



# CLASS SCHEDULING SYSTEM USER GUIDE



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# INTRODUCTION

The Class Scheduling System is a desktop-based application developed for Golden Gate Colleges to improve the efficiency of creating and managing class schedules. It eliminates the tedious manual process of using spreadsheets, minimizes conflicts, and ensures accurate and timely schedule generation.

## About the Application

This system was built using Electron, React, Vite and SQLite3. It allows administrators to:

- Automate scheduling for multiple programs and departments.
- Assign faculty, subjects, and rooms without conflict.
- Export and print finalized schedules for official use.
- Work offline with a reliable local database.

The application is designed with a modern, user-friendly interface to support ease of use for both administrators and faculty members.

## System Requirements

To run the desktop application, the following minimum requirements are recommended:

- Operating System: Windows 10 or later (64-bit)
- Processor: Intel i3 or equivalent
- Memory (RAM): 4 GB minimum (8 GB recommended)
- Storage: At least 200 MB free space



# INSTALLATION & SETUP

## Installation

### 1. Download the Installer

- Get the latest .exe installer from the official distribution link provided.

### 2. Run the Installer

- Double-click the downloaded file.
- Follow the on-screen instructions to complete the installation.
- Choose the installation folder (default is recommended).

### 3. Complete Installation

- Wait for the process to finish.
- Once done, click Finish to close the installer.

## Launching the Application

### 1. Start the App

- Locate the application icon on your desktop or in the Start Menu.
- Double-click to launch the Class Scheduling System.

### 2. Login

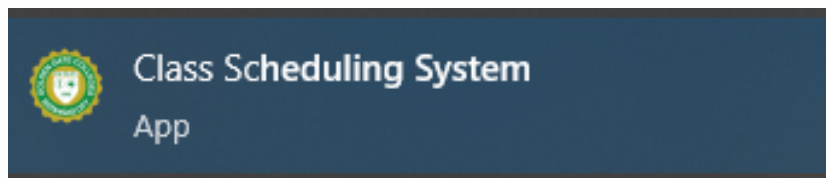
- Enter your assigned username and password.
- Click Login to access the main dashboard.

### 3. First-Time Setup

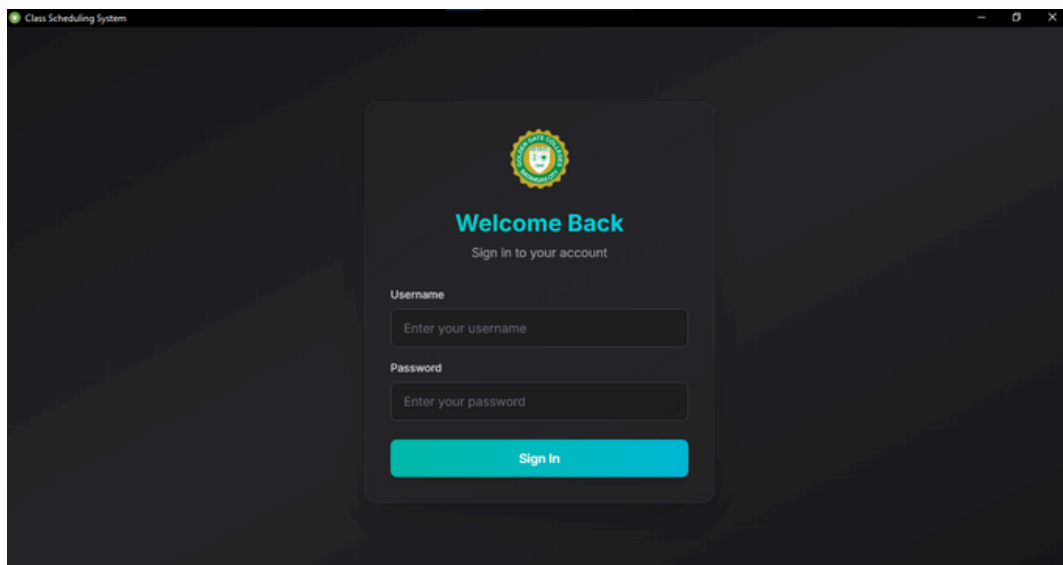
- On first launch, the system will automatically create the local database (database.sqlite).
- You can immediately start creating schedules and managing classes.

# GETTING STARTED

- Locate the Class Scheduling System icon on your desktop or in your applications folder.
- Double-click the icon to launch the program.

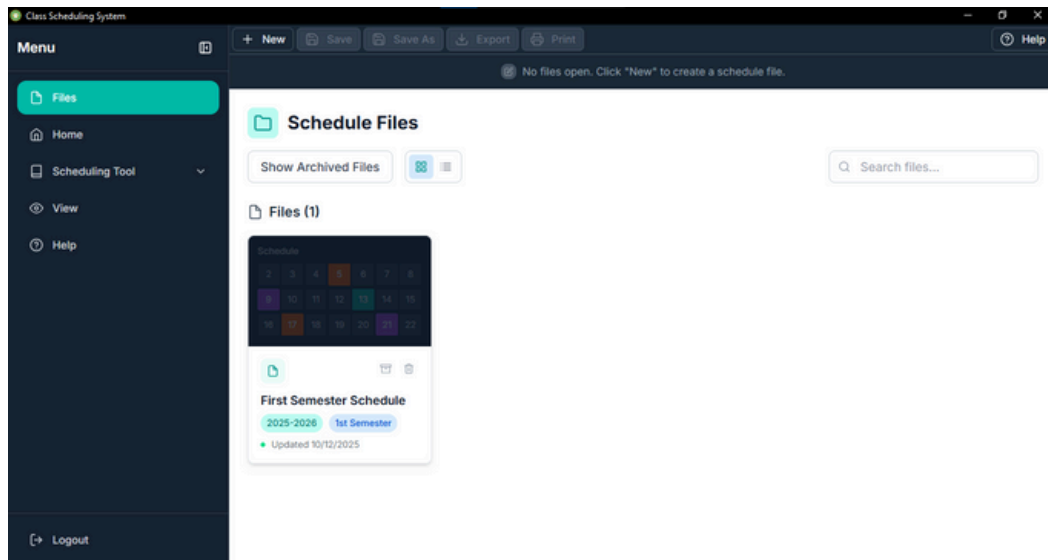


- When the login window appears, enter your Username and Password in the designated fields.
- Click Login to access your account.



