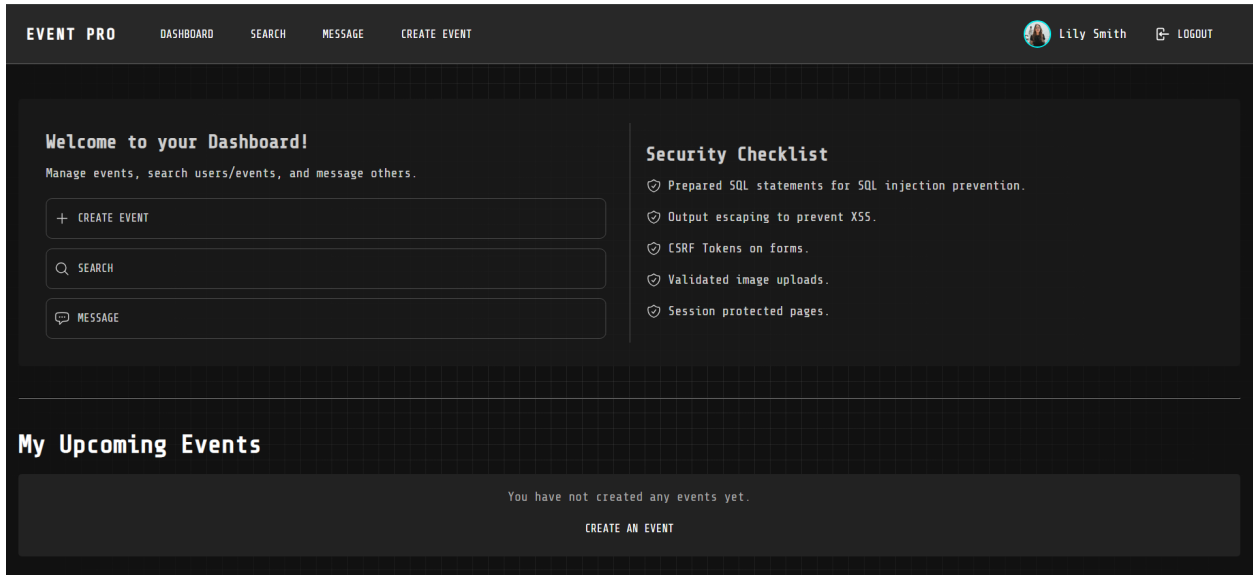


Figure 32: Second user's dashboard after message.

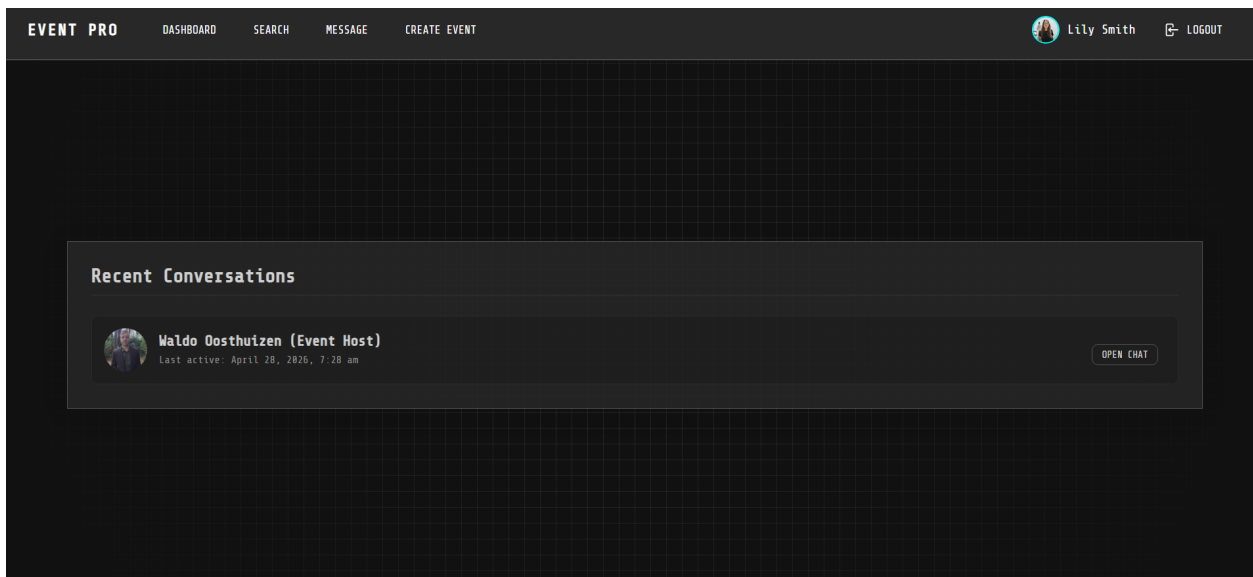


Figure 33: Second user's message page/ messages list.

