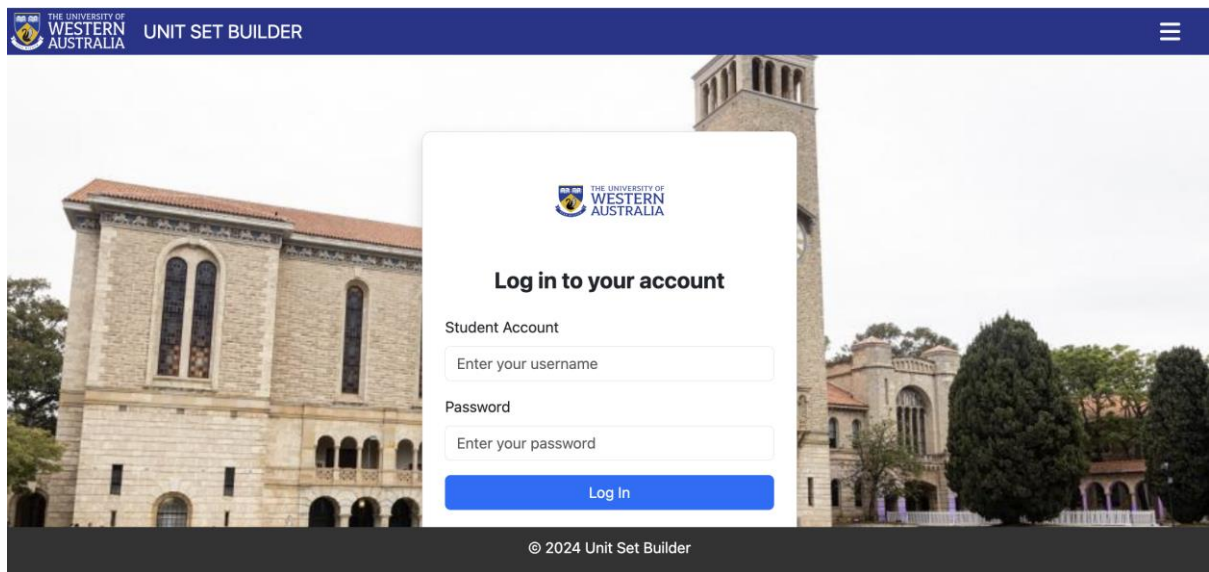# User Manual – Unit set builder

Front End

1. Login Page

Log in Instructions

When opening the Unit Set Builder system, the first page displayed is the login page. Users are required to enter their username and password to access their accounts.

1) Enter Username

Input the registered username in the "Student Account" field.

2) Enter Password

Provide the corresponding password in the "Password" field. The password will be masked for security.

3) Click Log In

Click the blue "Log In" button to submit the credentials and proceed to the system. The page will then jump to the homepage.

