Employee Safety Management

Safe Tracker

(User Manual)

Comprehensive training management system for workplace safety and compliance. Track, monitor, and ensure your team's safety training requirements.

Christina Fington (24260355), Dani Thomas (24261923), Gayathri Kasunthika Kanakaratne (24297797), Manas Rawat (24004729), Siqi Shen (24117655), Wei Dai (24076678), Zhaodong Shen (24301655)

GROUP 1, UWA

Contents

1. Introduction:

The **Health, Safety & Wellbeing (HSW) Training Tracker** is a web-based application developed for the **Health, Safety and Wellbeing Department at the University of Western Australia (UWA)**. The platform is designed to centralize and simplify the management of health, safety, and well-being training records for staff, students, and contractors.

Previously, UWA's training data was scattered across multiple systems, such as the Learning Management System (LMS), TryBooking, and various external providers. This fragmented setup led to inefficiencies, manual tracking, and limited visibility into compliance and expiry statuses.

To address these challenges, the HSW Training Tracker consolidates all training information into a single, easy-to-use system. It enables users and administrators to manage, track, and review training completions and expiry dates in one place. The system provides key features such as **user and group management**, **training record management, and training management** - ensuring accuracy, efficiency, and compliance across the university.

The application supports **role-based access control**, where:

- **Administrators** can create and manage users, groups, and trainings, as well as upload or edit records and generate reports.
- **Regular users** can view their training records, upload external training evidence, and receive reminders for upcoming renewals. *(This feature is not currently implemented. This is future work.)*

Although all functionalities must be developed and tested in real-time environments, this provides a baseline structure for the tracker and its future scope. This **User Manual** delivers step-by-step guidance on navigating the system, managing user details and groups, viewing training records, creating trainings, and utilizing search functions effectively.

2. System Overview:

The **Health, Safety & Wellbeing (HSW) Training Tracker** is a web-based platform designed to streamline the management of safety and compliance training across the University of Western Australia (UWA). It provides administrators, supervisors, and users with a unified view of training completions, expiry dates, and compliance records.

2.1 Key Objectives

- **Centralization** - Consolidate training data from multiple sources such as LMS, TryBooking, and external certifications.
- **Automation** - Reduce manual tracking by automating expiry alerts and status updates. *(The alerts would be future work)*
- **Transparency** - Give users direct access to their training records and expiry information. Currently, only admins have access to the information.
- **Compliance** - Support UWA's adherence to health, safety, and legislative requirements.
- **Reporting** - Provide accurate, exportable reports to monitor training completion and compliance levels. *(This feature will also be considered future work)*

2.2 User Roles:

Role	Description	Key capabilities
Administrator	Manages users, groups, and trainings. Oversees compliance.	Create/edit/delete users, manage trainings, upload records, and view reports.
User	Regular staff or student accessing their own data.	View personal training records, upload external certificates, and check expiry status.

Table 1: User roles

2.3 Core Modules:

a) **User Management** - Create and maintain user profiles and access rights. Edit user details, roles, and other settings.

b) **Group Management** - Organize users into groups based on department, role, or training category. Create, edit, and delete groups.

c) **Training Management** - Maintain the master list of all trainings with expiry and type (Online, In-house, External). Keep the training records of users.

2.4 System Architecture:

The system is built using **Next.js** for the front-end interface and **Django** for the back-end framework.

Data is stored securely in a relational database and accessed through REST APIs. This architecture ensures scalability, maintainability, and a smooth user experience across all devices.

3. Getting Started:

This section guides new users and administrators through the initial setup and navigation process.

3.1 Accessing the system:

Once the server is up and running, and after clicking on the link provided while running the frontend server, the following page shows up in the browser.

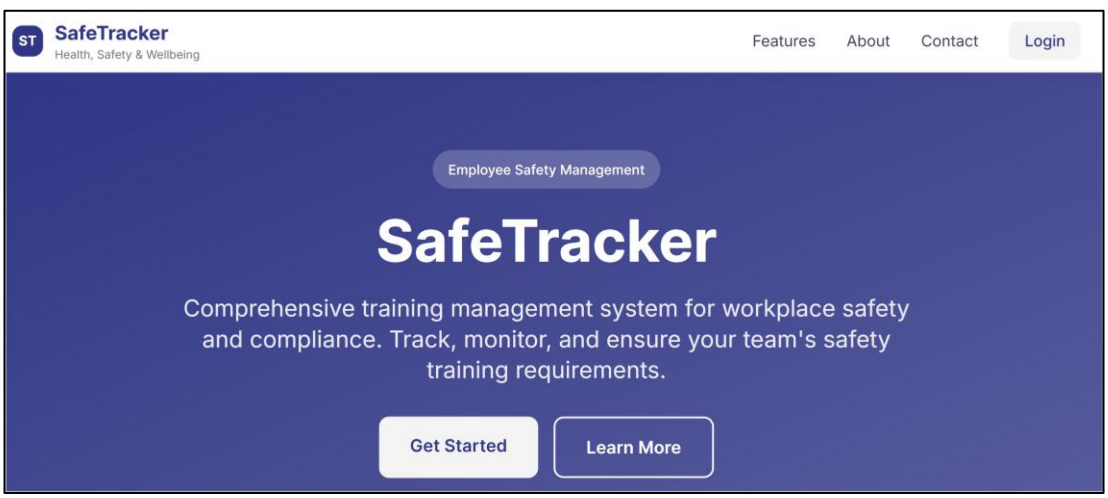

Figure 1: Safe Tracker home page

Click on login or ‘Get Started’ to get started and log in to the system.

Currently, since the UWA SSO (Single Sign On) is not integrated into the system, as well as due to the difficulty in getting access to the same, the current application just uses a placeholder and checks if the entered user ID is present in the database. If yes, then the user gets access to the system.