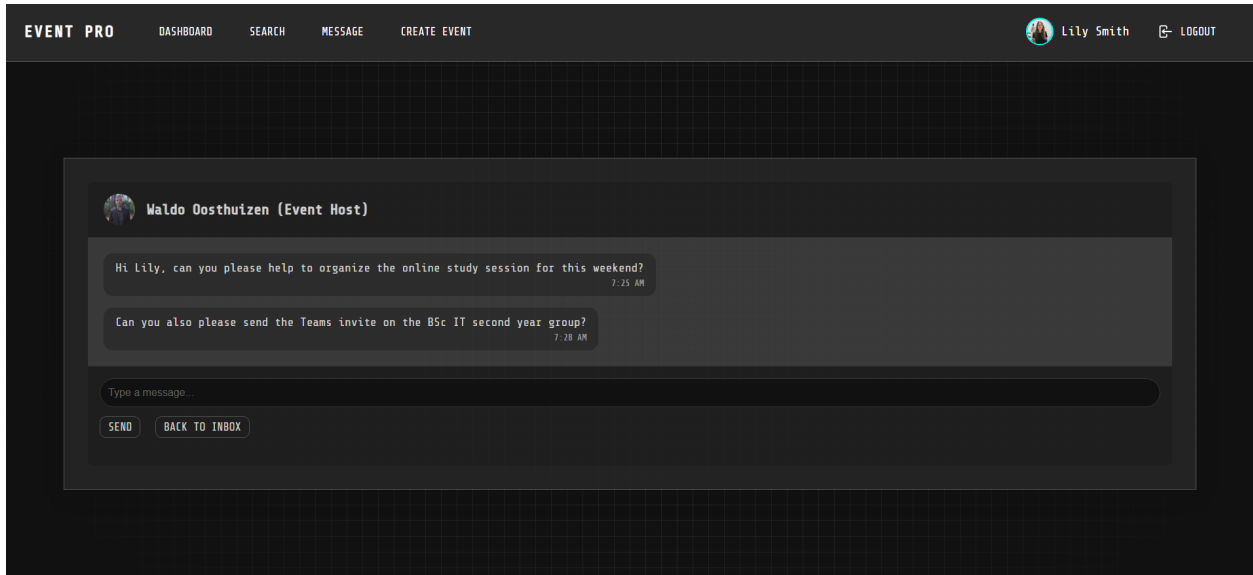


Figure 34: Second user conversation page.

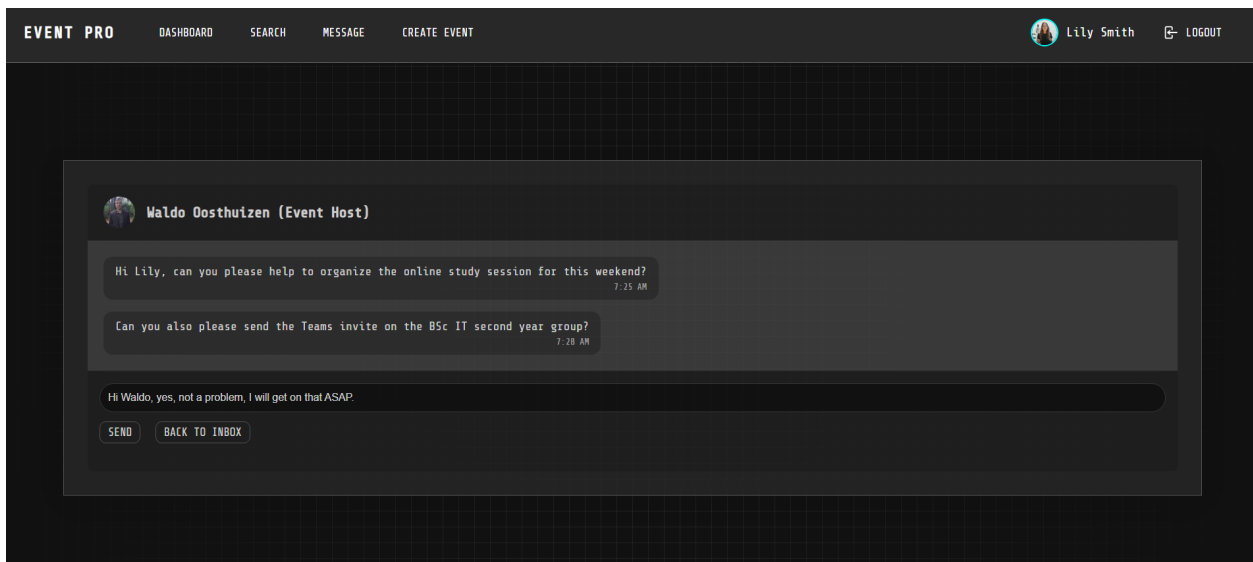


Figure 35: Second user typed message.