Navigation Menu Instructions

The dropdown navigation menu provides quick access to different sections of the Unit Set Builder system. Clicking on each option will jump to the corresponding page:
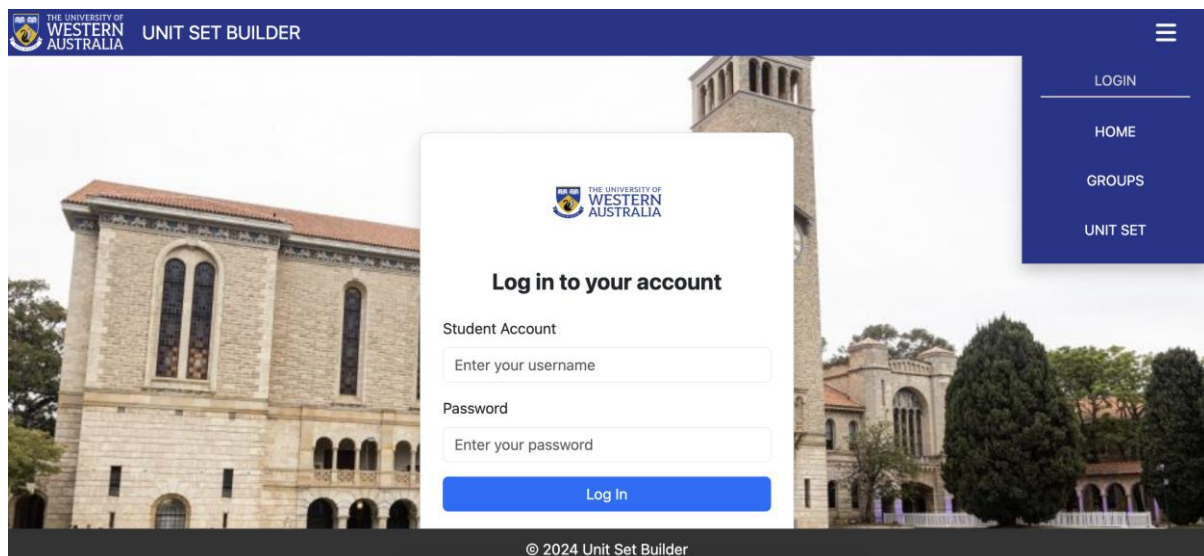
> **Login**: Redirects to the login page.
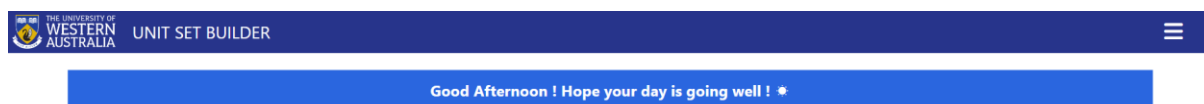> **Home**: Takes users to the homepage.
> **Groups**: Directs to the groups management section.
> **Unit Set**: Navigates to the unit set builder page.

The menu can be accessed by clicking the three horizontal lines icon in the top right corner.

2. Home Page

On the Home page users get a greeting message based on the time of day.

There is some information related to the app displayed on the home page with a Create Unit Set Builder button. On clicking the button, user is able to start the process of creating a unit set for the course and go through the different stages of the process.

Welcome To The Unit Set Builder App

Curriculum Management System (CAIDI) is a platform designed to streamline the administration of academic programs. The Unit Set Builder app is a user friendly experience for one of the complex component of Caidi.

Key features of Unit Set Builder typically include:

- **Course Management:** Simplifying the process of creating and modifying course offerings, creating sequences and unit sets.
- **Reporting and Analytics:** Generating insights into curriculum effectiveness, course offerings and structure.
- **Curriculum Mapping:** Ensuring courses align with institutional learning outcomes and goals.

Overall, the Unit Set Builder app enhances the educational experience by streamlining administrative processes and fostering better communication among faculty and students.

Create A Unit Set Builder > >

3. Select Course Page

Step Path Instructions

The step path displayed below the navigation bar shows the current progress in the Unit Set Builder process. The active step is highlighted in the path, and the user's progress is clearly indicated.

THE UNIVERSITY OF WESTERN AUSTRALIA UNIT SET BUILDER ≡

| SELECT COURSE ❶ | GROUPING ❷ | UNIT SET ❸ | CONFIRM ❹ |

Select Course Instructions

After logging in, the system redirects to the course selection page, located on the homepage. This page allows users to search for available courses and begin building their unit set.

Curriculum Management System
CAIDi

☼ Hope your morning is going well!

🔍 Search for a Course

Type	ID	Code	Title	Status

Create a Unit Set Builder ➜

1) Search for a Course

In the search bar, input the course name or keyword. As the keyword is typed, a dropdown list will appear, displaying all courses that match the entered keyword.

information	×
Master of Information Technology (coursework)	⊕
Master of Information Technology (AI Stream)	⊕

Type	ID	Code	Title	Status

2) Add Course to Form

In the dropdown list, click the green "+" button on the right side of the desired course. This action will add the selected course to the form below.

