

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`

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
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----- ----- -----
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

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.
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Interactive Documentation:

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