# CORE FEATURES

- After logging in successfully, you will be directed to the File page, where you can view class schedule files.

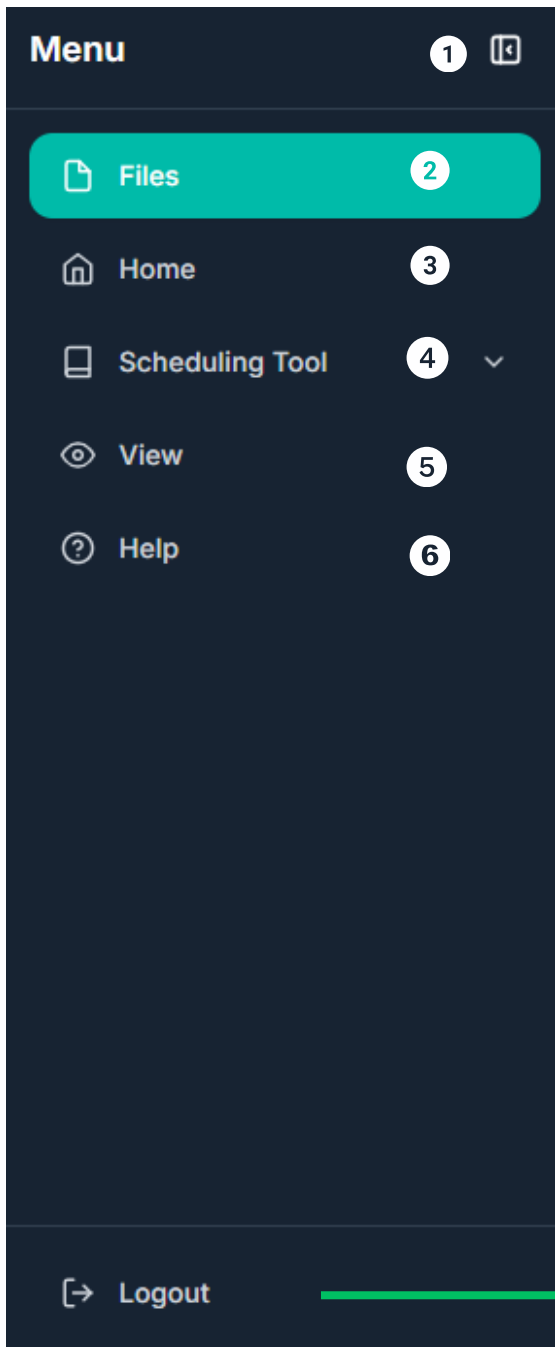


- The system will automatically detect your user role and load the corresponding menu options.

Administrator	User
Administrators have full control over data management and class scheduling. They have access to all modules	Users have limited access, allowing them to view or interact with assigned data only.
<ul style="list-style-type: none"> <li>• Files</li> <li>• Home</li> <li>• Scheduling Tool (Manage Data &amp; Assigning)</li> <li>• View Tools</li> <li>• Help</li> <li>• Logout</li> </ul>	<ul style="list-style-type: none"> <li>• Files</li> <li>• Home</li> <li>• View Tools</li> <li>• Help</li> <li>• Logout</li> </ul>

# CORE FEATURES

- The Sidebar appears on the left side of the application window.
- It serves as your main navigation panel for all system pages and features.

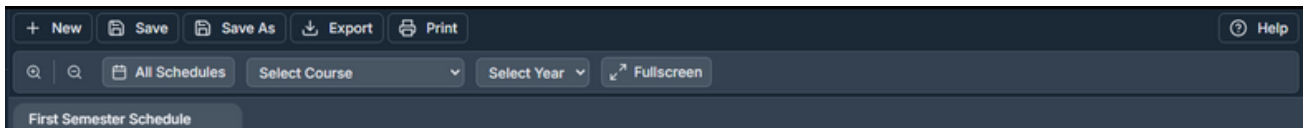


1. **Collapse / Expand Sidebar (Ctrl+B)** - To customize your workspace, you can collapse or expand the sidebar.
2. **Files (Ctrl+1)** - Access and manage schedule files.
3. **Home (Ctrl+2)** - Provides a clear and organized view of class schedules.
4. **Scheduling Tool** - Expandable menu containing "Manage Data (Ctrl+3)" and "Assigning (Ctrl+4)."
5. **View (Ctrl+5)** - Toggle viewing tools or display options in the toolbar.
6. **Help (Ctrl+H)** - Open the documentation for guidance.

(Ctrl L) - Log out safely and return to the login screen.

# CORE FEATURES

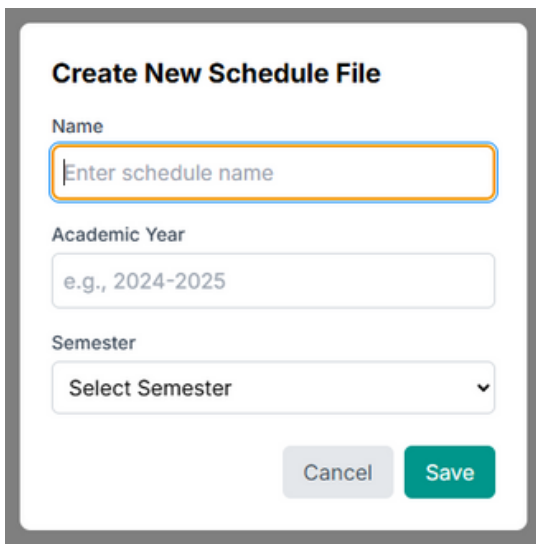
- The Toolbar is the main control panel located at the top of the application. It provides quick access to all essential file management operations, viewing options, and schedule navigation tools.



## File Operations Bar



- Contains buttons for creating, saving, exporting, and printing schedule files. All operations are restricted to admin users only.



