SIMPLE CALENDAR & EVENT MANAGER



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APPROACH & DESIGN

- Language: Python
- **Type:** Command-line app
- **Storage:** storage.json file
- Core Modules:
 - Event: Represents a calendar event
 - Scheduler: Handles logic (add, list, find free slots)
 - cli.py: Main program loop for user interaction

KEY FILES & FOLDERS

File	Purpose
eventClass.py	Defines the Event class and logic
eventScheduler.py	Defines Scheduler, core operations
cli.py	CLI interface using input()
storage.json	Stores saved events in JSON format
README.md	Setup and usage instructions

HOW TO RUN, TEST, AND VERIFY

Run

- •Open terminal or VS Code.
- Navigate to the project folder
- •Run: python cli.py
- Follow interactive prompts.

Test

- •Try creating events:
 - •In the future
 - •With overlap
 - •With end before start
 - •With past start time

python cli.py

```
1.Create Event 2.List events 3.Show Free slots 4.quit
option: 1
Enter event title: Doctor Appointment
Enter start time as MM-DD-YYYY HH:MM AM/PM: 06-21-2025 02:00
PMter end time as MM-DD-YYYY HH:MM AM/PM: 06-21-2025 03:00 PM
```

Sample input

HOW TO RUN, TEST, AND VERIFY

- •Try listing:
 - •All today's events
 - Remaining today
 - •Specific date
- •Try finding free slots.

```
1.Create Event 2.List events 3.Show Free slots 4.quit option: 1
Enter event title: hello
Enter start time as MM-DD-YYYY HH:MM AM/PM: 06-20-2025 7:00 PM
Enter end time as MM-DD-YYYY HH:MM AM/PM: 06-20-2025 9:00 PM
event_name: hello
Event hello overlaps with event Dinner.
```

Verify

- •Check console output for:
 - •Event creation success/failure messages.
 - •Error messages (invalid input, overlap, etc.).
- •Check storage.json file for saved event data.

Overlap check

TEST DATA & EDGE CASES

Example entries in storage.json:

Edge cases tested:

- •Overlapping events
- •Events before current time
- •Slots that cross midnight
- •Full-day slot request