

User Manual: SchedEase

Introduction

The Class Timetable Web Application is designed to help teachers, students, or administrators organize and manage class schedules effectively. It allows users to add classes, select days, and view the timetable in a user-friendly grid format. This guide will help you understand how to use the web app, including adding new classes, managing the schedule, and interacting with the timetable. It also includes instructions on how to set up the web app locally from GitHub.

Features Overview

- **Class Schedule:** Displays a timetable with available slots for each day of the week.
 - **Add Class:** Allows users to input and save new classes.
 - **Clear Timetable:** Clears all added classes and resets the timetable.
 - **Open Compact Schedule:** Opens a separate compact version of the schedule in a new window.
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How to Set Up the Web Application from GitHub

Prerequisites

Before setting up the web app, ensure you have the following installed on your system:

1. **Java 17+** (The application is built using Java and requires a Java Runtime Environment)
2. **Maven** (for building the project)
3. **Git** (for cloning the repository)
4. **IDE** (e.g., IntelliJ IDEA, Eclipse, or Visual Studio Code) for editing the code

Steps to Set Up the Web Application

1. **Clone the Repository**
 - To clone the Repository you can clone via your IDE or use the Github Desktop App
2. **Navigate to the Project Directory**
 - Navigate and find where the repository was cloned to
3. **Open the Project in an IDE**

- Open the project in your preferred Integrated Development Environment (IDE). For example, if you are using IntelliJ IDEA:
 - Launch IntelliJ IDEA.
 - Click on **Open** and select the project directory where you cloned the repository.
 - 4. **Build the Project**
 - Once you have the project open in your IDE, you can build the project using Maven.
 - Go to CIS434V1.0.0/src/main/java/org.example/ApplicationVew
 - 5. **Run the Application Locally**
 - To start the web application locally, run the file
 - This will launch the application. The default web app should now be running at <http://localhost:8080>.
 - 6. **Access the Web Application**
 - Open your web browser and go to <http://localhost:8080>. You should see the Class Timetable Web Application running locally on your machine.
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How to Use the Web Application

1. Adding a New Class

To add a new class to the timetable, follow these steps:

1. **Fill in the Class Details:**
 - **Class Name:** Enter the name of the class (e.g., "Mathematics").
 - **Classroom:** Enter the room where the class will take place (e.g., "Room 101").
 - **Start Time:** Select the start time for the class using the time picker (the class must start after 8:00 AM and before 6:00 PM).
 - **End Time:** Select the end time for the class. The end time must be later than the start time.
 - **Days:** Use the checkbox group to select the days of the week when the class will occur (e.g., Monday, Wednesday, Friday).
2. **Click "Add Class":** After filling out the details, click the "Add Class" button to save the class to the timetable. The schedule will automatically update with the new class.
Note: If any required fields are left empty or if the class times overlap with an existing class, an error message will be displayed.

2. Clearing the Timetable

If you wish to remove all classes from the timetable:

1. **Click "Clear":** Press the "Clear" button, which will clear all classes from the timetable.

2. **Confirmation:** A notification will appear, confirming that the timetable has been cleared.

3. Viewing the Timetable

The timetable is displayed in a grid format, where each row represents an hourly time slot (from 8:00 AM to 6:00 PM). The days of the week are displayed as columns, and the classes scheduled for each day are listed within the respective time slots.

- **Classes for a specific day:** If a class is scheduled for a particular day, it will be shown in the corresponding cell of the timetable under the appropriate time slot.
- **Multiple classes:** If there are multiple classes in the same time slot for a day, they will all be listed vertically within the time cell.

4. Opening the Compact Schedule

If you prefer a more compact view of the schedule, you can open it in a separate window.

1. **Click "Open Compact Schedule":** This button opens a new tab with a simplified view of the schedule. This view is designed for easier printing or sharing.

5. Navigation and Layout

The layout is divided into two main sections:

- **Class Form Section (Left):**
 - This section allows you to input and manage class details, including the class name, room, days, and times.
 - **Timetable Section (Right):**
 - This section displays the class timetable with the days of the week and the scheduled time slots. It dynamically updates when new classes are added.
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Error Handling and Validation

The web application includes built-in validation to ensure the integrity of the class schedule:

- **Missing Information:** If you try to add a class without filling in all required fields (e.g., class name, room, or times), a notification will alert you to complete the missing details.
 - **Overlapping Classes:** If a new class overlaps with an existing class (i.e., the times conflict), the application will notify you and prevent the class from being added.
 - **Invalid Time Range:** If the end time is earlier than or equal to the start time, a notification will appear to alert you to adjust the times.
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Tips and Best Practices

- **Avoid Overlapping Classes:** Ensure that classes do not overlap by checking the existing schedule before adding a new class.
 - **Use the Compact Schedule for Printing:** If you need a simplified, print-friendly version of the schedule, use the "Open Compact Schedule" button.
 - **Adjust Time Format:** The time is displayed in 12-hour AM/PM format for easier reading, but the class schedule operates on 24-hour time internally.
 - **Responsive Layout:** The application layout adjusts to different screen sizes. For mobile users, the timetable grid will automatically adjust to fit smaller screens.
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Troubleshooting

If you encounter any issues, try the following:

- **Refreshing the Page:** If the timetable does not update correctly, try refreshing the browser.
 - **Clearing the Cache:** If the app is not responding as expected, clear your browser's cache and cookies.
 - **Ensure All Fields Are Filled:** Make sure that every field in the class form is properly filled out before attempting to add a new class.
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Contact and Support

For further assistance or to report a bug, please contact the developer team.

Conclusion

This web application provides an easy-to-use platform for managing class schedules. You can quickly add, view, and manage classes in a flexible timetable format. Use the form to enter class details, and the timetable will automatically reflect changes.

Happy scheduling!