### New (Ctrl+N)

- Creates a new schedule file. Opens a dialog to enter:
  - Schedule name
  - Academic year
  - Semester

### Save (Ctrl+S)

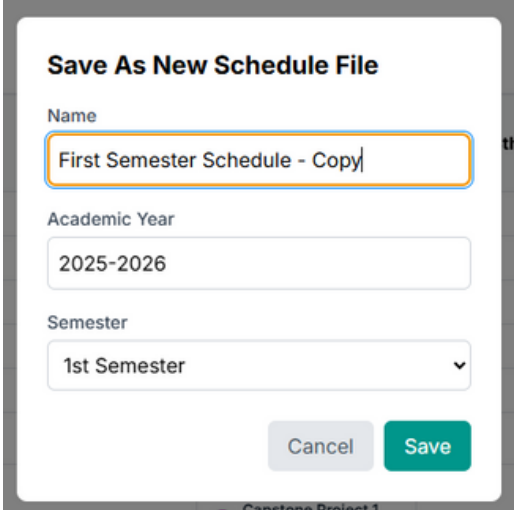
- Saves changes to the currently active schedule file. All required fields (name, academic year, semester) must be filled.



# CORE FEATURES

## Save As (Ctrl+Shift+S)

- Creates a copy of the current schedule file with a new name. Useful for creating variations or backups.



The 'Save As New Schedule File' dialog box contains the following fields and controls:

- Name:** A text input field containing 'First Semester Schedule - Copy'.
- Academic Year:** A text input field containing '2025-2026'.
- Semester:** A dropdown menu with '1st Semester' selected.
- Buttons:** 'Cancel' and 'Save' buttons at the bottom right.

## Export Schedule

Select File

First Semester Schedule (1st Semester : ▾)

Export Type

Program ▾

Program

BS Information Technology ▾

Format

PDF ▾

Cancel

Preview

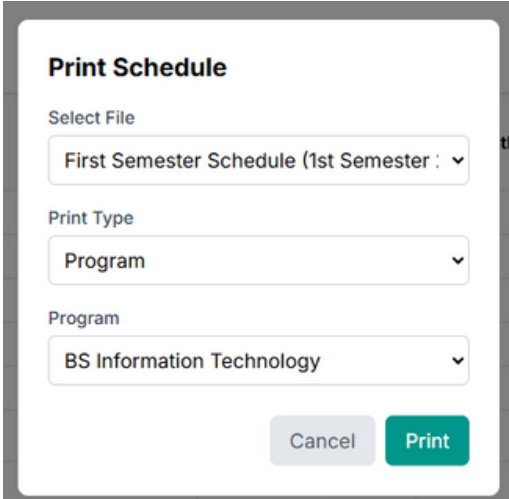
Export

## Export (Ctrl+E)

- Exports schedules to PDF format. Options include:
  - Select which schedule file to export
  - Choose export type (Program or Teacher)
  - Select specific program/teacher or all programs
  - Preview before exporting

## Print (Ctrl+P)

- Sends schedules directly to your printer. Same filtering options as Export (Program or Teacher view).



The 'Print Schedule' dialog box contains the following fields and controls:

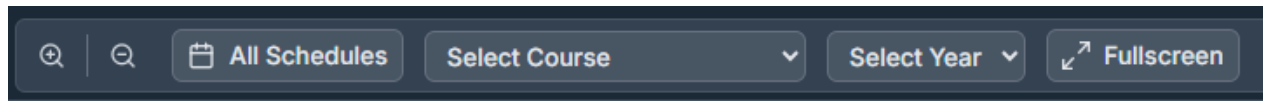
- Select File:** A dropdown menu with 'First Semester Schedule (1st Semester : ▾)'.
- Print Type:** A dropdown menu with 'Program' selected.
- Program:** A dropdown menu with 'BS Information Technology' selected.
- Buttons:** 'Cancel' and 'Print' buttons at the bottom right.

## Help (Ctrl+H)

- Opens the help documentation page.

# CORE FEATURES

## View Tools (Home Page Only)



- Appears on the home page with zoom controls, schedule filtering options (by course or year level), and fullscreen mode for better visibility.

### Zoom In (Ctrl++)

- Increases the schedule grid size for better visibility.

### Zoom Out (Ctrl+-)

- Decreases the schedule grid size to see more content.

### All Schedules

- Displays all open schedule files simultaneously in a combined view.

### Select Course

- Filters the schedule view to show only classes for a specific program/course.

### Select Year

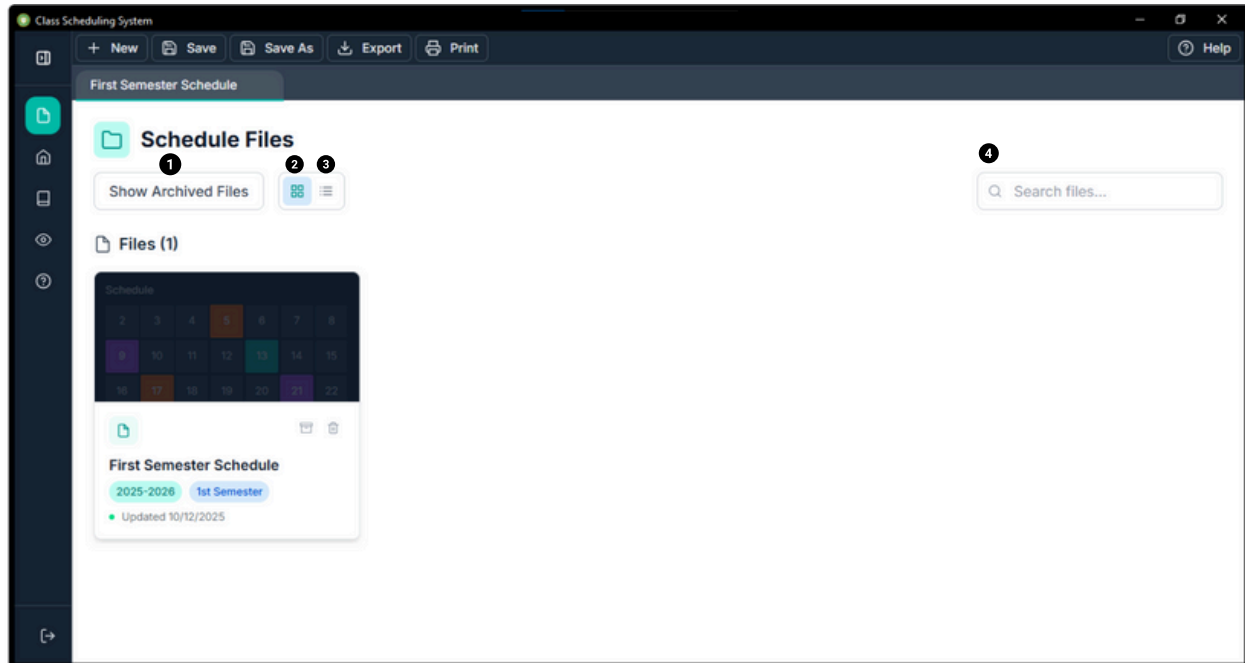
- Filters the schedule view to show only classes for a specific year level (1st-4th Year).