The selected course, including its type, ID, code, title, and status, will now appear in the form below the search bar. Multiple courses can be added if necessary.

information

	Master of Information Technology (coursework)	⟶ ⊕
	Master of Information Technology (AI Stream)	⊕

Type	ID	Code	Title	Status
🖉	00	10000	Master of Information Technology (coursework)	☐ 🗑
×	01	10001	Master of Information Technology (AI Stream)	☐ 🗑

3) Manage Course Selection

The form can be modified. In the "Type" column, if the icon appears as a pencil, it means the course can be added; if it shows a red "X," the course cannot be added. Click the trash bin icon in the "Status" column to remove the course from the list.

Type	ID	Code	Title	Status
🖉	00	10000	Master of Information Technology (coursework)	☐ 🗑
×	01	10001	Master of Information Technology (AI Stream)	☐ 🗑 ⟵

4) Confirm and Select Optional Courses

After confirming that the optional course is available for selection, the white checkbox on the left side of the "Status" column can be clicked to select it. Once the selection is made, clicking the large blue "Create a Unit Set Builder" button at the bottom will lead to the grouping page.

Type	ID	Code	Title	Status
🖎	00	10000	Master of Information Technology (coursework)	✓ 🗑

Create a Unit Set Builder ➜

4. Grouping Page

The grouping page displays the name of the course at the top and provides the user an option to create a group using Additional Grouping, Specialization and Year buttons.

MASTER OF INFORMATION TECHNOLOGY (COURSEWORK) [62510]

Add A New Group

Select the group you want to add: Additional Grouping ⊕ Specialization ⊕ Year ⊕

There is a default group for each course already present on the page which will be there always. The user can edit this default group and add the unit sets for it. The user also has an option to download the course structure.

Master of Information Technology (coursework) [62510] Download ⊕

☰ Master of Information Technology
Edit and set units for this group Edit ✎ Delete 🗑

