School Transport Management API - Complete Documentation

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Overview

Base URL: `http://72.61.250.191:8080/api/v1`
API Version: 1.0.0
Authentication: JWT Bearer Token

Authentication APIs

1. Login

Endpoint: `POST /auth/login`
Description: Universal login for admins, parents, and drivers.
Request Body:

```
{
  "phone": 9876543210,
  "password": "your_password"
}
```

2. Get Profile

Endpoint: `GET /auth/profile?phone={phone_number}`
Description: Get user profile by phone number.

Admin APIs

1. Create Admin

Endpoint: `POST /admins`

2. Get All Admins

Endpoint: `GET /admins`

3. Update Admin Status

Endpoint: `PUT /admins/{admin_id}/status`
Status Options: `ACTIVE`, `INACTIVE`

Parent APIs

1. Create Parent

Endpoint: `POST /parents`

2. Update Parent FCM Token

Endpoint: `PATCH /parents/{parent_id}/fcm-token`

Driver APIs

1. Create Driver

Endpoint: `POST /drivers`

2. Update Driver Status

Endpoint: `PUT /drivers/{driver_id}/status`
Available Status Values: `ACTIVE`, `INACTIVE`, `SUSPENDED` (Use for suspended drivers)

Bus APIs

1. Create Bus

Endpoint: `POST /buses`

2. Update Bus Status

Endpoint: `PUT /buses/{bus_id}/status`
Available Status Values: `ACTIVE`, `INACTIVE`, `MAINTENANCE` (Use for buses in maintenance)

Student APIs

1. Create Student

Endpoint: `POST /students`

Description: Create a new student. Provides specific error messages for invalid references.
Error Handling: Returns detailed 400 errors if parent_id, route_id, or stop_id is invalid.

2. Update Student Transport Status

Endpoint: `PUT /students/{student_id}/status`
Transport Status Options: `ACTIVE`, `TEMP_STOP`, `CANCELLED`

3. Assign/Unassign Secondary Parent

Endpoint: `PATCH /students/{student_id}/secondary-parent`
Description: Link a second parent to a student (e.g. mother and father). Pass `null` for `s_parent_id` to unassign.
Request Body:

```
{
  "s_parent_id": "parent_uuid"
}
```

OR

```
{
  "s_parent_id": null
}
```

Trip APIs

1. Create Trip

Endpoint: `POST /trips`
Trip Type: `MORNING`, `EVENING`

2. Update Trip Status

Endpoint: `PUT /trips/{trip_id}/status`
Trip Status Options: `NOT_STARTED`, `ONGOING`, `PAUSED`, `COMPLETED`, `CANCELED`

Database Table Models

1. Admins Table

Column	Type	Description
admin_id	VARCHAR(36)	Primary Key
phone	BIGINT	Unique Phone
status	VARCHAR(20)	ACTIVE, INACTIVE

2. Drivers Table

Column	Type	Description
driver_id	VARCHAR(36)	Primary Key
status	VARCHAR(20)	ACTIVE, INACTIVE, SUSPENDED

3. Buses Table

Column	Type	Description
bus_id	VARCHAR(36)	Primary Key
status	VARCHAR(20)	ACTIVE, INACTIVE, MAINTENANCE

4. Students Table

Column	Type	Description
student_id	VARCHAR(36)	Primary Key
parent_id	VARCHAR(36)	Foreign Key (Primary Parent)
s_parent_id	CHAR(36)	Secondary Parent (Nullable, Default NULL)
name	VARCHAR(100)	Student Name

Entity Relationships

```
Parents (has)  Students
```

```
   Students (assigned to)  Routes
       Routes (has)  Route Stops
       Routes (used by)  Buses
           Buses (driven by)  Drivers

Trips (combines): Bus, Driver, Route
```

Security Features

1. **JWT Authentication**: Secure token-based auth for all protected endpoints.
2. **Password Hashing**: Bcrypt encryption for all user passwords.
3. **Foreign Key Integrity**: Strict database constraints with clear API error reporting.

Interactive Documentation:
- [Swagger UI](http://72.61.250.191:8080/docs)
- [ReDoc](http://72.61.250.191:8080/redoc)