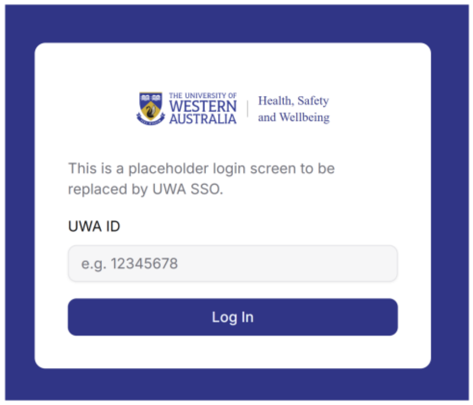

Figure 2: Login screen

3.2 Navigating the interface:

After logging in, you will arrive at the **Dashboard**. The main navigation bar includes the following tabs:

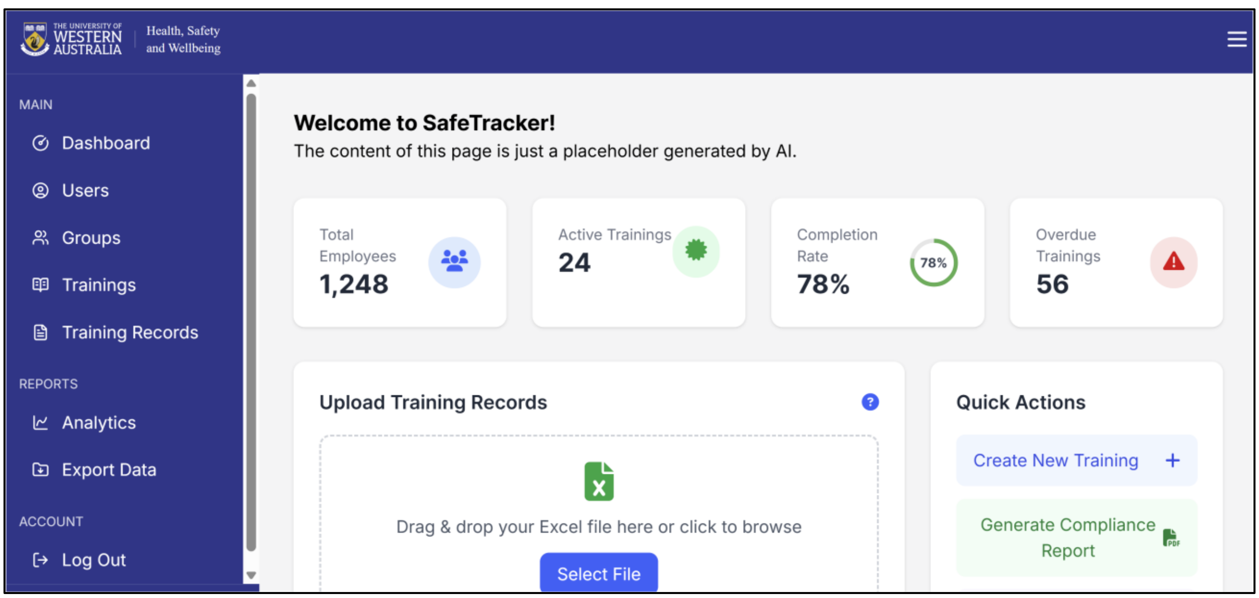

Figure 3: Dashboard overview

a) **Home / Dashboard** – Overview of your trainings, expiries, and reminders (placeholders for now).

b) **User Details** – View and edit User information. Link users to groups.

c) **Groups** – View your assigned groups and associated trainings. Add, edit or remove groups.

d) **Trainings** – View all available trainings and their statuses. Create, edit and remove trainings.

e) **Training Records** – View, edit, and add training records.

f) **Analytics** – Power BI integration (placeholder for now)

g) **Export data** – Export data as CSV (placeholder for now)

3.3 Logging out:

- To ensure data security, click the Logout button located in the top-right corner.
- Always log out after using a shared or public device.

4. User Interface Overview

The Health, Safety & Wellbeing (HSW) Training Tracker features a clean, intuitive, and role-based interface designed for easy navigation and efficient management of users, trainings, and compliance data.

Below is an overview of the main interface components of the web application.

4.1 User Management:

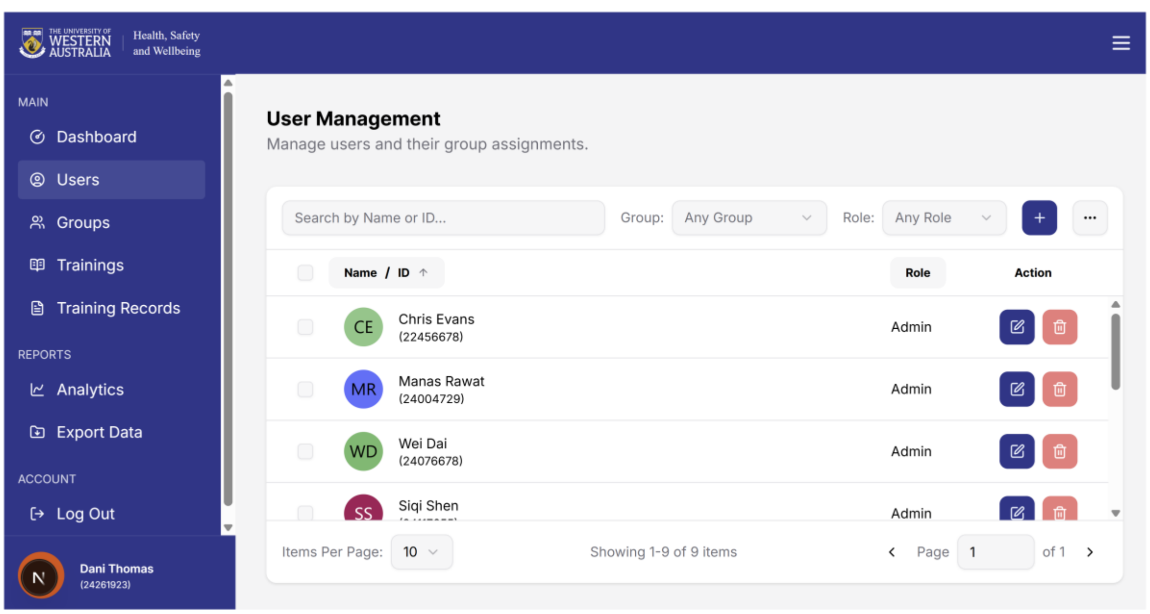

Figure 4: User Management

The User Management module allows administrators to manage users, assign them to groups, and control their access roles within the Health, Safety & Wellbeing (HSW) Training Tracker.

a) Overview

Located under the Users tab on the left sidebar, this page displays a searchable table of all registered users, along with their roles and actions that can be performed on each account.

Features	Description
Search Bar	Quickly find users by typing their name or UWA ID. The list updates dynamically as you type.
Group Filter	Use the dropdown to filter users by group (e.g., CSSE Staff, Contract Staff, Student).
Role Filter	Filter users by role, such as *Admin* or *Viewer*.
Add User (+)	Opens a dialog box where you can create new users, either one at a time (Single Mode) or through batch upload (Batch Mode).
Edit User ( )	Opens the edit form to modify User role, aliases, or group assignments.
Delete User ( )	Removes a user record from the system after confirmation
Bulk Actions (...)	Perform actions on multiple selected users, such as assigning them to or removing them from a group. *(Discussed at the end of this manual)*
Pagination	Navigate between pages or adjust the number of records displayed per page.