If the user wants to add a specialization group, then user will click on Specialization button and then the popup will be displayed to select the existing specialization or create a new specialization.
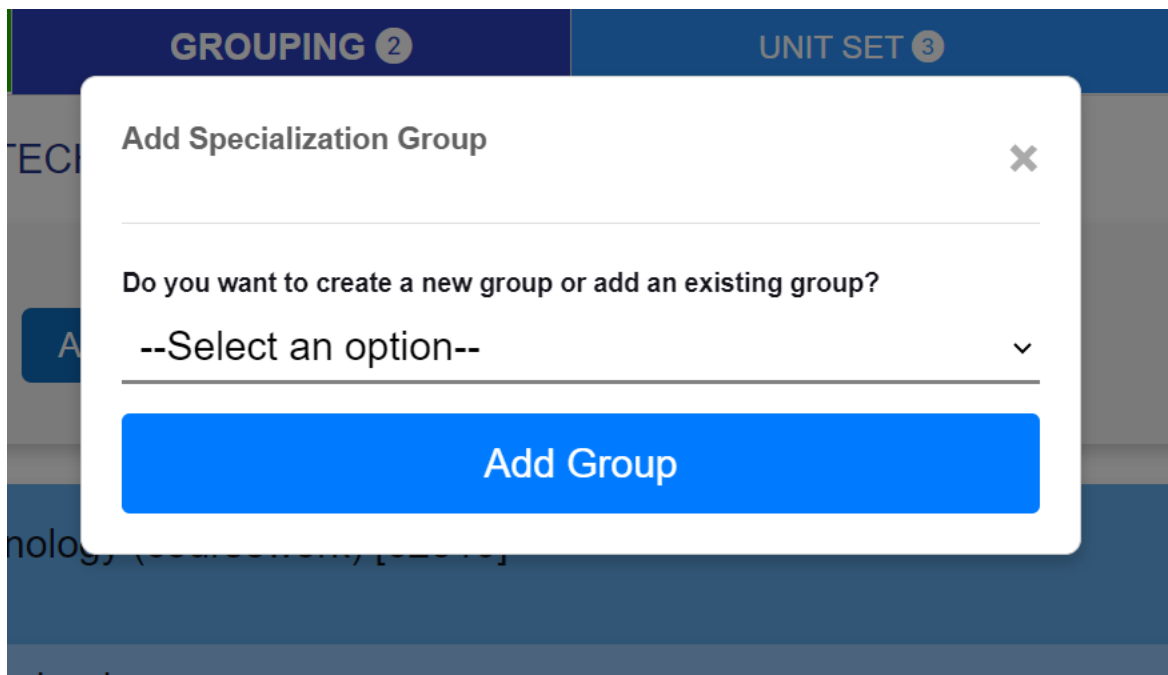
If the user selects, select existing specialization then field will be displayed to select the existing specialization. The user can search the specialization in the field below and add it to the course.
