

Users API

Method	Endpoint	Description	Body Example
POST	/users/register	Register a new user (role=DRIVER auto, creates Driver with assignedCarId=null)	{ "username": "rahul", "password": "rahul123", "name": "Rahul Kumar", "age": 28, "gender": "MALE", "contactNumber": "9999999999", "email": "rahul@example.com", "licenseNumber": "DL-1234-5678" }
POST	/users/login	Login with username/password, returns token + user info	{ "username": "rahul", "password": "rahul123" }
GET	/users	List all active users	-
GET	/users/{id}	Get user by ID	-
GET	/users/role/{role}	List users by role (ADMIN, DRIVER)	-
PUT	/users/{id}	Update mutable fields (promote to ADMIN by setting role)	{ "name": "Admin", "age": 32, "gender": "MALE", "contactNumber": "9000000000", "email": "admin@example.com", "licenseNumber": "NA", "role": "ADMIN" }
DELETE	/users/{id}	Soft delete user (isActive=false)	-
PUT	/users/{id}/reactivate	Reactivate user	-
GET	/users/search/name?namePattern=rah%	Search users by name pattern	-
GET	/users/stats/count	Count total, admins, drivers	-

Drivers API

Method	Endpoint	Description	Body Example
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POST	/drivers	Create driver for existing user (usually auto-created on register)	{ "userId": 5, "assignedCarId": null }
GET	/drivers	List all active drivers	-
GET	/drivers/{id}	Get driver by ID	-
GET	/drivers/user/{userId}	Get driver by user ID	-
PUT	/drivers/{id}	Update driver (assign/unassign car)	{ "assignedCarId": 12 }
DELETE	/drivers/{id}	Soft delete driver	-
PUT	/drivers/{id}/reactivate	Reactivate driver	-
PUT	/drivers/{id}/assign-car? carId={carId}	Assign car to driver	-
PUT	/drivers/{id}/remove-car	Unassign car from driver	-
GET	/drivers/available	List drivers without cars	-
GET	/drivers/assigned	List drivers with cars	-
GET	/drivers/stats/count	Counts: total/available/assigned	-
GET	/drivers/stats/detailed	Detailed driver stats	-

Cars API

Method	Endpoint	Description	Body Example
POST	/cars	Create car	{ "status": "ACTIVE", "speed": 0, "fuelLevel": 100, "temperature": 90, "location": "New York, NY" }
GET	/cars	List active cars	-
GET	/cars/{id}	Get car by ID	-
PUT	/cars/{id}	Update car fields	{ "status": "ACTIVE", "speed": 45, "fuelLevel": 60, "temperature": 95, "location": "Dallas, TX" }
DELETE	/cars/{id}	Soft delete car	-
PUT	/cars/{id}/reactivate	Reactivate car	-

PUT	/cars/{id}/assign-driver?driverId={driverId}	Assign driver to car	-
PUT	/cars/{id}/remove-driver	Remove driver from car	-
GET	/cars/status/{status}	Filter cars by status	-
GET	/cars/driver/{driverId}	Get cars linked to driver	-
GET	/cars/available	Cars without drivers	-
GET	/cars/stats/count	Counts: total/available/assigned	-
POST	/cars/{id}/update-telemetry	Update telemetry-like fields	{ "status": "ACTIVE", "speed": 58, "fuelLevel": 42, "temperature": 102, "location": "Houston, TX" }

Telemetry API

Method	Endpoint	Description	Body Example
POST	/telemetry	Create telemetry record	{ "carId": 12, "speed": 72, "fuelLevel": 37, "temperature": 99, "location": "Dallas, TX", "timestamp": "2025-08-15T11:02:31" }
GET	/telemetry	List all active telemetry	-
GET	/telemetry/{id}	Get telemetry by ID	-
GET	/telemetry/car/{carId}	All telemetry for a car	-
GET	/telemetry/car/{carId}/latest	Latest telemetry for a car	-
GET	/telemetry/car/{carId}/range?...	Telemetry in time range	-
GET	/telemetry/latest/all	Latest telemetry for all cars	-
GET	/telemetry/stats/car/{carId}?startTime&endTime	Aggregated stats	-

DELETE	/telemetry/{id}	Soft delete telemetry	-
PUT	/telemetry/{id}/reactivate	Reactivate telemetry record	-

Alerts API

Method	Endpoint	Description	Body Example
POST	/alerts	Create alert	{ "carId": 12, "type": "HIGH_SPEED", "severity": "HIGH" }
GET	/alerts	All active alerts	-
GET	/alerts/{id}	Alert by ID	-
GET	/alerts/car/{carId}	Alerts for a car	-
GET	/alerts/severity/{severity}	Alerts filtered by severity	-
GET	/alerts/type/{type}	Alerts filtered by type	-
GET	/alerts/unacknowledged	All unacknowledged alerts	-
GET	/alerts/critical	All critical alerts	-
PUT	/alerts/{id}/acknowledge	Mark alert as acknowledged	-
GET	/alerts/stats/count	Alert counts	-
GET	/alerts/stats/severity	Counts by severity	-
DELETE	/alerts/{id}	Soft delete alert	-
PUT	/alerts/{id}/reactivate	Reactivate alert	-
GET	/alerts/recent	Alerts within last 24 hours	-

Simulator API

Method	Endpoint	Description	Body Example
GET	/simulator/status	Check simulator status	-