Table 2: User Management features

b) Creating a User

- Click the "+" button on the top-right corner of the User Management panel.
- In the **Create User** dialog box, choose one of the following modes:
  - **Single Mode:** Enter *UWA ID* and *Full Name* manually.
  - **Batch Mode:** Upload a CSV/XLSX file containing multiple users.
- Check '**Add to current selection'** if you want to include the newly created users for further action immediately.
- Click **Create** to confirm.

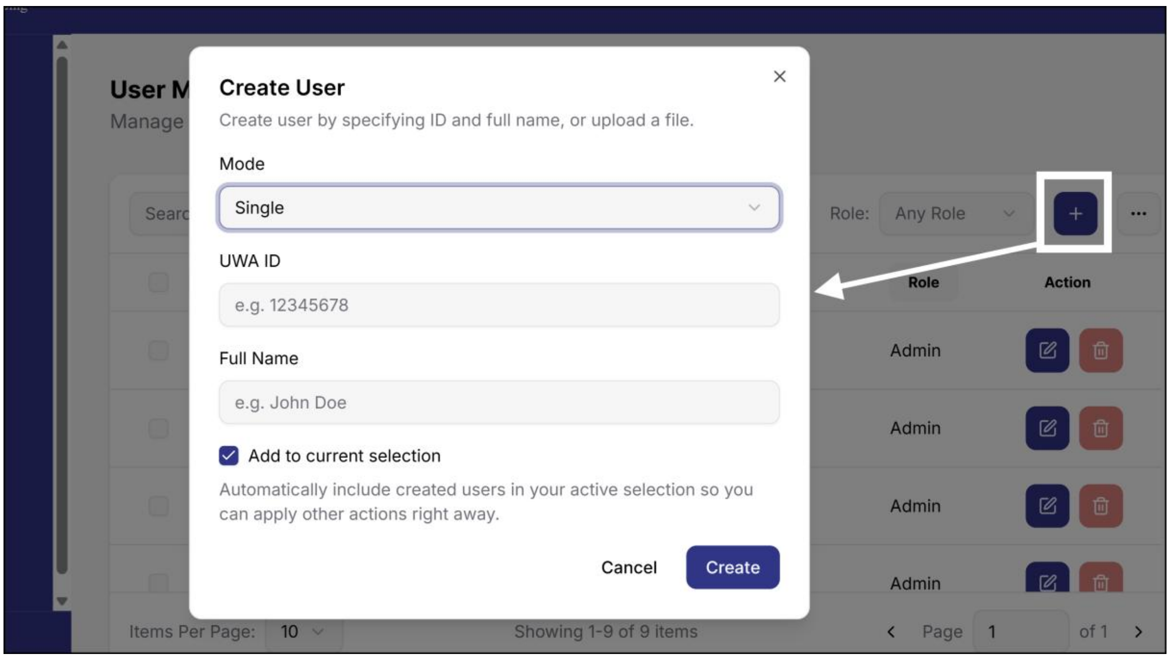

Figure 5: Creating a user

c) Editing a User:

- Click the **Edit** ( ) button next to a user.
- In the Edit User window, you can:
  - **Update** the name or aliases.
  - **Change** the role (e.g., from Viewer to Admin).
  - **Modify** group assignments by selecting or deselecting groups.
- Click **Save** to apply the changes.

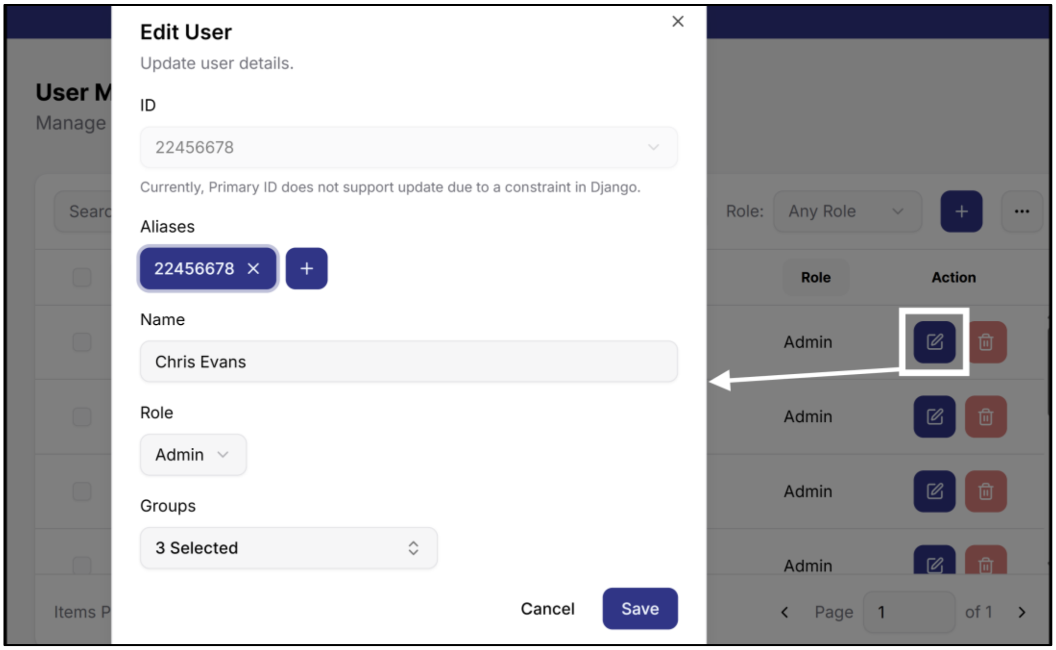

Figure 6: Edit user

- Similarly, a user can be deleted using the Delete ( ) button, which asks for confirmation and deletes the user upon clicking '**Delete**'.

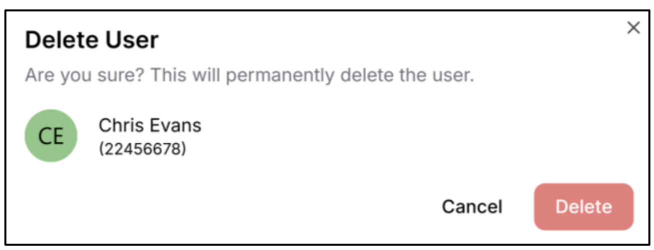

Figure 7: Delete User

d) Assigning Users to a Group:

- Select one or more users using the checkboxes beside their names.
- Click the **More Options** (···) button and choose **Assign to Group**.
- In the pop-up window, select one or more target groups (e.g., CSSE Staff, Contract Staff).
- Click **Assign** to complete the action.

Note: If users are already in the selected groups, the system will ignore duplicates.