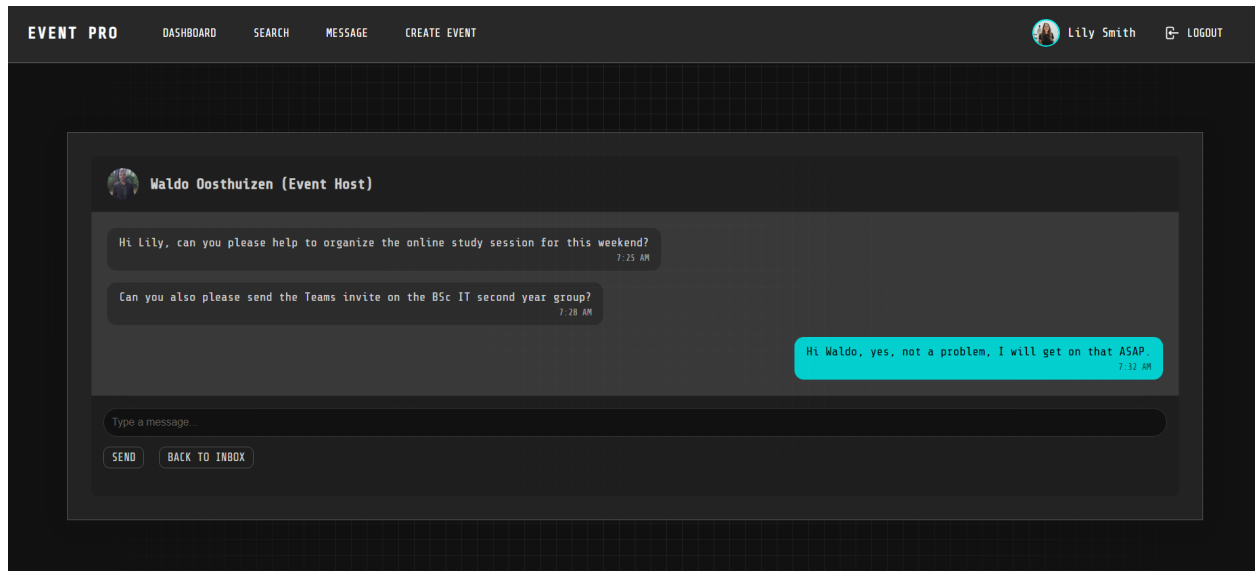


Figure 36: Second user reply sent.

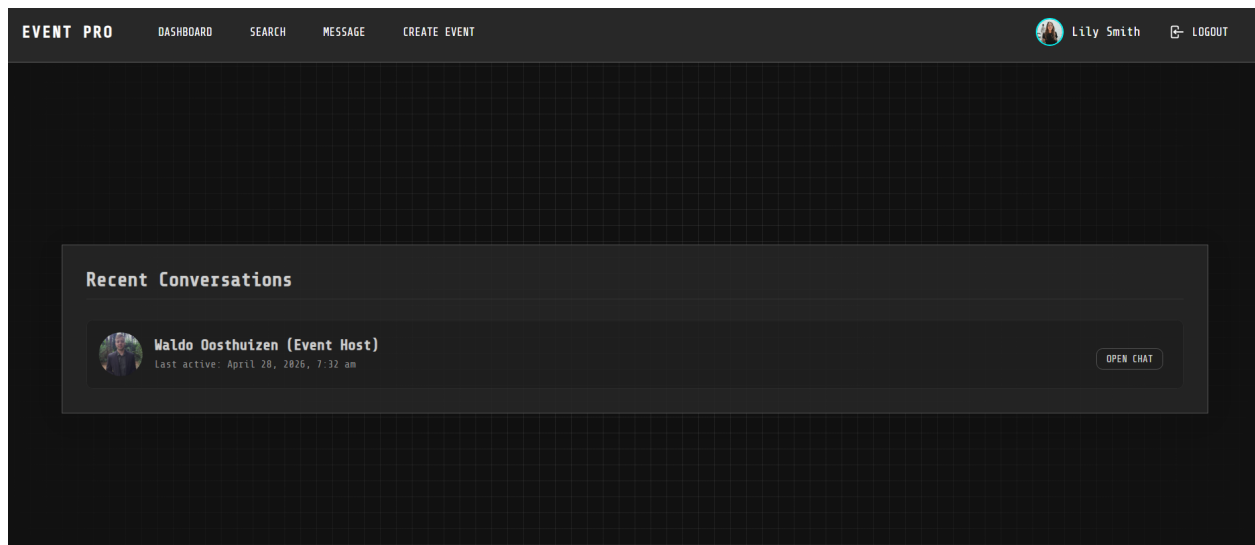


Figure 37: Second user conversation list last active time updated.