### Fullscreen (Ctrl+F or F11)

- Expands the schedule view to full screen mode. Press again or ESC to exit.

# PAGES

## File



- The File Page is your central hub for managing all schedule files. It displays all active and archived schedule files with options to open, organize, and manage them.

### 1. Show Active/Archived Toggle

- a. Switches between viewing active schedule files and archived files. Click to toggle between the two views.

### 2. Grid View

- a. Displays files as cards with calendar previews. Provides a visual overview of all files at a glance.

### 3. List View

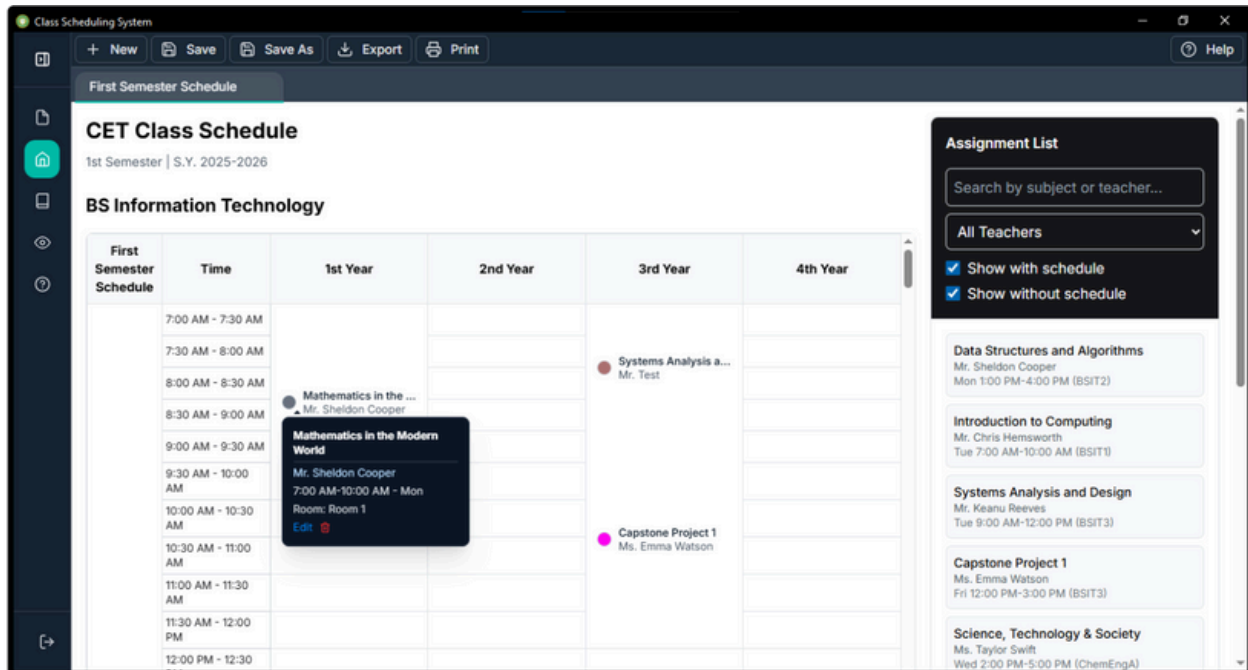
- a. Displays files in a table format with detailed information in columns. Better for viewing many files and comparing details quickly.

### 4. Search Bar

- a. Filters files by name in real-time. Works in both active and archived file views.

# PAGES

## Home



- The Home Page displays the visual class schedule grid where you can view all scheduled classes organized by day, time, and year level. Admin users can drag and drop assignments to schedule classes directly on the grid.

### Schedule Grid

- Day Column: Shows days of the week (Mon-Sat)
- Time Column: Displays 30-minute time slots
- Separate columns for 1st Year, 2nd Year, 3rd Year, and 4th Year

### Scheduled Classes (Colored Cells)

Each scheduled class displays:

- Color Indicator: Circle showing the assigned teacher's color code
- Subject Name: The course being taught
- Teacher Name: Instructor assigned to the class



## Home

### Class Details Tooltip (Quick Update)

Hover over any scheduled class to see:

- Full subject name
- Teacher name with honorifics
- Day and time slot
- Assigned room
- Program name (in full schedule view)
- Edit button (Admin only): Modify time, duration, or room
- Delete button (Admin only): Remove the assignment

### Available Time Slots

- Empty cells: Available for scheduling
- Teal-highlighted cells: Show teacher availability when filtering by specific teacher

### Assignment List Panel (Admin Only)

Located on the right side of the screen with tools for managing assignments.

### Search Bar

Filter assignments by subject name or teacher name in real-time.

### Teacher Filter Dropdown

Select a specific teacher to:

- View only their assignments
- Highlight their available time slots in the grid (teal background)
- Useful for avoiding teacher conflicts when scheduling

### Display Filters

- Display assignments already placed on the schedule
- Display unscheduled assignments that need placement

## Home

### Scheduling Features (Admin Only)

#### Drag and Drop Scheduling

1. Find an unscheduled assignment in the Assignment List
2. Drag it to an empty cell in the appropriate year level column
3. System automatically checks for conflicts
4. Assignment is placed if no conflicts exist
- 5.

