

# Flutter Driver App - API Integration Guide

**Target Audience:** Mobile Engineering Team

**Base URL (Staging):** <https://driversklub-backend.onrender.com>

**Base URL (Development):** <http://localhost:3000> (API Gateway)

**Base URL (Production):** AWS Elastic Beanstalk `driversklub-backend-env`

**Auth Header:** Authorization: Bearer <ACCESS\_TOKEN>

**Version:** 4.1.0 (Microservices + S3 + Fleet Manager Migration)

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**Last Verified:** January 17, 2026

**Note:** All requests go through the API Gateway. The gateway routes to 6 microservices (Auth, Driver, Vehicle, Assignment, Trip, Notification).

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## 1. Authentication

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### 1.1 New Driver Registration (Onboarding)

The new onboarding flow allows drivers to self-register via the mobile app. It replaces the old "Admin-only" creation model.

#### Step 1: Check Eligibility & Send OTP

**Endpoint:** POST `/users/drivers/verify`

Use this to screen the phone number.

- If user exists -> Returns error (User already registered).
- If new -> Sends OTP via SMS.

```
// Request
{
  "phone": "9876543210"
}

// Response
{
  "message": "OTP sent successfully"
}
```

#### Step 2: Verify OTP

**Endpoint:** POST /users/drivers/verifyOtp

Verify the OTP entered by the driver.

```
// Request
{
  "phone": "9876543210",
  "otp": "123456"
}

// Response
{ "message": "OTP verified successfully" }
```

### Step 3: Create Account (Signup)

**Endpoint:** POST /users/drivers/signup

Creates the `User` and empty `Driver` profile. Does NOT require Auth token (Public).

```
// Request
{
  "name": "Amit Kumar",
  "phone": "9876543210"
}

// Response
{
  "id": "u-123",
  "name": "Amit Kumar",
  "role": "DRIVER",
  "token": "..." // Auto-login after signup
}
```

**Note:** If the signup endpoint does not return a token, you must call normal Login ( `POST /auth/verify-otp` ) immediately after signup to get the session token.

### Step 4: KYC Profile Completion

Once logged in (Token received), the driver must complete their profile using the standard Driver API:

**Endpoint:** PATCH /drivers/profile (or PATCH /drivers/:id )

#### New Fields Available:

- `email`
- `dob` (Date of Birth)
- `address`, `city`, `pincode`
- `aadharNumber`, `panNumber`, `dlNumber`

#### Document Uploads (S3 Presigned URLs):

- `licenseFront`, `licenseBack`
- `aadharFront`, `aadharBack`
- `panCardImage`

- livePhoto

## 1.2 Send OTP

**Endpoint:** POST /auth/send-otp

**Auth Required:** No

**Request Body:**

```
{  
  "phone": "9876543210"  
}
```

**Response (200):**

```
{  
  "success": true,  
  "message": "OTP sent successfully"  
}
```

**Dev Mode:** When `NODE_ENV != 'production'`, OTP is printed to server console:

```
=====  
[DEV OTP] Phone: +919876543210  
[DEV OTP] Code : 123456  
=====
```

## 1.2 Verify OTP

**Endpoint:** POST /auth/verify-otp

**Auth Required:** No

**Request Body:**

```
{  
  "phone": "9876543210",  
  "otp": "123456"  
}
```

**Request Headers (Optional):**

```
x-client-type: app
```

**Note:** Set `x-client-type` header to `app` for mobile apps or `web` for web clients. This determines refresh token expiry duration.

**Dev Bypass (Development Only):**

```
{  
  "phone": "9876543210",  
  "otp": "000000",  
  "verifiedKey": "pass"  
}
```

**Response (200):**

```
{  
  "success": true,  
  "statusCode": 200,  
  "data": {  
    "accessToken": "eyJhbGciOiJIUzI1NiIs...".  
    "refreshToken": "8f8e23...",  
    "user": {  
      "id": "uuid-user-id",  
      "phone": "9876543210",  
      "role": "DRIVER"  
    }  
  }  
}
```

**Token Expiry:**

- **Access Token:** 15 minutes (all clients)
- **Refresh Token:**
  - **Mobile App** (`x-client-type: app`): 30 days
  - **Web Client** (`x-client-type: web`): 1 day
  - **Default** (no header): 1 day

**Action:**

1. Check if `user.role === 'DRIVER'`. If not, show "Unauthorized App" error.
2. Store `accessToken` securely (Keychain/Keystore).
3. Store `refreshToken` for silent token renewal.