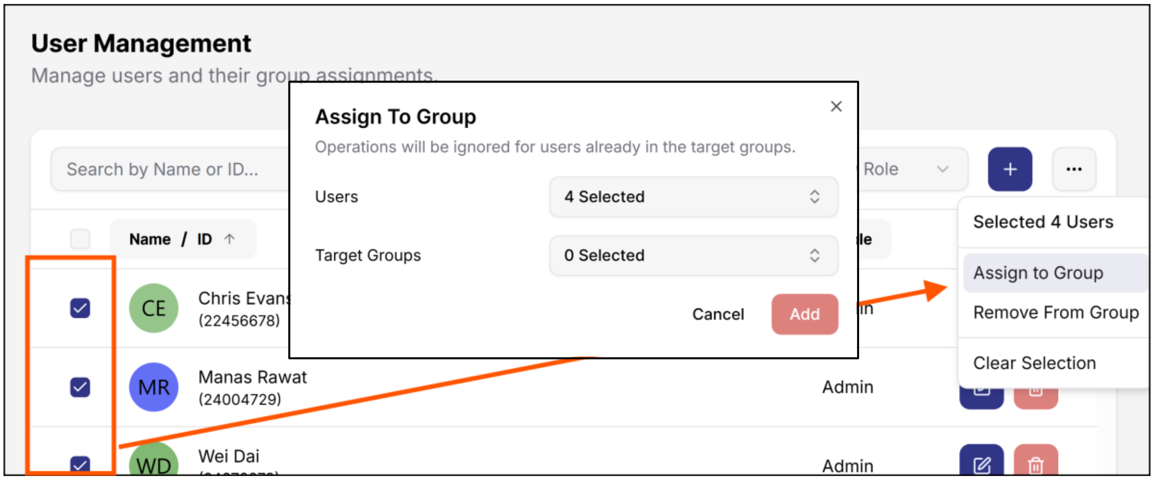

Figure 8: Assigning to a group

Removing Users from a Group

- Select users from the list.
- Click **More Options** (···) → **Remove from Group**.
- Choose the target groups to remove users from.
- Click **Remove** to confirm.

e) Viewing User Details

Clicking on a **user's name** in the list opens the User Detail page, where you can view all assigned training and their current completion status.

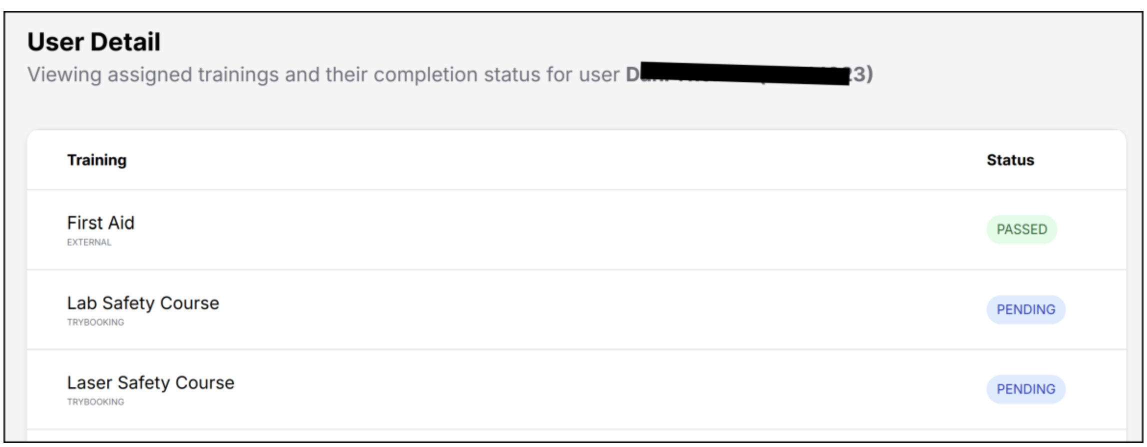

Figure 9: User detail page

The User Detail page provides a complete overview of a selected user's training progress and assigned learning requirements.

This page displays:

- The **user's name** and **UWA ID** are at the top.
- A table listing all **assigned trainings** with their type and **status** (Pending, Passed, Failed, Expired)

4.2 Group Management:

The Group Management module allows administrators to organize users into groups and associate those groups with specific training requirements.

Groups are typically defined by role or department (e.g., *CSSE Staff*, *Contract Staff*, *Students*) to make it easier to assign mandatory trainings and manage compliance efficiently.

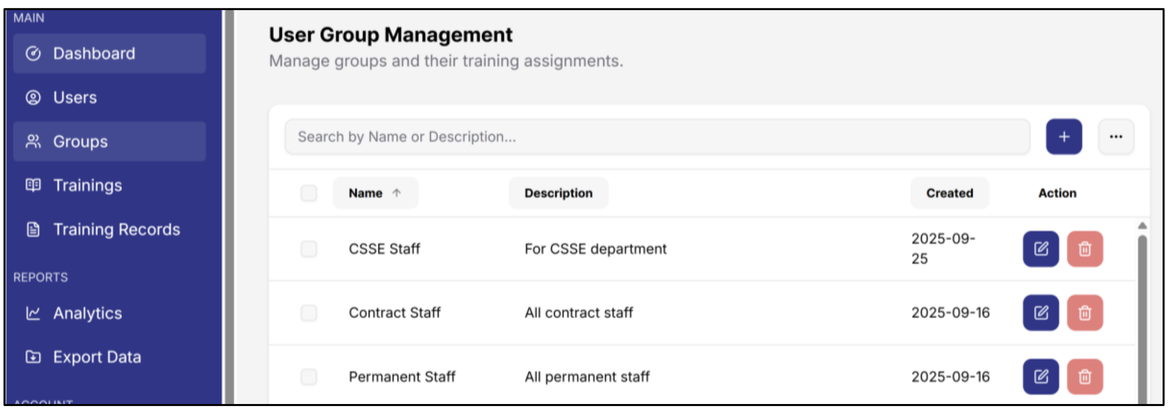

Figure 10: Group Management

a) Overview

Located under the Groups tab in the left sidebar, the User Group Management page displays a list of all created groups, along with their descriptions, creation dates, and management actions.

Features	**Description**
Search Bar	Quickly find a group by typing its name or description.
Add Group (+)	Opens a dialog box to create a new group and define its description and associated trainings.

Edit Group ( )	Opens the selected group's properties for modification (name, description, trainings).
Delete Group ( )	Permanently removes a group after confirmation.
Bulk Actions (…)	Allows administrators to select multiple groups and assign or reassign training in bulk.
Pagination	Navigate through the list and adjust the number of groups displayed per page.