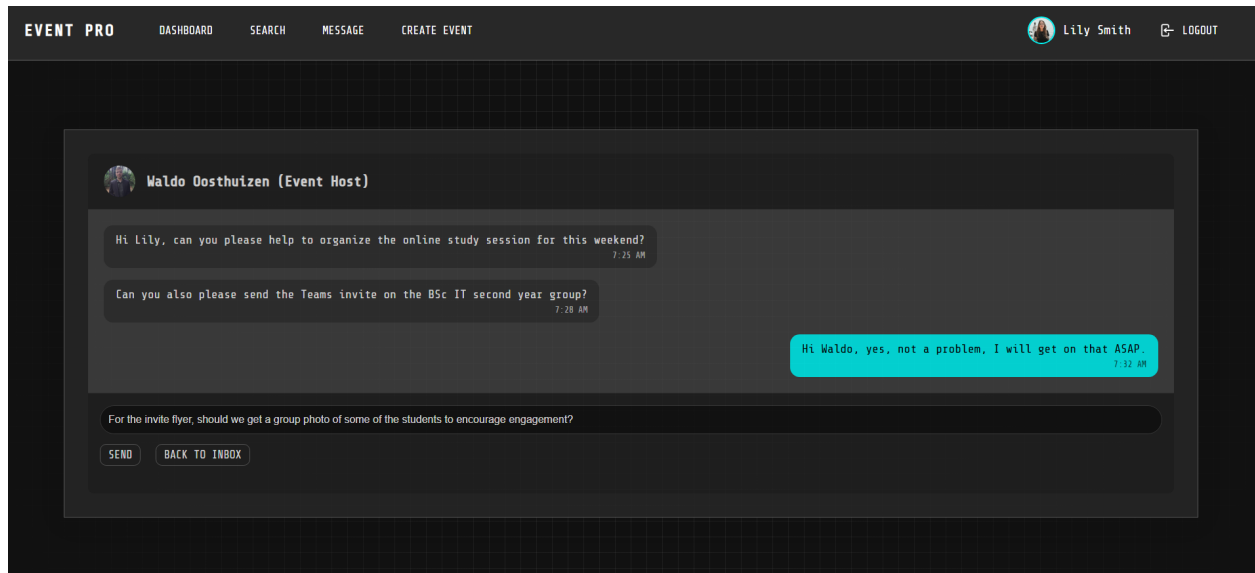


Figure 38: Second user, second reply typed.