---

### 1.3 Refresh Token

**Endpoint:** POST /auth/refresh

**Auth Required:** No

**Request Body:**

```
{  
  "refreshToken": "8f8e23..."
```

```
}
```

#### Response (200):

```
{
  "success": true,
  "data": {
    "accessToken": "eyJ..."
  }
}
```

**Implementation:** Call this automatically when you receive `401 Unauthorized` on any protected endpoint.

## 2. Daily Attendance

### 2.1 Check In (Start Shift)

**Endpoint:** POST `/attendance/check-in`

**Auth Required:** Yes

**Role:** DRIVER

#### Request Body:

```
{
  "driverId": "uuid-driver-id-from-profile",
  "lat": 28.4595,
  "lng": 77.0266,
  "odometer": 10500,
  "selfieUrl": "https://s3.amazonaws.com/bucket/selfie.jpg"
}
```

**Important:** Upload selfie to S3/Cloudinary first, then send the URL.

#### Response (201):

```
{
  "success": true,
  "data": {
    "id": "uuid",
    "status": "PENDING_APPROVAL",
    "checkInTime": "2025-12-25T08:00:00Z"
  }
}
```

#### Side Effects:

- **Rapido Status:** Driver is automatically marked **ONLINE** on Rapido (if no other conflicts exist).
- 

## 2.2 Check Out (End Shift)

**Endpoint:** POST /attendance/check-out

**Auth Required:** Yes

**Role:** DRIVER

**Request Body:**

```
{  
  "driverId": "uuid-driver-id",  
  "odometer": 10650,  
  "odometerImageUrl": "https://s3.amazonaws.com/bucket/odometer.jpg",  
  "cashDeposited": 5000  
}
```

**Note:**

- `cashDeposited` is the Amount the driver declares they are submitting (Cash + UPI collection) at day end.
- `odometerImageUrl` is optional. Upload odometer image to S3 first using `/drivers/upload-url`, then send the URL.

**Response (200):**

```
{  
  "success": true,  
  "message": "Check-out successful",  
  "data": {  
    "checkOutTime": "2025-12-25T18:00:00Z",  
    "totalKm": 150  
  }  
}
```

**Error Responses (400):**

- **Invalid Odometer:** message: "Odometer reading cannot be less than start reading (10500)"
- **Invalid Cash:** message: "Invalid cash deposit amount"

**Side Effects:**

- **Rapido Status:** Driver is forced **OFFLINE** on Rapido immediately.
- 

## 2.3 Start Break (Start Break in Shift)

**Endpoint:** POST /attendance/start-break

**Auth Required:** Yes

**Role:** DRIVER

**Request Body:**

```
{  
  "driverId": "uuid-driver-id"  
}
```

#### Response (200):

```
{  
  "success": true,  
  "statusCode": 200,  
  "message": "Break started successfully",  
  "data": {  
    "id": "1d0c84d0-a593-4079-8ed3-2ce274ad378d",  
    "driverId": "b16dd8ec-a030-44a9-9175-ebd77013dbd0",  
    "checkInTime": "2025-12-25T10:06:20.674Z",  
    "checkOutTime": null,  
    "status": "APPROVED",  
    "approvedBy": null,  
    "adminRemarks": null,  
    "checkInLat": 19.076,  
    "checkInLng": 72.8777,  
    "selfieUrl": "https://cdn.example.com/selfies/driver_98765.jpg",  
    "odometerStart": 45230,  
    "odometerEnd": null,  
    "breakStartTime": "2025-12-25T10:07:31.911Z",  
    "breakEndTime": null,  
    "createdAt": "2025-12-25T10:06:20.674Z",  
    "updatedAt": "2025-12-25T10:07:31.920Z"  
  }  
}
```

## 2.4 End Break (End Break in shift)

**Endpoint:** POST /attendance/end-break

**Auth Required:** Yes

**Role:** DRIVER

#### Request Body:

```
{  
  "driverId": "uuid-driver-id",  
}
```

#### Response (200):

```
{  
  "success": true,
```

```
        "statusCode": 200,
        "message": "Break ended successfully",
        "data": {
            "id": "1d0c84d0-a593-4079-8ed3-2ce274ad378d",
            "driverId": "b16dd8ec-a030-44a9-9175-ebd77013dbd0",
            "checkInTime": "2025-12-25T10:06:20.674Z",
            "checkOutTime": null,
            "status": "APPROVED",
            "approvedBy": null,
            "adminRemarks": null,
            "checkInLat": 19.076,
            "checkInLng": 72.8777,
            "selfieUrl": "https://cdn.example.com/selfies/driver_98765.jpg",
            "odometerStart": 45230,
            "odometerEnd": null,
            "breakStartTime": "2025-12-25T10:07:31.911Z",
            "breakEndTime": "2025-12-25T10:08:14.312Z",
            "createdAt": "2025-12-25T10:06:20.674Z",
            "updatedAt": "2025-12-25T10:08:14.316Z"
        }
    }
}
```