Table 3: Group Management features

b) Creating a group:

- Click the "+" button on the top-right corner of the Group Management panel.
- In the **Create Group** window:
  - **Name:** Enter a descriptive name (e.g., *CSSE Staff*).
  - **Description:** Add a short explanation (e.g., *for CSSE department training*).
  - **Associated Trainings:** Select one or more trainings from the dropdown list (e.g., *Fire Warden Training*, *First Aid*).
- Click **Create** to save the new group.

Note: Once created, the group will appear in the table with its creation date.

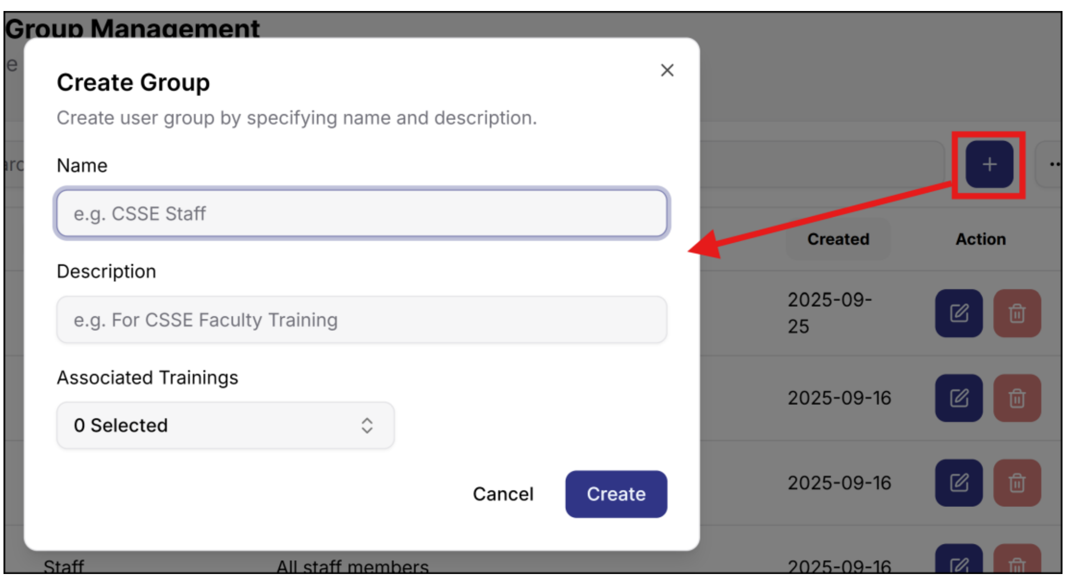

Figure 11: Create new group

c) Editing a Group:

- Click the Edit () button beside the group name.
- Update any of the following fields:
  - **Name** or **Description**
  - **Associated Trainings** (you can add or remove linked training)
- Click **Update** to save changes.

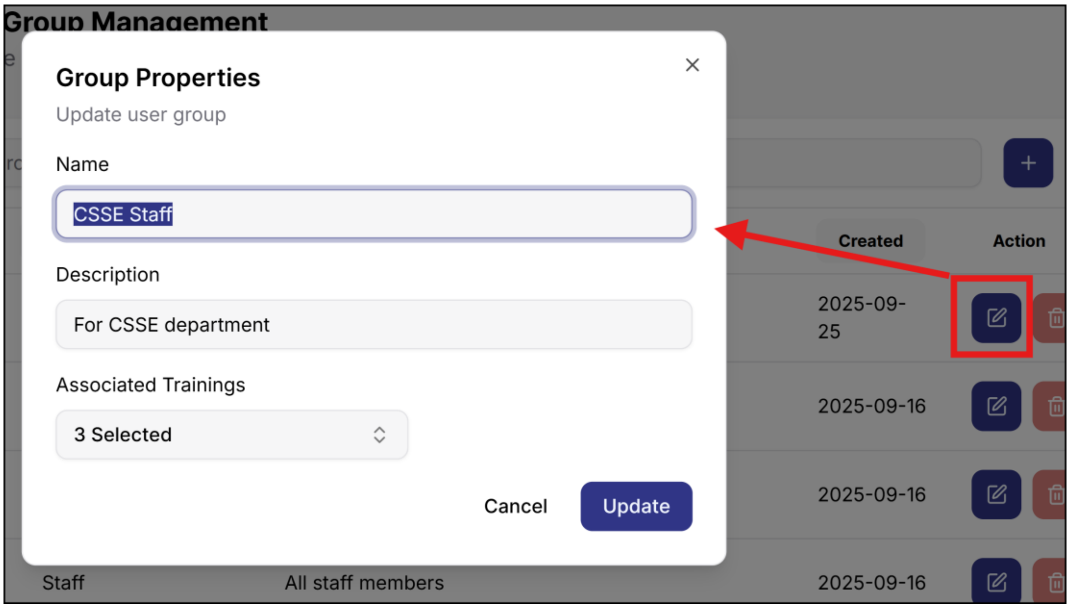

Figure 12: Edit Group

d) Deleting a Group:

- Click the Delete () button next to the group.
- Confirm the deletion in the Delete Group dialog box.

  Caution: This action is permanent and will remove the group and its training associations.
- Click Delete to proceed.

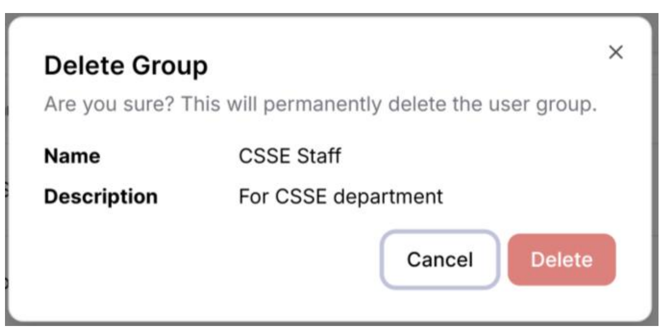

Figure 13: Delete a group

e) Assigning Training to a Group:

This feature lets administrators assign one or more training to multiple groups simultaneously.

- Select multiple groups using the checkboxes.
- Click the **More Options** (…) button and choose **Assign to Training**.
- In the pop-up window:
  - Verify the number of selected groups.
  - Select one or more **Target Trainings** to assign.
- Click **Add** to confirm.

The selected training courses will be linked to all selected groups.