#### Edit Scheduled Class

1. Hover over a scheduled class cell
2. Click the "Edit" button in the tooltip
3. Click "Save" to apply changes or "Cancel" to discard

#### Delete Scheduled Class

1. Hover over a scheduled class cell
2. Click the delete icon (trash can) in the tooltip
3. Confirm deletion in the popup dialog
4. Class and room assignments are both removed

### Conflict Detection

The system automatically prevents scheduling conflicts.

- Teacher Conflicts – Blocks assigning a teacher to overlapping classes.
- Class Conflicts – Stops scheduling a class for multiple subjects at the same time.
- Room Conflicts – Prevents double-booking of rooms.
- Room Capacity – Warns if student count exceeds room capacity (especially merged classes).
- Year Level Mismatch – Ensures subjects match their designated year level.
- Conflict Alert – Displays a modal listing all detected issues before scheduling.

# PAGES

## Scheduling Tool: Manage Data

- The Manage Data page allows you to create, edit, and delete essential scheduling information including teachers, subjects, rooms, classes, and programs.

### Adding New Items

1. Click the "Add New" button in the top-right corner of the list
2. Fill in the required fields in the form on the right
3. Click "Create" to save

The screenshot shows the 'Class Scheduling System' interface. At the top, there's a navigation bar with buttons: '+ New', 'Save', 'Save As', 'Export', and 'Print'. Below this is a tab labeled 'First Semester Schedule'. A sidebar on the left contains icons for navigation, with 'Teachers' highlighted. The main content area is divided into two panels. The left panel, titled 'Teachers List', contains a table with columns 'COLOR', 'NAME', and 'ACTIONS'. The table lists five teachers: Mr. Sheldon Cooper (grey), Mr. Chris Hemsworth (red), Mr. Keanu Reeves (green), Ms. Emma Watson (pink), and Ms. Taylor Swift (orange). Each row has a red trash icon in the 'ACTIONS' column. An '+ Add New' button is in the top right of this panel. The right panel, titled 'Add New Teacher', contains a form with three fields: 'Full Name' (text input), 'Honorifics' (dropdown menu), and 'Choose Color' (a set of color swatches). Below the color swatches is a 'Custom Color' section with a black color picker. At the bottom of the form are 'Cancel' and 'Create' buttons.

COLOR	NAME	ACTIONS
Grey	Mr. Sheldon Cooper	[Trash]
Red	Mr. Chris Hemsworth	[Trash]
Green	Mr. Keanu Reeves	[Trash]
Pink	Ms. Emma Watson	[Trash]
Orange	Ms. Taylor Swift	[Trash]
Brown	Mr. Test	[Trash]

### Teachers

- Full Name (required)
- Color (required) - Select from presets or use custom color picker
- Honorifics (optional) - Mr., Ms., Mrs., Dr., or Prof.

# PAGES

## Scheduling Tool: Manage Data

Class Scheduling System

+ New Save Save As Export Print Help

First Semester Schedule

Teachers Subjects Rooms Classes Programs

**Subjects List** + Add New

SUBJECT NAME	CODE	UNITS	YEAR	ACTIONS
Introduction to Computing	IT 101	3	1st Year	
Mathematics in the Modern World	GE 103	3	1st Year	
Data Structures and Algorithms	IT 201	3	2nd Year	
Science, Technology & Society	GE 108	3	2nd Year	
Systems Analysis and Design	IT 301	3	3rd Year	
Capstone Project 1	IT 307	3	3rd Year	

**Add New Subject**

Subject Name  
Enter subject name

Subject Code  
Enter subject code

Units  
Enter units

Semester  
Select semester

Course/Program  
Select program

Year Level  
Select year level

Cancel Create

### Subjects

- Subject Name, Code, and Units
- Semester, Program, and Year Level

Class Scheduling System

+ New Save Save As Export Print Help

First Semester Schedule

Teachers Subjects Rooms Classes Programs

**Rooms List** + Add New

ROOM NAME	CAPACITY	ACTIONS
CL1	50	
Room 1	100	
Room 2	50	
Lab1	50	
Engr Lab	50	

**Add New Room**

Room/Lab Name  
Enter room name

Capacity  
Enter capacity

Cancel Create

### Rooms

- Room/Lab Name and Capacity



# PAGES

## Scheduling Tool: Manage Data

Class Scheduling System

First Semester Schedule

Teachers Subjects Rooms **Classes** Programs

**Classes List** + Add New

CLASS NAME	NO. OF STUDENTS	ACTIONS
BSIT1	50	
BSIT2	50	
BSIT3	50	
BSIT4	50	
ChemEngA	40	

**Add New Class**

Class Name  
Enter class name

No. of Students  
Enter number of students

Program  
Select program

Year Level  
Select year level

Cancel Create

### Classes

- Class Name, Number of Students, Program, and Year Level

Class Scheduling System

First Semester Schedule

Teachers Subjects Rooms Classes **Programs**

**Programs List** + Add New

PROGRAM NAME	YEARS	ACTIONS
BS Information Technology	4	
BS Chemical Engineering	4	

**Add New Program**

Program Name  
Enter program name

Years Offered  
Enter years offered

Cancel Create

### Programs

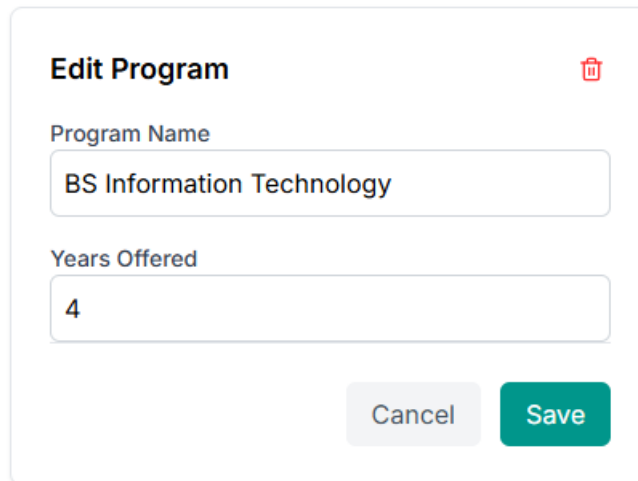
- Program Name and Years Offered

# PAGES

## Scheduling Tool: Manage Data

### Editing Items

- Click on any row in the table to select it
- The edit form appears on the right side
- Make your changes
- Click "Save" to update