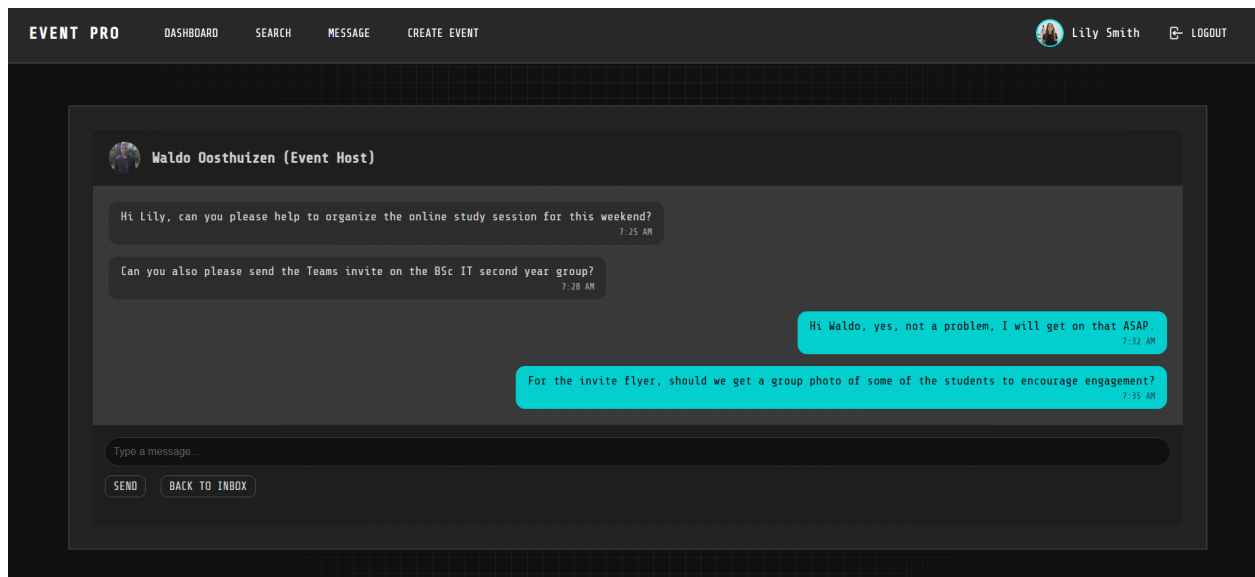
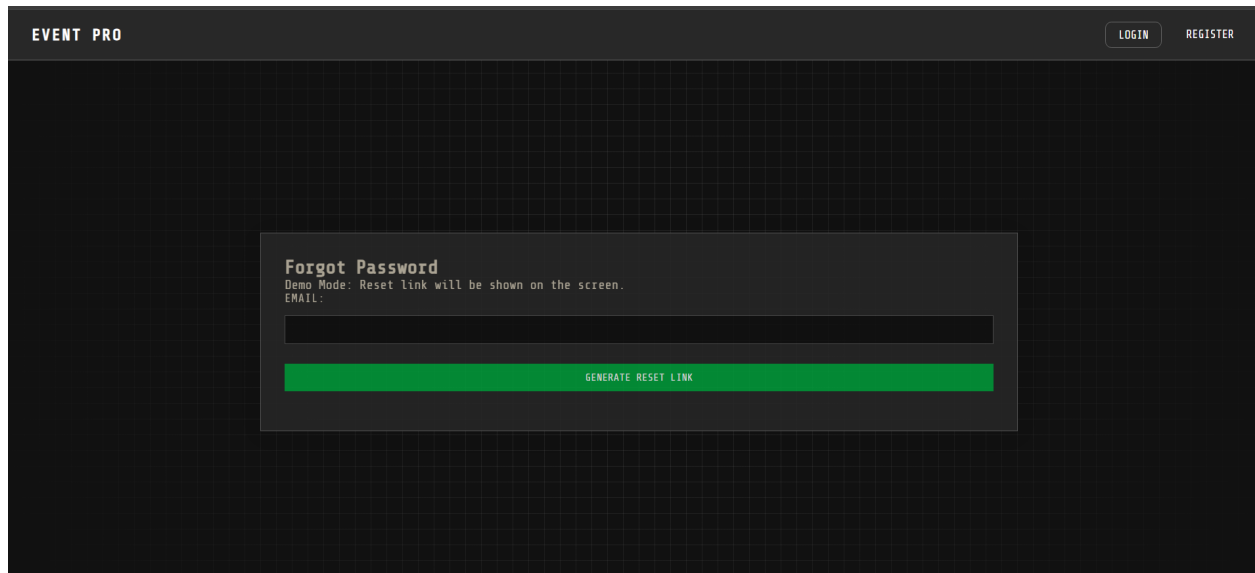
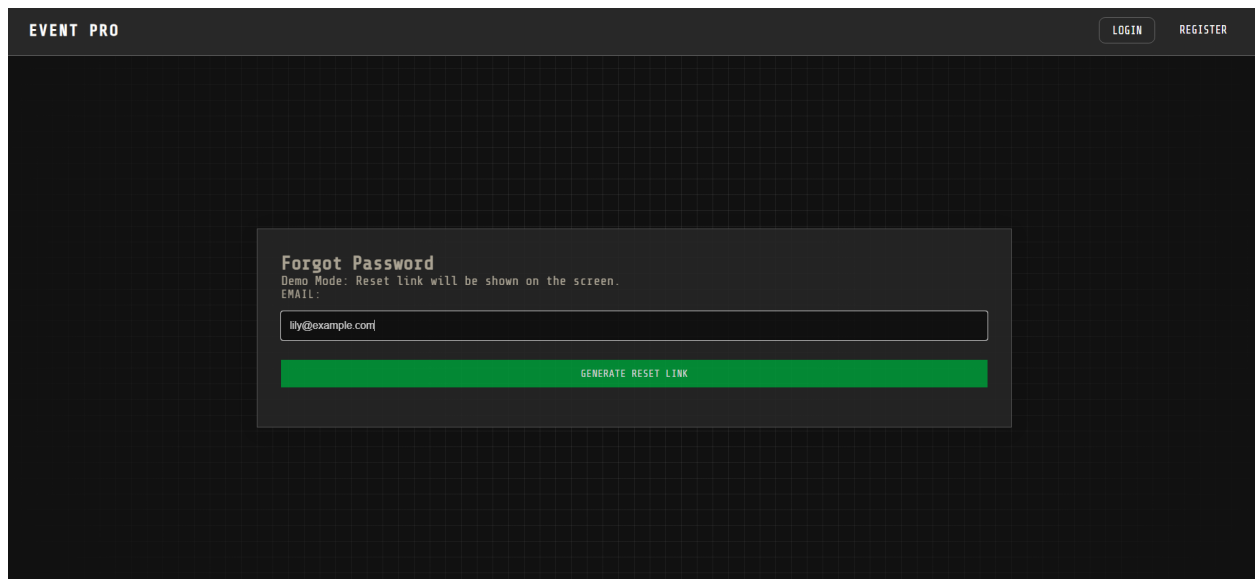