## 2.5 Get Attendance History

**Endpoint:** GET /attendance/history?driverId={uuid}

**Auth Required:** Yes

**Response (200):**

```
{
    "success": true,
    "data": [
        {
            "id": "uuid",
            "checkInTime": "2025-12-25T08:00:00Z",
            "checkOutTime": "2025-12-25T18:00:00Z",
            "status": "APPROVED",
            "odometerStart": 10500,
            "odometerEnd": 10650
        }
    ]
}
```

# 3. Trip Management

## 3.1 Get My Assigned Trips

**Endpoint:** GET /trips?status=DRIVER\_ASSIGNED

**Auth Required:** Yes

**Role:** DRIVER

**Response (200):**

```
{  
    "success": true,  
    "data": [  
        {  
            "id": "uuid-trip-id",  
            "tripType": "AIRPORT",  
            "originCity": "Delhi",  
            "pickupLocation": "T3 Terminal, Gate 4",  
            "pickupLat": 28.5562,  
            "pickupLng": 77.1000,  
            "dropLocation": "Cyber Hub, Gurgaon",  
            "pickupTime": "2025-12-25T10:00:00Z",  
            "status": "DRIVER_ASSIGNED",  
            "price": 1200,  
            "distanceKm": 45  
        }  
    ]  
}
```

### 3.2 Get Trip Details

**Endpoint:** GET /trips/:id

**Auth Required:** Yes

**Response (200):**

```
{  
    "success": true,  
    "data": {  
        "id": "uuid",  
        "tripType": "AIRPORT",  
        "pickupLocation": "T3 Terminal, Gate 4",  
        "pickupLat": 28.5562,  
        "pickupLng": 77.1000,  
        "dropLocation": "Cyber Hub",  
        "pickupTime": "2025-12-25T10:00:00Z",  
        "status": "DRIVER_ASSIGNED",  
        "price": 1200,  
        "customerPhone": "9876543210",  
        "customerName": "John Doe",  
        "provider": "MMT"  
    }  
}
```

### 3.3 🚗 Trip Lifecycle State Machine

Perform these actions **strictly in order**. Send GPS coordinates with every status change.

---

#### Step A: Start Trip (En-route to Pickup)

**Endpoint:** POST /trips/:id/start

**Auth Required:** Yes

**Request Body:**

```
{  
  "lat": 28.5500,  
  "lng": 77.0900  
}
```

##### ⚠️ STRICT CONSTRAINT:

- Can ONLY start within **2.5 hours** of pickupTime
- Error if too early: 400 "Cannot start trip more than 2.5 hours before pickup"

**Response (200):**

```
{  
  "success": true,  
  "message": "Trip started successfully"  
}
```

#### Side Effects:

- Status: DRIVER\_ASSIGNED → STARTED
- MMT Webhook triggered (if MMT trip)

---

#### Step B: Arrived (At Pickup Location)

**Endpoint:** POST /trips/:id/arrived

**Auth Required:** Yes

**Request Body:**

```
{  
  "lat": 28.5562,  
  "lng": 77.1000  
}
```

##### ⚠️ STRICT CONSTRAINTS:

1. **Geofence:** Must be within **500m** of pickupLat / pickupLng
2. **Time:** Must be within **30 minutes** of pickupTime

**Errors:**

- 400 "Driver not within 500m geofence" - Too far from pickup
- 400 "Cannot arrive more than 30 minutes before pickup" - Too early

#### Response (200):

```
{  
  "success": true,  
  "message": "Arrival confirmed"  
}
```

#### Side Effects:

- Status: STARTED → ARRIVED
- SMS sent to customer: "Driver Arrived"