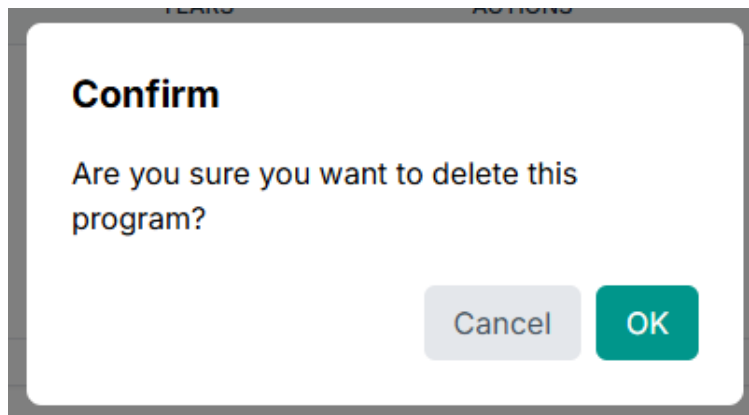
A screenshot of the 'Edit Program' form. It has a title 'Edit Program' and a trash icon in the top right corner. Below the title are two input fields: 'Program Name' with the text 'BS Information Technology' and 'Years Offered' with the number '4'. At the bottom right are two buttons: 'Cancel' and 'Save'.

### Deleting Items

- Click the trash icon in the Actions column



- You'll be asked to confirm before deletion.

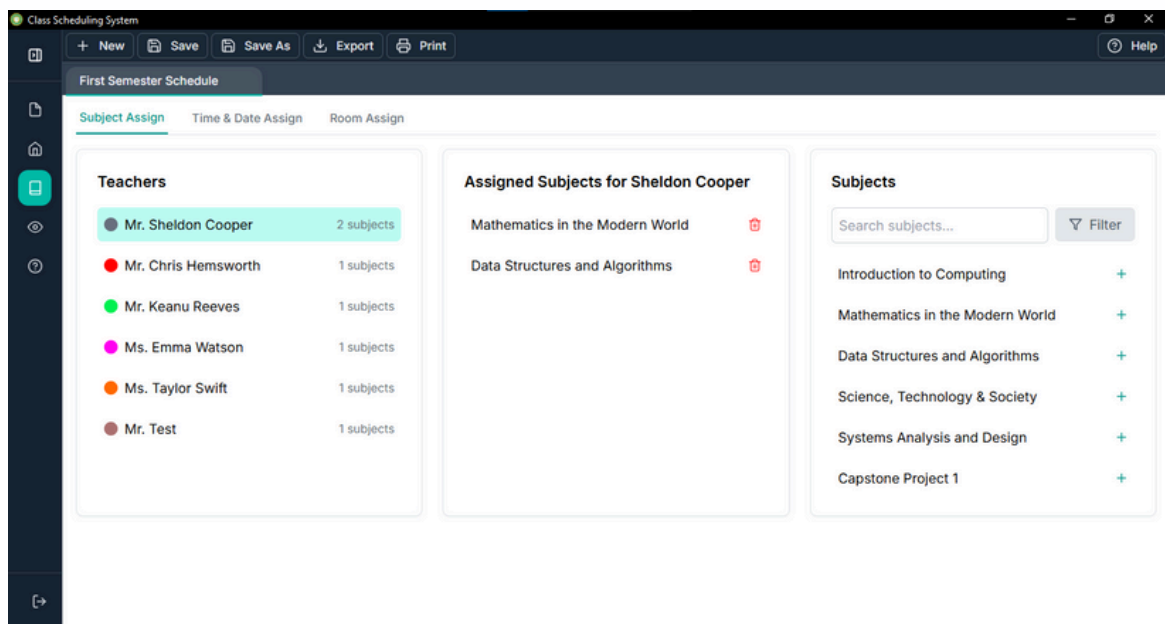
A screenshot of a 'Confirm' dialog box. It has a title 'Confirm' and a question 'Are you sure you want to delete this program?'. At the bottom right are two buttons: 'Cancel' and 'OK'.

# PAGES

## Scheduling Tool: Assigning

- The Assigning page manages three types of assignments for your schedule: assigning teachers to subjects, scheduling time slots, and assigning rooms.