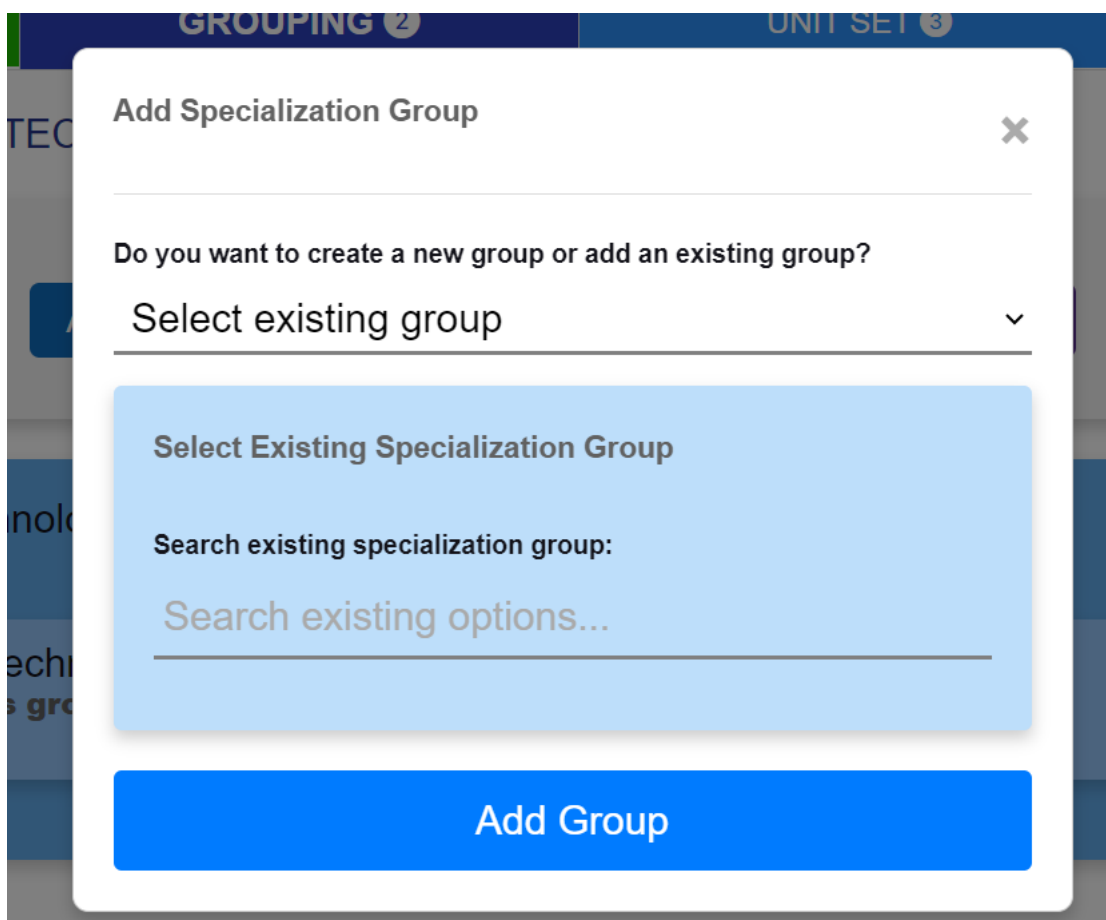
If the user wants to create a new specialization, then the user can enter the specialization details in the popup below.
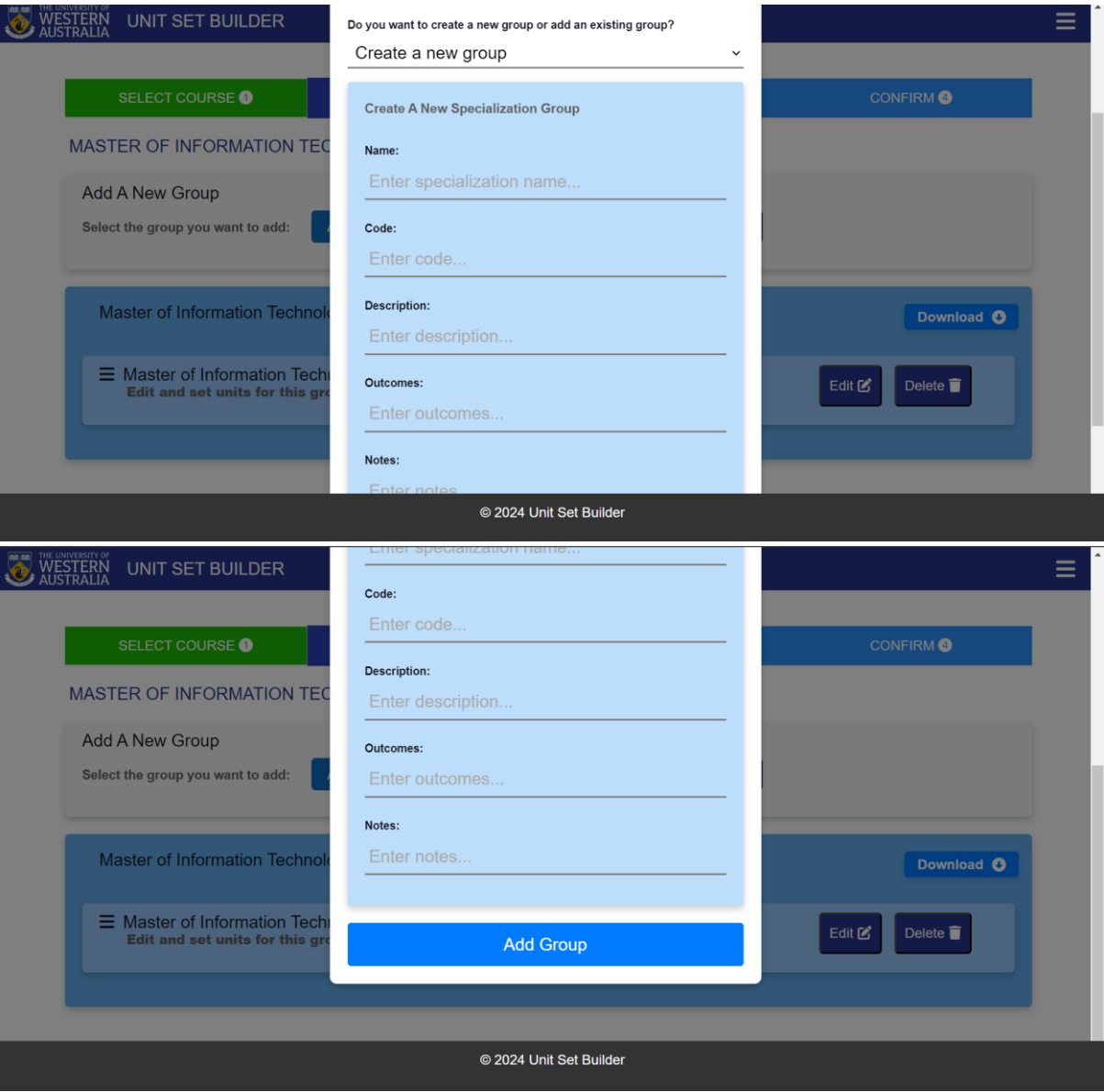
On adding the specialization through one of the above methods, the user gets an option to edit and delete the group created on the Grouping page
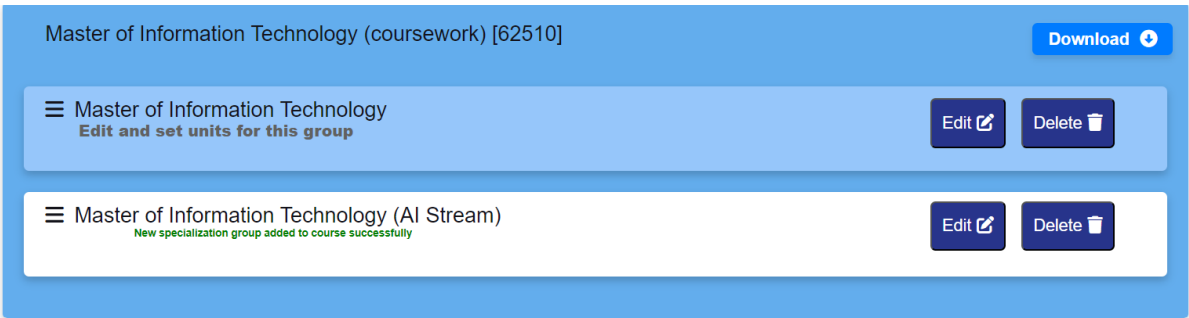
On clicking the edit button user will be navigated to unit set page.

