Overview

This application is a comprehensive school timetable planner built with Python and Tkinter. It allows you to manage classes, s

Features

- Login System (if enabled)
- Timetable Grid: View and edit the weekly timetable for all classes and sections.
- Auto Assign: Automatically assign teachers to periods based on subject mapping and availability.
- Smart Match: Advanced assignment logic for optimal teacher allocation.
- Teacher On Leave: Mark a teacher as on leave for a day and reassign their periods.
- Edit Mapping: Edit which teachers can teach which subjects.
- Export: Save the timetable as PDF or Excel.
- Configurable: All data (classes, sections, teachers, subjects, mapping) is stored in config.json.
- Refresh: Reload the timetable from the database.

How to Use

- 1. Start the App: Double-click the executable or run python school_timetable_planner.py.
- 2. Select Year & Week: Use the top bar to choose the academic year and week number.
- 3. Edit Timetable: Click cells to assign subjects and teachers. Use dropdowns for quick selection.
- 4. Auto Assign/Smart Match: Use these buttons for automatic teacher allocation.
- 5. Teacher On Leave: Mark a teacher as absent and reassign their classes for the day.
- 6. Edit Mapping: Update which teachers can teach which subjects.
- 7. Export: Save the timetable as PDF or Excel for sharing/printing.
- 8. Refresh: Reload the timetable if you made changes elsewhere.

File Descriptions

- school_timetable_planner.py: Main application file.
- config.json: Stores all classes, sections, teachers, subjects, and mappings.
- timetable.db: SQLite database for timetable data.
- TimetablePlanner_Help.txt: This help file.

Creating an Executable

1. Install PyInstaller:

pip install pyinstaller

2. Build the Executable:

pyinstaller --onefile --noconsole --add-data "config.json;." --add-data "timetable.db;." school_timetable_planner.py

- The executable will be in the dist folder.
- Copy config.json and timetable.db to the same folder as the .exe if not bundled.

Cleaning Up Unwanted Files

- Keep only:
- school_timetable_planner.py
- config.json
- timetable.db
- TimetablePlanner_Help.txt
- You can delete: .bak files, old versions, test scripts, images, HTML, JS, CSS, and any folders not needed for your use.

Troubleshooting

- PDF Export Fails: Make sure reportlab is installed (pip install reportlab).

- Excel Export Fails: Make sure pandas and openpyxl are installed.
- UI Issues: Ensure you are using Python 3.7+ and have all dependencies installed.

Contact

For further help, contact your developer or IT support.