### Subject Assign



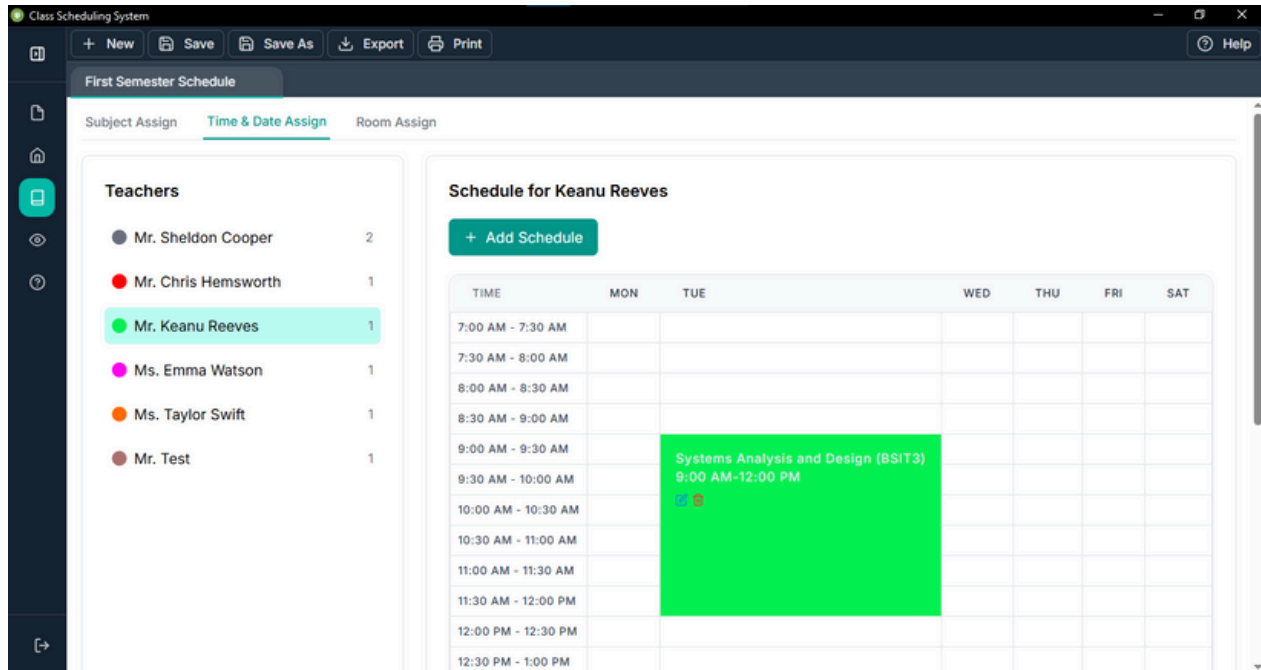
### Assigning a Subject

- Select a teacher from the left panel (their row will highlight in teal)
- Find the subject you want to assign:
- Use the search box to filter by name
- Click the Filter button for advanced options:
  - Sort alphabetically
  - Show/hide subjects with/without teachers
  - Filter by program
  - Filter by year level
- Click the + icon next to the subject
- Confirm the teacher and subject in the modal
- Click Save

# PAGES

## Scheduling Tool: Assigning

### Time & Date Assign



**Time & Date Assign**

Select Teacher  
Mr. Keanu Reeves

Select Subject  
Select subject

Select Class  
Select class

Day  
Select day

Start Time  
Select start time

Duration  
Select duration

Cancel Save

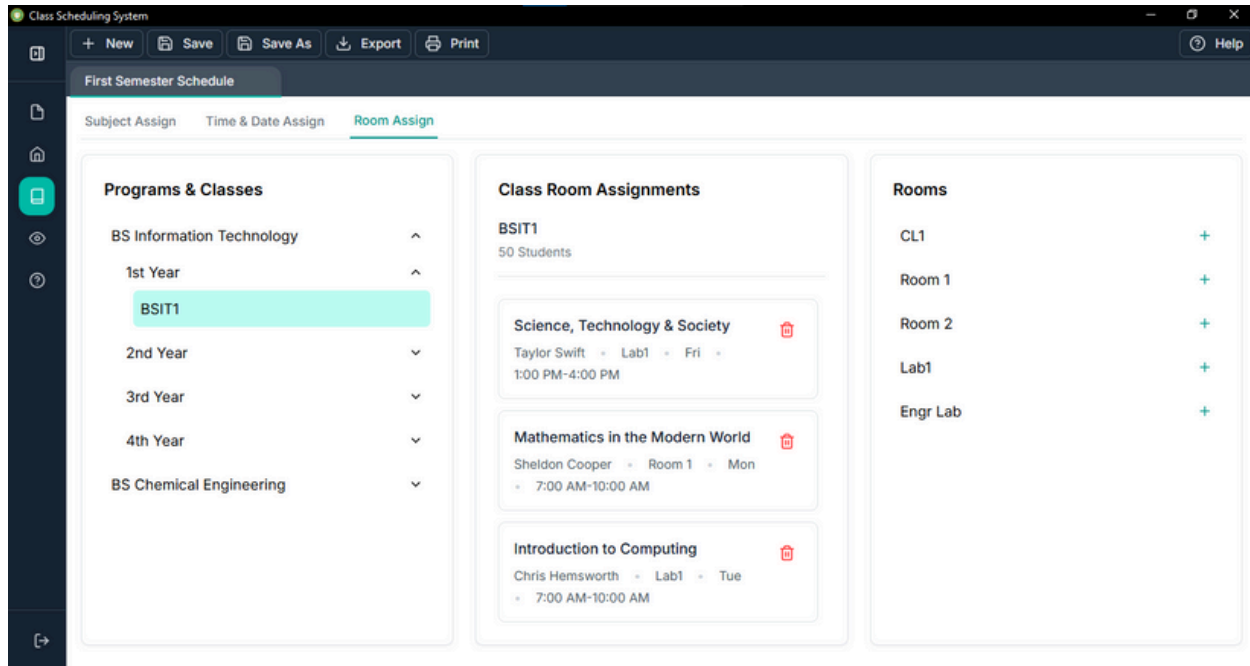
### Adding a Schedule

- Select a teacher from the left panel
- Click "Add Schedule" button
- Fill in the modal form:
  - Teacher (pre-selected if you chose one)
  - Subject
  - Class (which class will attend)
  - Day (Mon-Sat)
  - Start Time
  - Duration
- Click Save