5. Unit set checklist Page

The Unit Set Checklist allows users to organize units by grouping them into different categories such as Core, Conversion, Option, and Customized. The checklist enables users to select, reorder, and remove units within each section, providing flexibility in organizing academic plans.

Unit Set checklist

Master of Information Technology: Artificial Intelligence (AI) Stream

Select the Group you want to add:

| Core | Conversion | Option | Customised |

Drag this icon ☰ to adjust the order

Core Unit
Take all units from this group (24 points) ⫽

- CITS1401: Computational Thinking with Python ☰ ☆ ⊖
- CITS4401: Software Requirements and Design ☰ ☆ ⊖
- CITS5206: Information Technology Capstone Project ☰ ★ ⊖

Conversion Unit
Take all units from this group (24 points) ⫽

- CITS1003: Introduction to Cybersecurity ☰ ⊖
- PHIL4100: Ethics and Critical Thinking ☰ ⊖

Option Unit
Take all units from this group (24 points) ⫽

- CITS4012: Natural Language Processing ☰ ⊖
- CITS4404: Artificial Intelligence and Adaptive Systems ☰ ⊖

Customised Unit
Take all units from this group (24 points) ⫽

- CITS4401: Software Requirements and Design ☰ ⊖
- CITS5505: Agile Web Development ☰ ⊖
- PHIL4100: Ethics and Critical Thinking ☰ ⊖

Features:

1. **Course Title Display:** The page displays the specific course at the top, showing the user which unit set they are managing (e.g., "Master of Information Technology: Artificial Intelligence (AI) Stream").

Unit Set checklist

Master of Information Technology: Artificial Intelligence (AI) Stream

2. **Group Selection Buttons:** Users can add a section to their checklist by clicking on one of the following buttons: **Core, Conversion, Option, Customized**

Select the Group you want to add:

| Core | Conversion | Option | Customised |

Once a button is clicked, a corresponding section will be generated with default units or an empty list to populate.

3. **Search and Add Units:** Each section allows users to add units using a search bar. Units can be searched by their names or codes and added directly to the selected section.

Add Unit

CITS 🔍

CITS4401 Software Requirements and Design

CITS5505 Agile Web Development

CITS5206 Information Technology Capstone

Save

4. **Unit Management:** Users can manage individual units within each section:

   Star: Mark a unit as a stared by clicking star icon.
   Reorder: Change the order of units using drag-and-drop functionality.
   Delete: Remove a unit from the section.