Figure 39: Second user, second reply sent.

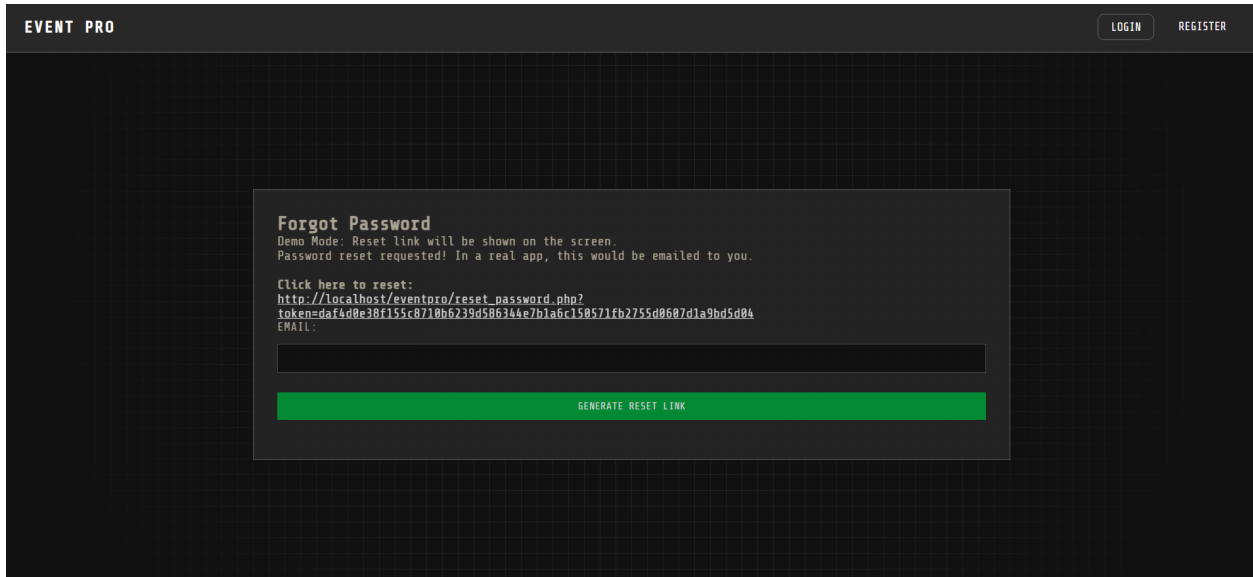
## Forgot Password Functionality



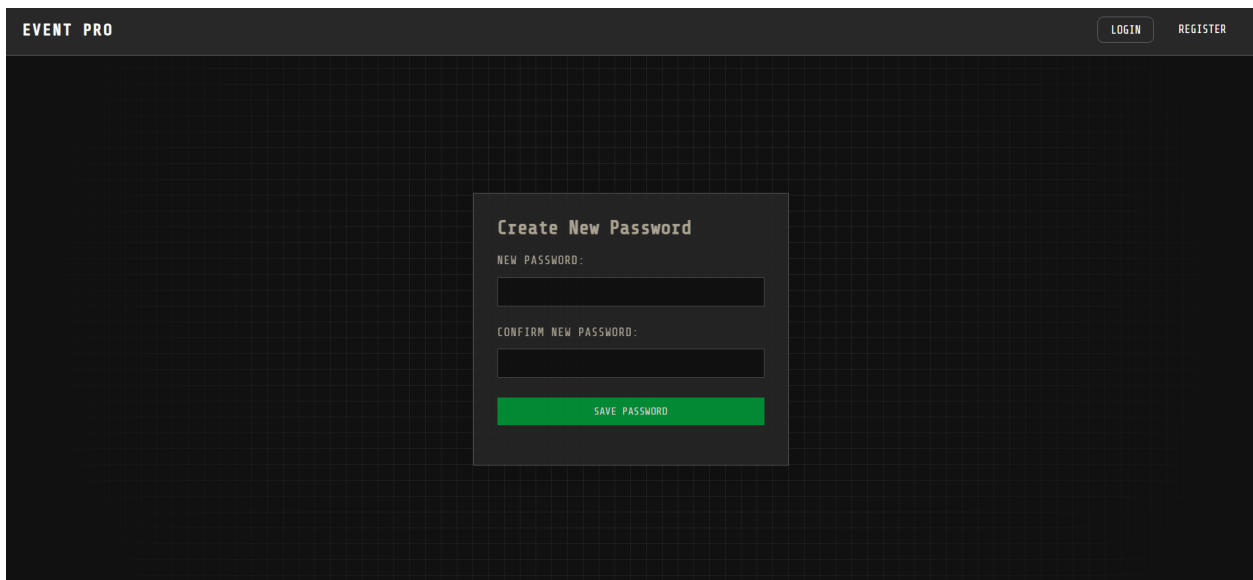
*Figure 40: Forgot password page.*



