**Scheduling System: RESTful APIs Documentation**

This document lists all necessary RESTful APIs for the scheduling system, including both implemented and planned APIs.

**1. Add a Tutor (Implemented)**

* **Endpoint**: /tutor
* **HTTP Method**: POST
* **Purpose**: Add a new tutor to the system.
* **Request**:

{

"first\_name": "John",

"last\_name": "Doe",

"time\_zone": "UTC",

“subject”: ”Mathematics”

}

* **Response**:

{

"message": "Tutor created successfully"

}

**2. Add a Student (Implemented)**

* **Endpoint**: /student
* **HTTP Method**: POST
* **Purpose**: Add a new student to the system.
* **Request**:

{

"first\_name": "Mary",

"last\_name": "Jane",

"time\_zone": "EST",

}

* **Response**:

{

"message": "Student created successfully"

}

**3. Add/Update Tutor Availability (Implemented)**

* **Endpoint**: /availability
* **HTTP Method**: POST
* **Purpose**: Add or update a tutor's availability.
* **Request**:

{

"tutor\_id": 1,

"day": "Monday",

"start\_time": "09:00",

"end\_time": "12:00",

"time\_zone": "UTC"

}

* **Response**:

{

"message": "Availability added successfully"

}

**4. Search for Available Tutors (Implemented)**

* **Endpoint**: /students/search\_tutors
* **HTTP Method**: GET
* **Purpose**: Search for tutors’ availability by subject and time.
* **Request**:

GET/students/search\_tutors?subject=Mathematics&day=Tuesday&start\_time=13:00&end\_time=14:00&time\_zone=UTC

* **Response**:

{

"id": 2,

"first\_name": "Jane",

"last\_name": "Smith",

"subject": "Mathematics",

"availabilities": [

{

"day": "Tuesday",

"start\_time": "13:00:00",

"end\_time": "14:00:00",

"time\_zone": "UTC"

}

]

}

**5. Book a Slot (Implemented)**

* **Endpoint**: /students/:student\_id/bookings
* **HTTP Method**: POST
* **Purpose**: Book a time slot with a tutor.
* **Request**:

{

"tutor\_id": 1,

"day": "Monday",

"time\_slot": "10:00"

}

* **Response**:

{

"message": "Booking created successfully"

}

**6. Retrieve a Tutor’s Availabilities (Implemented)**

* **Endpoint**: /tutors/:tutor\_id/availabilities
* **HTTP Method**: GET
* **Purpose**: Retrieve all availabilities for a specific tutor.
* **Request:**

GET /tutors/2/availabilities

* **Response**:

{

"id": 8,

"tutor\_id": 2,

"day": "Tuesday",

"start\_time": "2000-01-01T13:00:00.000Z",

"end\_time": "2000-01-01T14:00:00.000Z",

"created\_at": "2025-01-22T12:36:00.792Z",

"updated\_at": "2025-01-22T12:36:00.792Z",

"time\_zone": "UTC"

}

**7. Retrieve Student Bookings (Planned)**

* **Endpoint**: /students/:student\_id/bookings
* **HTTP Method**: GET
* **Purpose**: Retrieve all bookings for a specific student.
* **Request Parameters**:

GET /students/1/bookings

* **Response**:

{

"id": 5,

"student\_id": 1,

"tutor\_id": 2,

"day": "Tuesday",

"time\_slot": "10:00:00",

"created\_at": "2025-01-22T12:36:00.792Z",

"updated\_at": "2025-01-22T12:36:00.792Z"

},

{

"id": 6,

"student\_id": 1,

"tutor\_id": 3,

"day": "Wednesday",

"time\_slot": "14:00:00",

"created\_at": "2025-01-22T13:20:00.145Z",

"updated\_at": "2025-01-22T13:20:00.145Z"

}

**8. Delete a Tutor Availability (Planned)**

* **Endpoint**: /availability/:id
* **HTTP Method**: DELETE
* **Purpose**: Delete a specified tutor availability.

**9. Delete a Booking (Planned)**

* **Endpoint**: /booking/:id
* **HTTP Method**: DELETE
* **Purpose**: Delete a booked slot (un-book).

**10. Reminder Notification (Planned)**

* **Endpoint**: /notifications
* **HTTP Method**: POST
* **Purpose**: Send the student a reminder notification of an upcoming booking.