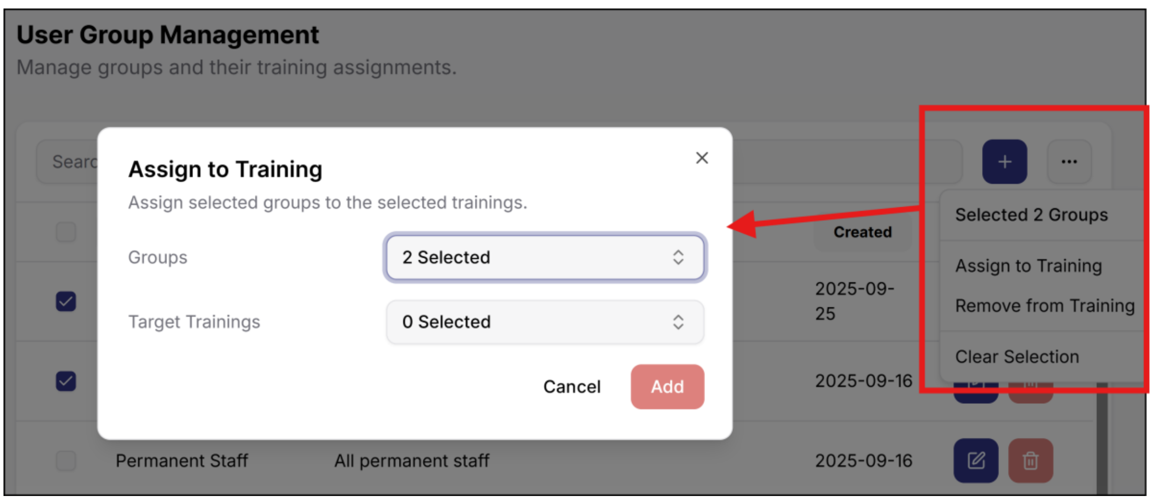

Figure 14: Assigning training to groups

f) Removing Training from Groups

- Select the desired groups from the list.
- Click More … Options ( ) → Remove from Training.
- Select the training you wish to remove.
- Click Remove to complete the operation.

4.3 Training Management:

The **Training Management** module allows administrators to create, edit, and organize all training courses offered under the Health, Safety & Wellbeing (HSW) framework. Each training record defines its name, description, type (e.g., LMS, TryBooking, External), expiry policy, and required completion score (Only for LMS type).

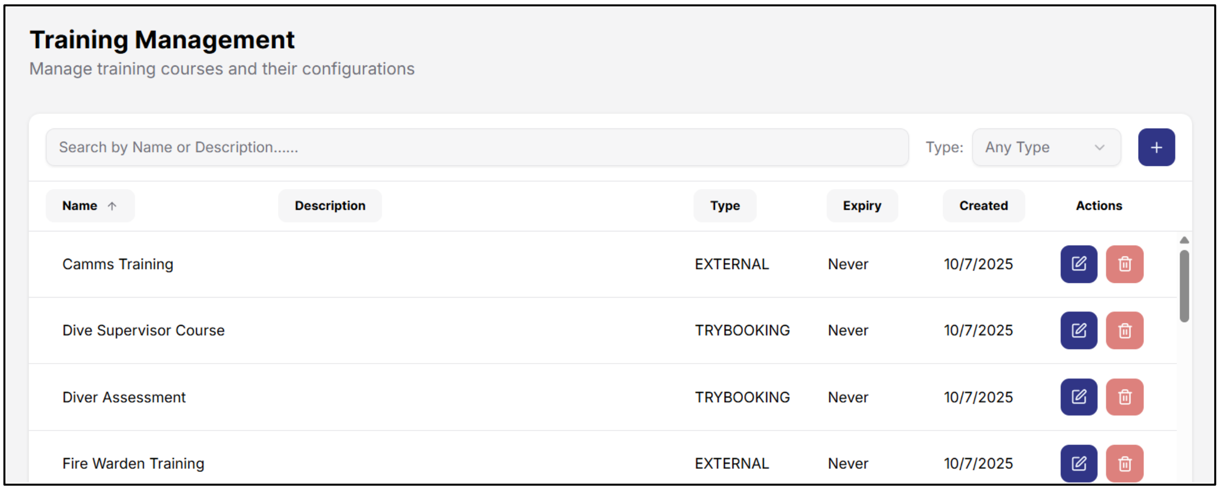

Figure 15: Trainings page

a) Overview

Accessible from the **Training** tab on the sidebar, the **Training Management** page lists all training courses available in the system. Administrators can use this page to manage training configurations and ensure each course is properly linked to relevant groups or users.

Features	Description
Search Bar	Quickly find a group by typing its name or description.
Type Filter	Filter trainings based on type — *LMS*, *TryBooking*, or *External*.
Add Training (+)	Create a new training course and define its expiry and completion criteria.
Edit Training ( )	Update the details of an existing training.

Delete Training ( )	Permanently remove a training course after confirmation.
Sort	Click the Name header to toggle between ascending and descending alphabetical order.
Pagination	Navigate through the list and adjust how many trainings are displayed per page.

Table 4: Training Management Features

b) Training Types:

Features	Description
LMS	Online module delivered via the Learning Management System (requires score-based completion).
TryBooking	Internal in-person or event-based training tracked through attendance data.
External	Externally provided training where users upload completion certificates as evidence. *(Currently, no upload is supported; future work)*

Table 5: Training Types

c) Creating a Training:

- Click the "+" button on the top-right corner of the page.
- In the Create Training dialog box, fill in the following fields:
  - **Name:** Enter the training name (e.g., Laboratory Safety Training).
  - **Description:** Provide a short description (e.g., Mandatory safety training for lab users).
  - **Type:** Select LMS, TryBooking, or External from the dropdown.
  - **Expiry (days):** Enter the number of days before the training expires (0 = no expiry).

- **Completion Score:** (LMS only) Define the minimum score required for successful completion.

- Click Create to save the new training course.

Tip: Trainings can be later linked to specific groups using the Group Management module.