# PAGES

## Scheduling Tool: Assigning

### Room Assign



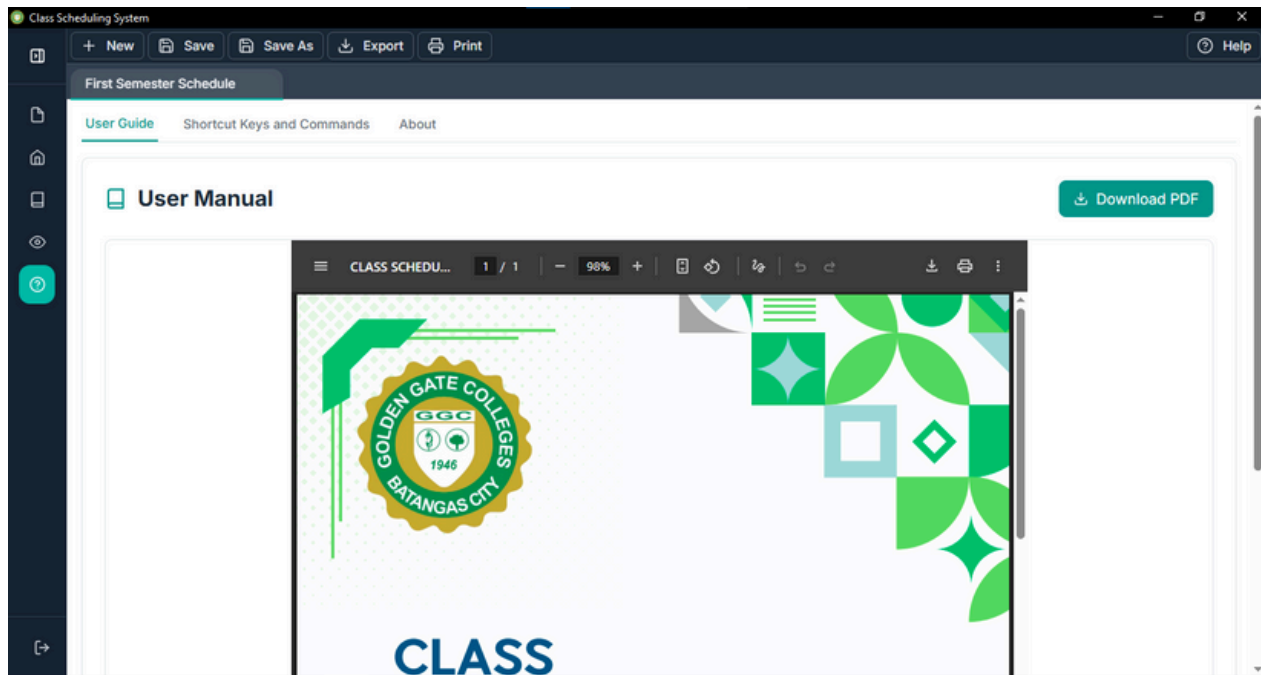
### Assigning a Room

- Navigate to your class:
  - Click a program to expand it
  - Click a year level to expand it
  - Click a class to select it (highlights in teal)
- Click the + icon next to a room in the right panel
- Fill in the modal:
  - Teacher (who teaches this subject)
  - Subject (what's being taught)
  - Room (pre-selected if you clicked from rooms panel)
  - Class (pre-selected if you chose a class)
- Click Save

# PAGES

## Help

### User Guide



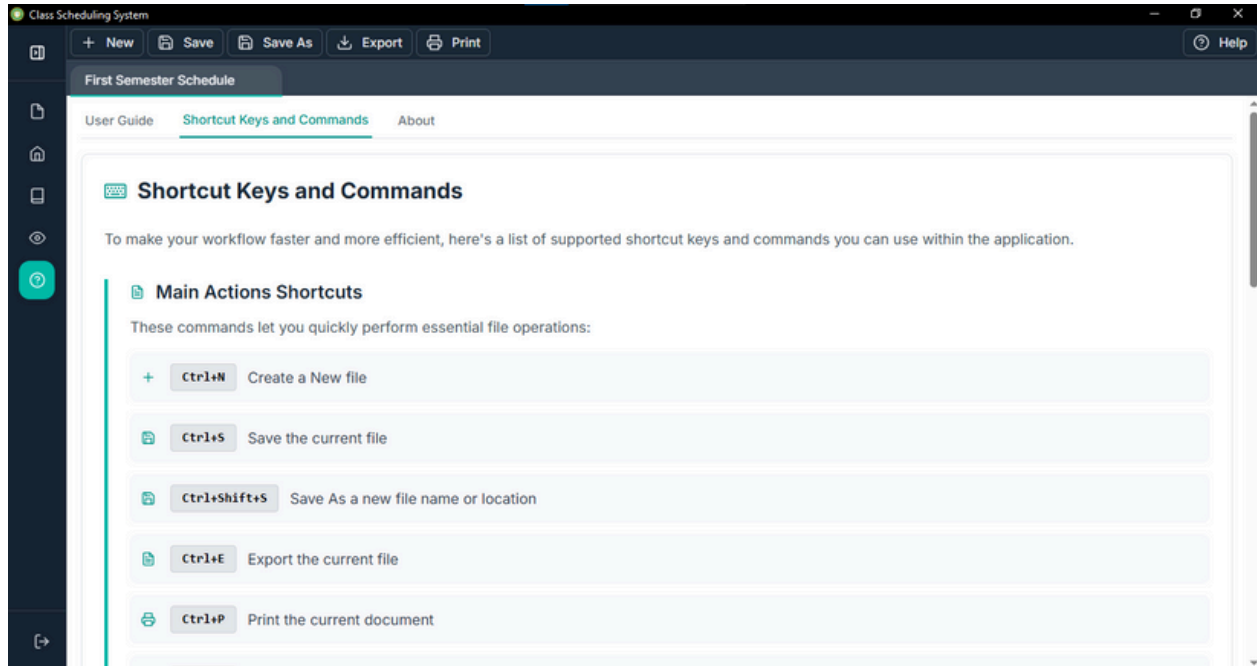
### Using the User Manual

- Navigate to the Help page (Ctrl+H)
- The User Guide tab opens by default
- View the manual using the embedded PDF viewer:
  - Use the toolbar to navigate pages
  - Zoom in/out using PDF controls
  - Search within the document
- Download the manual:
  - Click the "Download PDF" button in the top-right corner
  - The file will save to your default downloads folder

# PAGES

## Help

### Shortcut Keys



### Using Shortcuts Effectively

- Best Practices:
  - Practice frequently used shortcuts first (Ctrl+S, Ctrl+N)
  - Use navigation shortcuts to avoid clicking through menus
  - Master view tools shortcuts when working with schedules
  - Remember Escape to quickly close any modal
- Pro Tips:
  - Combine shortcuts for faster workflow (Ctrl+N then Ctrl+S)
  - Use Ctrl+B to maximize screen space when needed
  - Full screen mode (F11) is great for presentations
  - Print shortcut (Ctrl+P) works from any page with schedule data

