TIMETABLE GENERATOR

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PROJECT ID	23
PROJECT TITLE	TIMETABLE GENERATOR

1. INTRODUCTION:

- **Overview of the timetable generator:** Describe the purpose of the timetable generator, its target audience, and the problems it aims to solve. Mention its key features and benefits.
- **Purpose and scope of the documentation:** Explain what this documentation covers, who it is intended for (end users, administrators, developers), and how it is organized.

2. SYSTEM REQUIREMENTS:

Listing the hardware and software requirements for installing and running the timetable generator.

FRONT END	HTML, CSS, Java Script
BACK END	Linux, Apache, PHP
DATABASE	My SQL
API	REST Ful services

3. USER GUIDE:

- **User interface overview:** Describe the main components of the user interface, including menus, toolbars, and main windows.
- **Creating a new timetable:** Step-by-step instructions for creating a new timetable from scratch.
- **Adding, editing, and deleting events:** Detailed guide on how to add, modify, and remove events or sessions in the timetable.
- **Importing and exporting data:** Explain how to import data from external sources (e.g., CSV files) and export timetables to different formats.
- **Generating reports:** Instructions on creating and customizing reports based on the timetable data.

4. FEATURES AND FUNCTIONALITY:

- **Scheduling algorithms:** Explain the algorithms used for scheduling, their logic, and how they ensure optimal timetables.
- **Conflict detection and resolution:** Describe how the software detects scheduling conflicts and the available options for resolving them.
- **Notifications and reminders:** Explain how to set up and manage notifications and reminders for events.
- **Timetable Display:** Provide students with a view of their personal class schedules. Provide faculty with a view of their teaching schedules. Allow administrators to view and manage overall schedules for all users.

5. ADMINISTRATIVE FUNCTIONS:

- **User management (roles, permissions):** Guide on managing users, assigning roles, and setting permissions.
- **Data backup and restoration:** Instructions for backing up and restoring timetable data.
- **Configuration settings:** Overview of the configuration settings available to administrators.

6. ADVANCED USAGE:

- **Integrating with other systems (API usage):** Instructions on how to integrate the timetable generator with other systems using its API.
- **Automation scripts:** Examples of automation scripts for common tasks.

- **Custom scheduling rules:** Guide on defining and applying custom scheduling rules.

7. SCOPE:

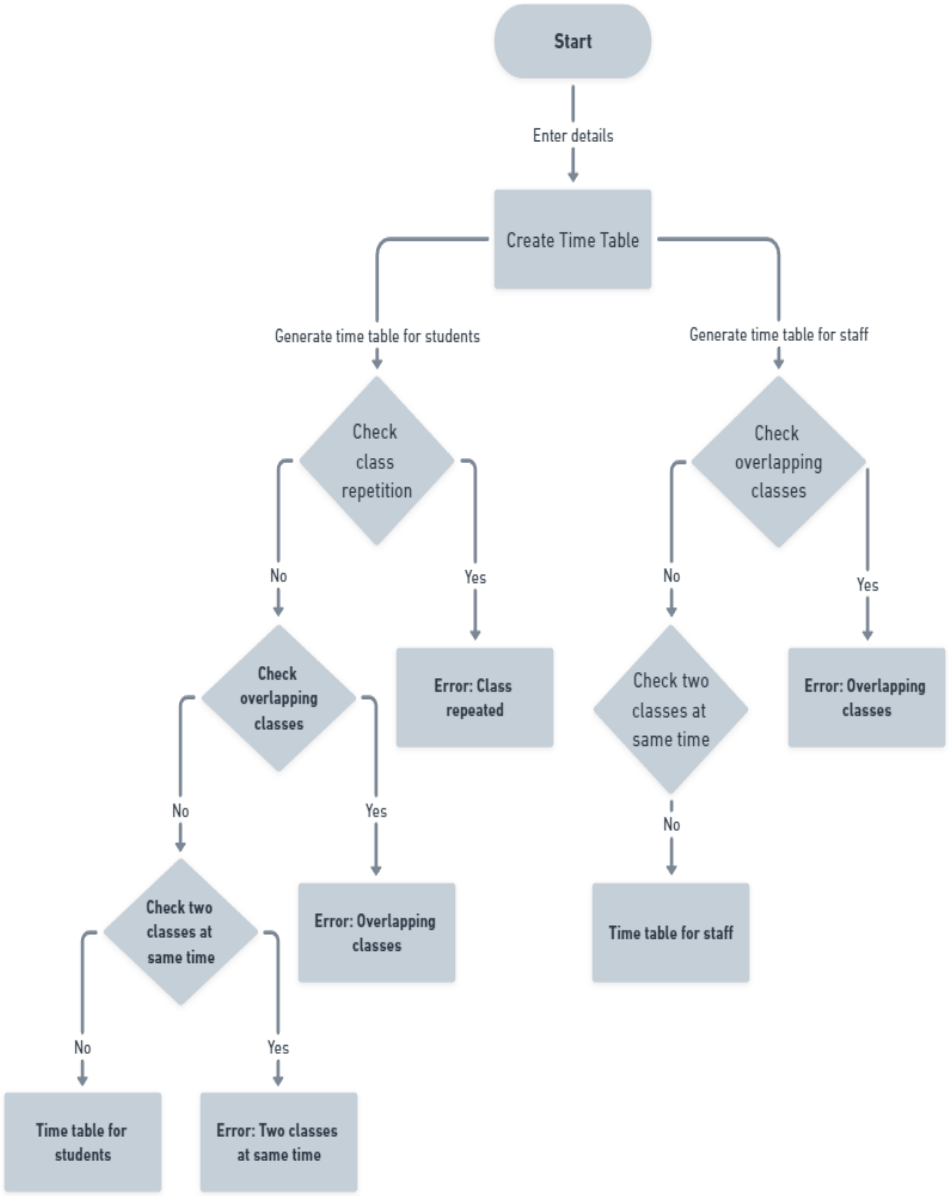
- **Architecture overview:** Detailed explanation of the software's architecture and design principles.
- **Development setup:** Instructions for setting up a development environment. Guide on how to extend the software by adding new features.
- **Testing and debugging:** Instructions for testing and debugging the software.

Contributing to the project: Guidelines for contributing to the project, including coding standards and submission processes. This System encompasses the design, development, implementation, and maintenance of a system that automates the creation of timetables for a college setting. The scope covers various aspects, including user roles, functionalities, constraints, and technology stack.

8.API DOCUMENTATION:

- **Overview of the API:** General information about the API, including its purpose and capabilities.
- **Authentication and authorization:** Instructions on how to authenticate and authorize API requests.

FLOWCHART:


Start
Enter details
Create Time Table
Generate time table for students
Generate time table for staff
Check class repetition
Check overlapping classes
No
Yes
No
Yes
Check overlapping classes
Error: Class repeated
Check two classes at same time
Error: Overlapping classes
No
Yes
No
Check two classes at same time
Error: Overlapping classes
Time table for staff
No
Yes
Time table for students
Error: Two classes at same time