*Figure 41: Forgot password form filled in.*



*Figure 42: Reset link generated.*



*Figure 43: Update password link.*

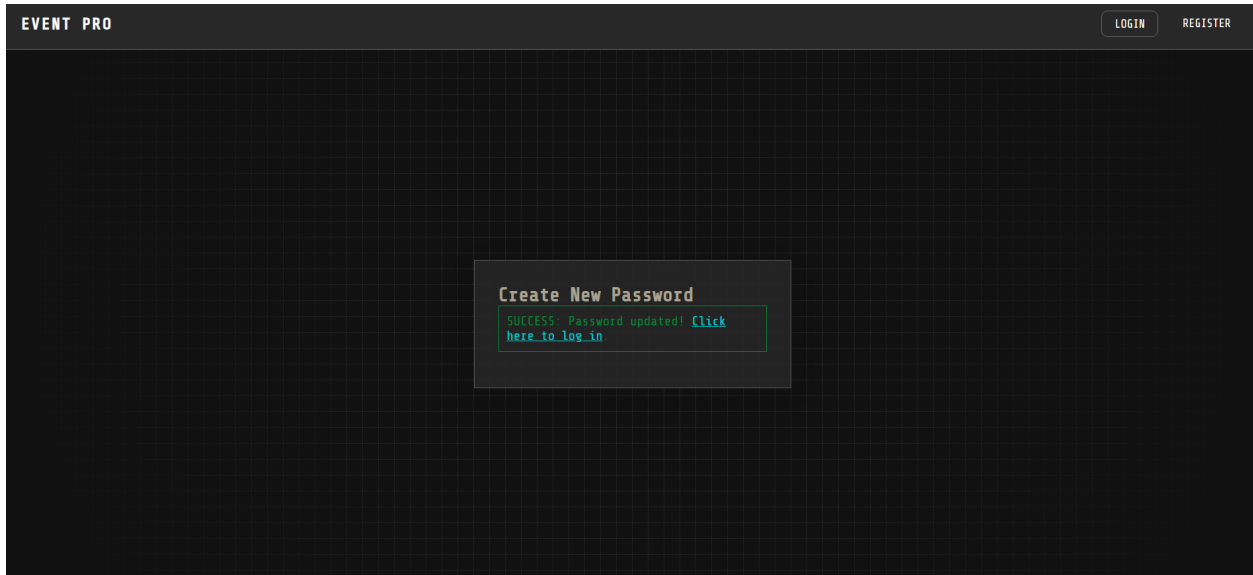


Figure 44: Password successfully updated.