5. **Section Management:** Sections can also be managed as a whole:

   Reorder Section: Users can reorder entire sections by dragging the section's reorder icon.
   Delete Section: Users can remove the entire section and its contents by clicking the delete icon.
   Edit Section: Edit the section's description by clicking the pencil icon
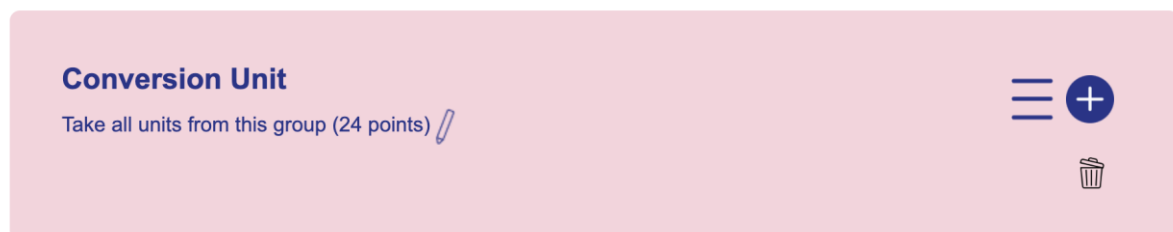
Backend End Set Up

1. Git Clone
   Clone the source code of project from the project GitHub:
   https://github.com/TonyyZzz/CITS5206-Team16-UnitSetBuilder

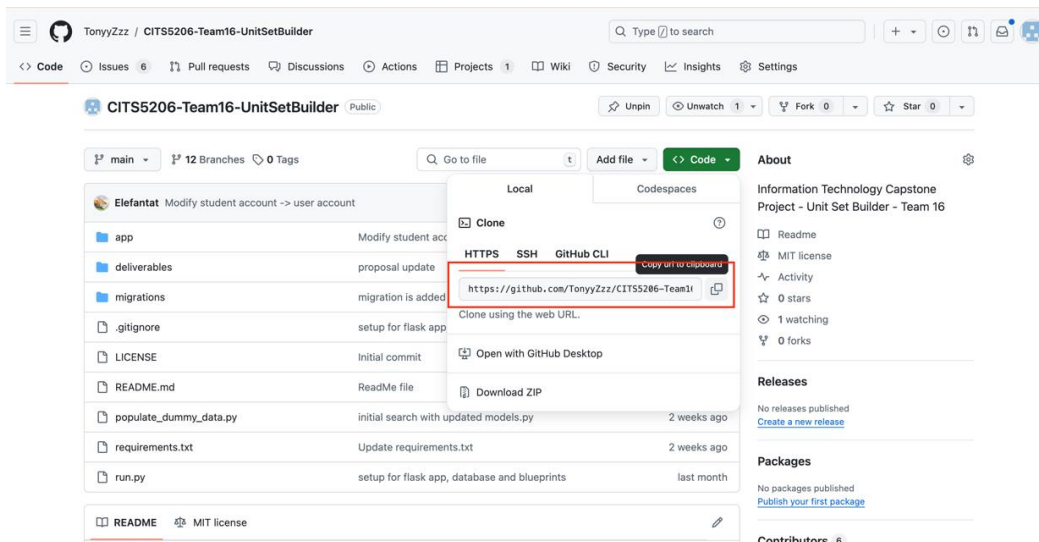Using the HTTPS link retrieved from the project GitHub repository and running the following command in **Terminal** to clone the project to your server or your local host machine.

```
git clone https://github.com/TonyyZzz/CITS5206-
Team16-UnitSetBuilder.git
```

2. Create the python virtual environment by running following code

```
Python -m venv venv #Create new virtual env

source venv/bin/activate # activate virtual env
```

```
Python -m venv venv #Create new virtual env

source venv/bin/activate # activate virtual env
```

3. Install Package

```
pip install -r requirements.txt
```

4. Initialize and migrate the database

```
flask db init # init database

flask db upgrade # implement all migrations
```

5. Launch application

```
pip install -r requirements.txt
```

6. Click the link on the result of running above command to access the application.

```
(venv) TonydeMacBook-Pro:CITS5206-Team16-UnitSetBuilder tony$ flask run
 * Serving Flask app 'app:create_app("development")'
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:5000
Press CTRL+C to quit
```