

CCT211H5 F

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Application User Manual

This GUI application, developed using Python's Tkinter library, serves as a data-processing tool that manages records stored in a CSV file. This program is intended for users who are willing to create, view, update and delete data of students currently enrolled in the CCT211 course at the University of Toronto Mississauga.

Features

1. Create Button
 - Add new records to the data file.
2. View Button
 - View existing records in a tabular or searchable format.
3. Update Button
 - Modify details of an existing record.
4. Delete Button
 - Remove records permanently from the file.

How to Use

1. Launching the Application
 - Open the application file, and the main window will display the available options for CRUD operations.
2. Creating a Record
 - Enter data in the input fields labelled for each attribute.
 - Click the "Add" button. The system validates inputs before saving the record.
3. Viewing Records
 - Click the "View" button to display all records in a tabular form.
4. Updating a Record
 - Enter the record's unique identifier (i.e., "Student Number") to be updated.
 - Modify fields as needed, and click "Update." The system confirms the record's existence before making changes.
5. Deleting a Record
 - Enter the student number of the record to delete.
 - Click "Delete." The system asks for confirmation before deletion.

Logic and Limitations

1. Record Identification

- All operations (Update/Delete) depend on a unique identifier, such as the "Student Number."

2. Input Validation

- The system rejects empty or invalid inputs (e.g., non-numeric data for a numeric field).
- The system also ensures that the user types the correct Student Number (whether it's between 9 and 11 digits long)

3. File Constraints

- The application processes a single CSV file; advanced database functionality is not supported.

4. Processing Different Files

- If the user intends to use another file for data processing, then the program needs to be edited to allow for that file to be edited, which is a hassle for many users.