**Student Admission API Documentation**

**Overview**

This API provides full **CRUD** (Create, Read, Update, Delete) operations for managing student admission records.  
It automatically calculates **BMI** and gives a **health verdict** based on height and weight data.

**1. POST - Create Student**

**Endpoint:** POST /create  
**Description:** Creates a new student admission record.

**Fields Required**

* **id**: Unique student identifier
* **first\_name**: Student’s first name
* **last\_name**: Student’s last name
* **gender**: Must be "male", "female", or "other"
* **date\_of\_birth**: Date in YYYY-MM-DD format
* **class\_applied**: Grade/class applying for
* **height\_cm**: Height in centimeters (must be > 0)
* **weight\_kg**: Weight in kilograms (must be > 0)
* **father\_name**: Father’s full name
* **contact\_number**: Contact phone number
* **address**: Must include city and state
* **status**: Admission status

**Response Codes:**

* 201 Created: Student created successfully
* 400 Bad Request: Student already exists

**2. PUT - Update Student**

**Endpoint:** PUT /edit/{student\_id}  
**Description:** Updates an existing student record. All fields are optional, meaning you can update one or many fields.

**Fields Available for Update**

* Personal details: first\_name, last\_name, gender, date\_of\_birth
* Academic details: class\_applied
* Physical details: height\_cm, weight\_kg
* Family details: father\_name, contact\_number
* Address details: city, state
* Admission details: status

**Response Codes:**

* 200 OK: Student updated successfully
* 404 Not Found: Student not found

**Important Notes:**

* BMI and health verdict are recalculated automatically if height or weight is updated
* You only need to include fields you want to update; existing values remain unchanged

**3. DELETE - Delete Student**

**Endpoint:** DELETE /delete/{student\_id}  
**Description:** Permanently deletes a student admission record.

**Response Codes:**

* 200 OK: Student deleted successfully
* 404 Not Found: Student not found

**4. GET - View All Students**

**Endpoint:** GET /view  
**Description:** Retrieves all student records from the system.

**Response Code:**

* 200 OK: Returns all student data

**5. GET - View Single Student**

**Endpoint:** GET /student/{student\_id}  
**Description:** Retrieves details of a specific student using their ID.

**Response Codes:**

* 200 OK: Returns student data
* 404 Not Found: Student not found