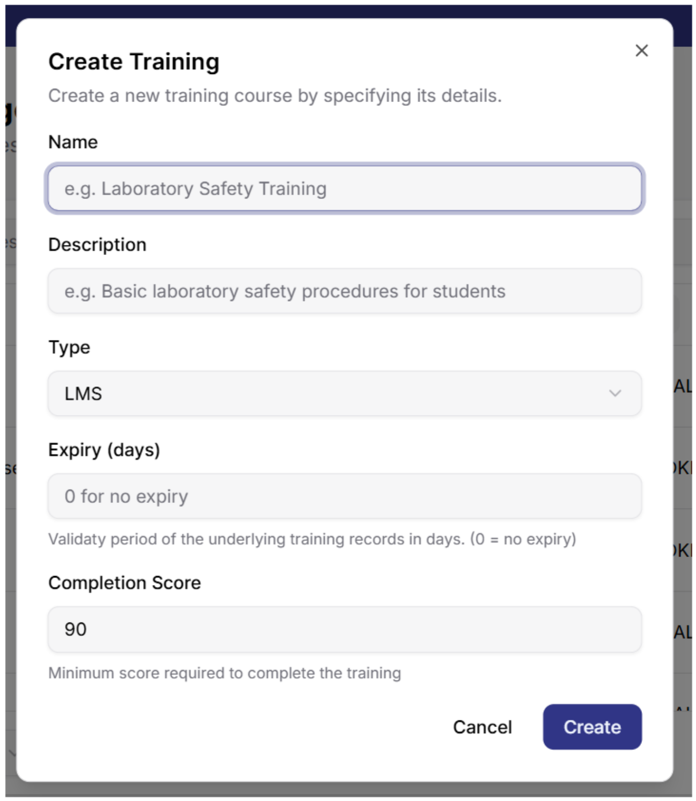

Figure 16: Creating a Training

d) Editing a Training:

- Click the Edit () button next to the desired training.
- Modify the following as needed:
  - Name or Description
  - Associated Groups (select or deselect groups this training applies to)
  - Expiry (days) or Completion Score
- Click Update to apply the changes.

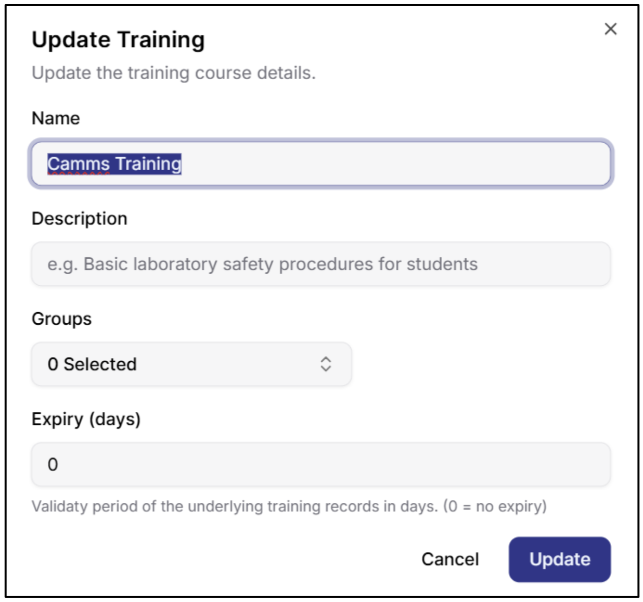

Figure 17: Editing a Training

e) Deleting a Training:

- Click the Delete ( ) icon next to the training entry.
- A confirmation dialog will appear displaying the training name.
- Click Delete to confirm.

Warning: This action is permanent. Deleting a training removes it from all linked groups and users and also the training records.

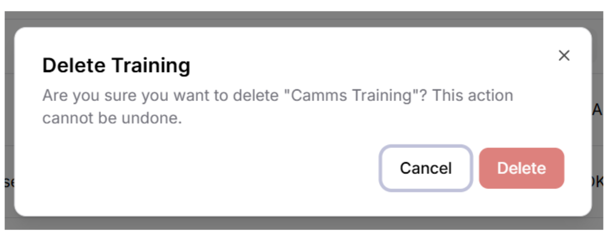

Figure 18: Delete a training

f) Sorting and Filtering:

- Click on the Name column header to toggle between ascending and descending order.
- Use the Type filter to show only specific training types (LMS, TryBooking, or External).
- Combine filters with the search bar for faster lookups.

4.4 Training Records Management:

The Training Records module allows administrators to manage user training completions, assign new records, and track training outcomes across all users. This only stores the existing records, and for missing completions, the user detail page should be considered to view the training statuses.

Currently, one user can only have a single record for a training. In other words, the system does not support storing a complete list of history. This is mainly for batch import because if we do allow keeping a list of history, since there is no way for us to know if a record is already imported, importing more results in duplicates.

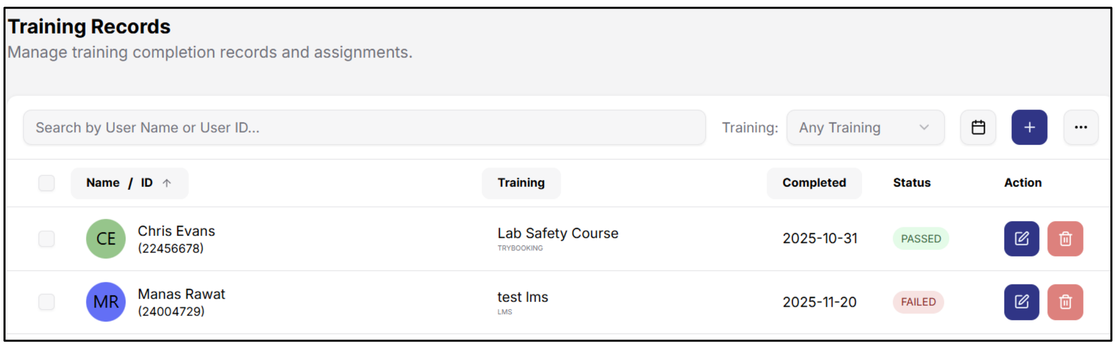

Figure 19: Training Record page

a) Overview

Located under the **Training Records** tab in the sidebar, this module displays all recorded training completions for users.
Administrators can add, edit, or delete records individually or in bulk, while also filtering and exporting results.

Features	Description
Search Bar	Search by username or UWA ID to quickly locate training records.
Training Filter	Filter by specific training course using the dropdown list (e.g., *First Aid*, *Lab Safety Course*).
Date Filter (📅)	Narrow results to a specific completion date range using the date picker.

Add Record (+)	Create a new training record manually or via batch upload.
Edit Record ( )	Update a training completion date for an existing record.
Delete Record ( )	Permanently remove a record from the system after confirmation.
Bulk Actions (...)	Perform multiple actions such as deleting, exporting, or clearing selections. (Currently placeholder, future work)
Pagination	Navigate through record pages and adjust items per page.

Table 6: Training Record Features

b) Creating a Training Record

- Click the " + " button on the top-right corner of the Training Records page.
- In the Create Record dialog box:
  - Mode: Choose Single (manual entry) or Batch (upload a file).
  - Training: Select the relevant training course from the dropdown list.
  - User: Choose one or more users who completed the training.
  - Record Date: Select the completion date using the date picker.
- Click Create to save.