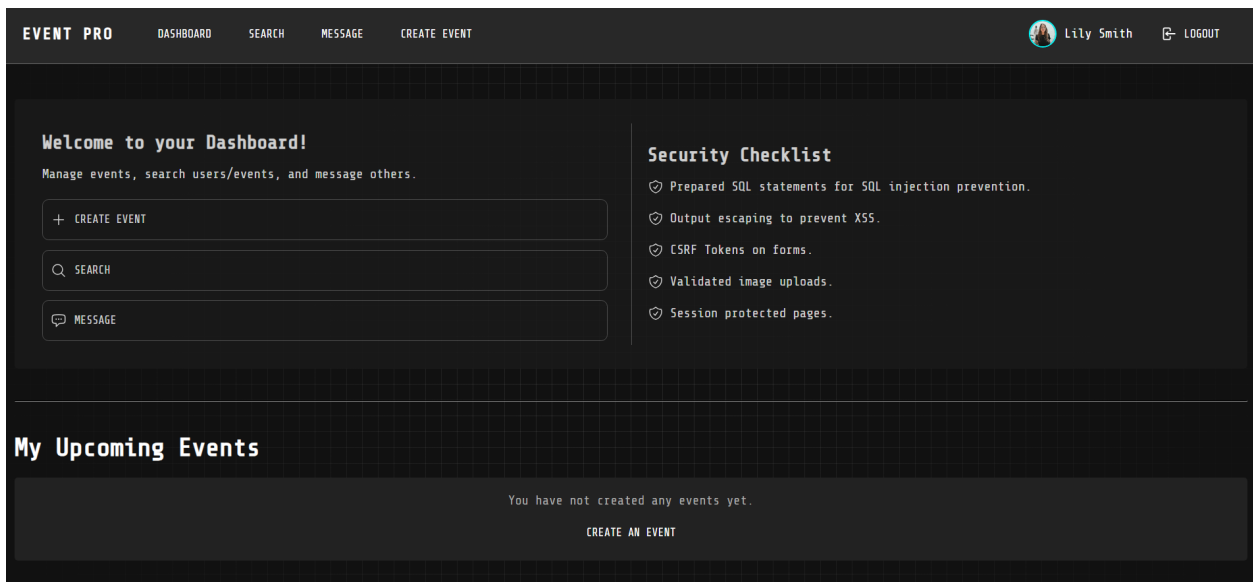
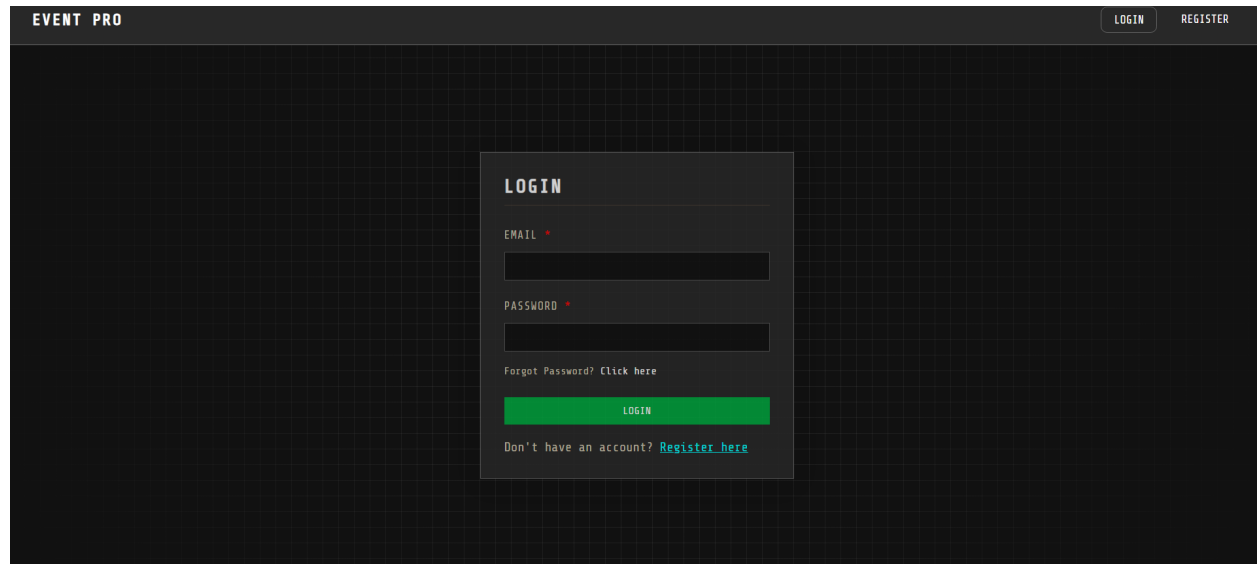


Figure 45: Dashboard after reset.



*Figure 46: User logged out.*

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Bro Code (2024). *PHP how to connect to MySQL database*. [online] YouTube. Available at: <https://www.youtube.com/watch?v=-1DTYAO25bY> [Accessed: 16 April 2026].

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dcode (2019). *Previewing Image Before File Upload On Websites - HTML, CSS & JavaScript Tutorial*. [online] YouTube. Available at: <https://www.youtube.com/watch?v=VElnT8EoEEM> [Accessed 19 Apr. 2026].

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