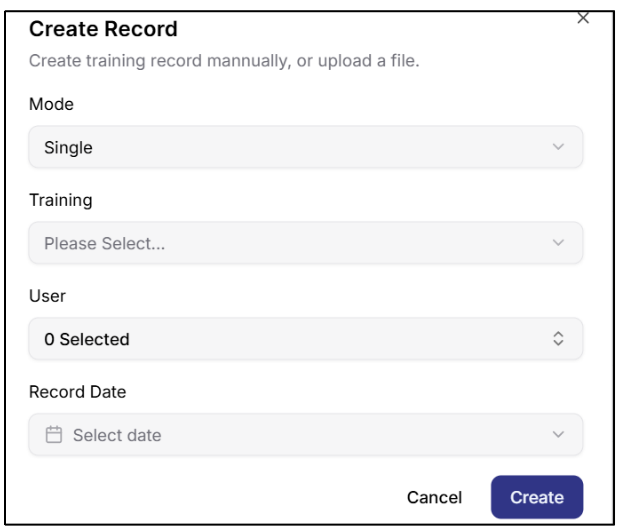

Figure 20: Create Training record

c) Editing a Training record

- Click the Edit (✎) icon beside a record.
- In the Edit Record dialog box:
    - Update the completion date or other editable fields (expiry is auto managed based on training setup).
- Click Update to save the changes.

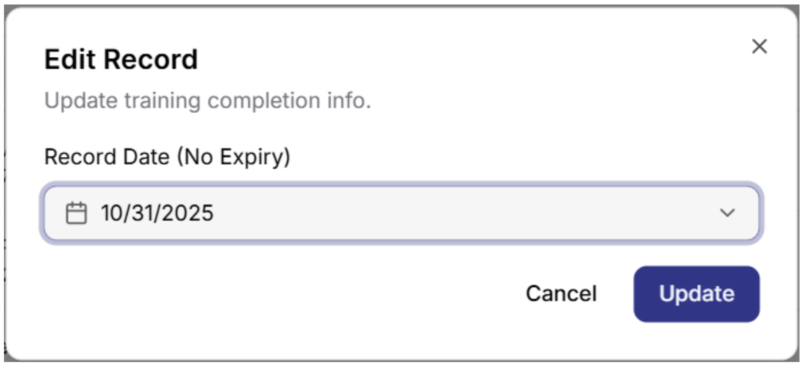

Figure 21: Editing Training Record

d) Deleting a Training Record

- Click the Delete (🗑) icon next to a training entry.
- Confirm deletion in the Delete Training Record window.
    - The pop-up displays the user ID, training name, and completion date.
- Click Delete to finalize.

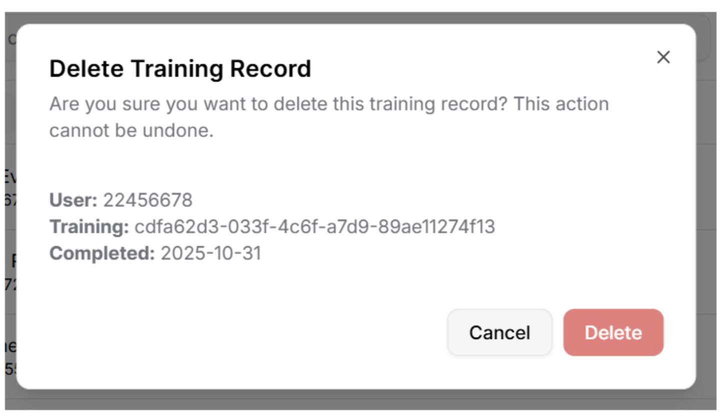

Figure 22: Deleting Training Record

e) Filtering and Searching Records

- **By User:** Type the user's name or UWA ID in the search bar.
- **By Training:** Select a training title from the Training dropdown to filter relevant records.
- **By Date:** Click the calendar icon ( ) to view records completed within a specific date range.
- Combine filters to refine search results efficiently.

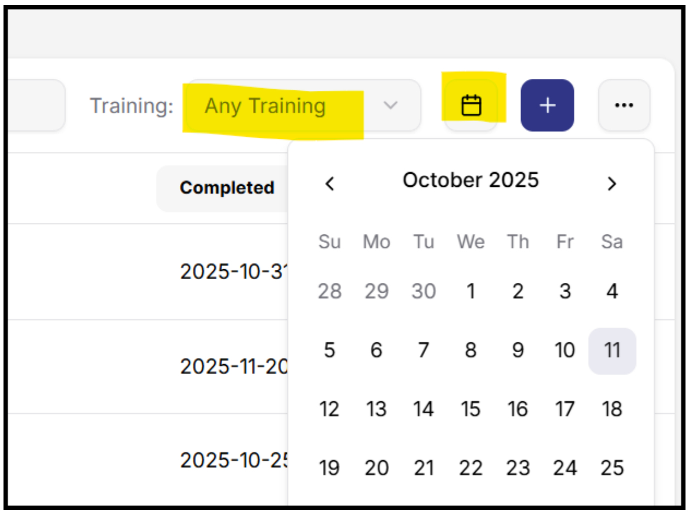

Figure 23: Filtering and Sorting Records

4.5 Batch Mode Processing

The Batch Mode Processing feature enables administrators to efficiently create or update multiple User and Training Record entries in bulk through the upload of a CSV or XLSX file. This functionality streamlines data management processes by supporting both User Batch Upload and Record Batch Upload operations.

a) User Batch Upload

The User Batch Upload feature allows administrators to add multiple users to the system simultaneously by importing data from a structured file.

File Requirements:

The uploaded files must contain the following columns/fields

- **Name** – The full name of the user
- **UserID** – The UWA ID of the user (aliases supported)

Processing Rules:

- The system will create new user records based on the data provided in the uploaded file.
- If a user with the same UserID and Name already exists, that entry will be skipped.
- If a user with the same UserID already exists but the Name does not match, the system will report an error and abort the batch import.
- If no errors are detected, all successfully processed users will be added to the user database.

b) Record Batch Upload

The Record Batch Upload feature allows administrators to import multiple training records in a single operation. Each record is automatically linked to an existing user or, if necessary, a new user is created.

File Requirements:

The uploaded file must contain the following columns/fields

- **Name** – The full name of the user
- **UserID** – The UWA ID of the user
- **Completion Date** – The date on which the training was completed

Additional Requirement for LMS training types:

- **Score** – Required only if training type is LMS and it represents the user's training result or score.

Processing Rules:

- The system will attempt to associate each record with an existing user based on the Name and UserID fields.
- If a matching user does not exist, a new user will be created automatically.

- If a user already exists, the same validation and processing rules defined under User Batch Upload will apply.

Record Handling:

If a record for the same user and training already exists:

- The existing record will be updated only if the uploaded record contains a newer Completion Date.
- If the uploaded record has an older or identical Completion Date, the existing record will remain unchanged.