---

### Step C: Passenger Onboard (Ride Begins)

**Endpoint:** POST /trips/:id/onboard

**Auth Required:** Yes

#### Request Body:

```
{  
  "otp": "1234"  
}
```

**Note:** OTP field is optional. Backend validates if provided.

#### Response (200):

```
{  
  "success": true,  
  "message": "Passenger onboarded"  
}
```

#### Side Effects:

- Status: ARRIVED → ONBOARD

---

### Step D: Complete (Dropoff)

**Endpoint:** POST /trips/:id/complete

**Auth Required:** Yes

#### Request Body:

```
{  
  "distance": 45.5,  
}
```

```
        "fare": 1200
    }
```

#### Response (200):

```
{
  "success": true,
  "message": "Trip completed successfully"
}
```

#### Side Effects:

- Status: ONBOARD → COMPLETED
- Driver becomes available for next assignment

#### Alternative: No Show

**Endpoint:** POST /trips/:id/noshow

**Auth Required:** Yes

#### Request Body:

```
{
  "reason": "Customer not reachable"
}
```

#### ⚠️ STRICT CONSTRAINT:

- Can ONLY mark no-show **AFTER 30 minutes** past pickupTime
- Error if too early: 400 "Cannot mark no-show before 30 minutes past pickup time"

#### Response (200):

```
{
  "success": true,
  "message": "Trip marked as no-show"
}
```

#### Side Effects:

- Status: → NO\_SHOW

### 3.4 Update Live Location

**Endpoint:** POST /trips/:id/location **Auth Required:** Yes

#### Request Body:

```
{  
  "lat": 28.5500,  
  "lng": 77.0900  
}
```

#### Response (200):

```
{  
  "success": true,  
  "message": "Location updated successfully"  
}
```

**Implementation Note:** Call this endpoint every 30-60 seconds while the trip is in progress ( `STARTED` , `ARRIVED` , `ONBOARD` ) to update the driver's live location.

### 3.5 Get Live Tracking

**Endpoint:** GET `/trips/:id/tracking`

**Auth Required:** Yes

#### Response (200):

```
{  
  "success": true,  
  "data": {  
    "currentLat": 28.5500,  
    "currentLng": 77.0900,  
    "lastUpdated": "2025-12-25T09:45:00Z"  
  }  
}
```

### 3.6 Partner Trips (MMT)

**Identification:** Trips assigned from MakeMyTrip can be identified by:

- `provider : "MMT"` (in Trip Details)
- `tripType : "AIRPORT" or "OUTSTATION"`

#### Special Handling Rules:

##### 1. Prepaid/Zero Payment:

- MMT trips are prepaid.
- **Do NOT collect cash** from the customer even if `price` is shown.
- Show "PREPAID" tag in the UI.

##### 2. Mandatory OTP:

- MMT requires a valid OTP for onboarding.
- Ensure the driver enters the exact 4-digit OTP provided by the customer.
- Sending "0000" or invalid OTP may cause MMT to reject the 'Onboard' status.

### 3. Location Updates:

- MMT strictly tracks vehicle movement.
- Ensure `POST /trips/:id/location` is called every **30-60 seconds** without fail.
- Failure to send location updates may result in penalties from MMT.

### 4. Cancellation:

- If a driver cancels an MMT trip, it triggers an immediate reassignment webhook.
- **Avoid frequent cancellations** to maintain fleet rating.

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## 4. Driver Profile

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### 4.1 Get My Profile

**Endpoint:** GET `/drivers/me`

**Auth Required:** Yes

**Role:** DRIVER

**Response (200):**

```
{
  "success": true,
  "data": {
    "id": "uuid",
    "firstName": "Raj",
    "lastName": "Kumar",
    "mobile": "9876543210",
    "licenseNumber": "DL-12345-67890",
    "kycStatus": "APPROVED",
    "status": "ACTIVE",
    "fleet": {
      "id": "uuid",
      "name": "Delhi Cabs Pvt Ltd",
      "city": "DELHI"
    },
    "assignments": [
      {
        "id": "assignment-uuid",
        "status": "ACTIVE",
        "startDate": "2026-01-12T00:00:00Z",
        "vehicle": {
          "id": "vehicle-uuid",
          "vehicleNumber": "DL10CA1234",
          "vehicleName": "Tata Tigor EV",
          "fuelType": "ELECTRIC",
          "vehicleType": "SEDAN",
          "status": "ACTIVE"
        }
      }
    ]
  }
}
```

```
        }
    ]
}
}
```

**Note:**

- `assignments` array contains the currently assigned vehicle (if any)
- If no vehicle is assigned, `assignments` will be an empty array `[]`
- Use `assignments[0].vehicle` to access the assigned vehicle details

## 4.2 Get Driver Profile by ID

**Endpoint:** GET /drivers/:id **Auth Required:** Yes **Role:** SUPER\_ADMIN , OPERATIONS , MANAGER

**Response (200):**

```
{
  "success": true,
  "data": {
    "id": "uuid",
    "firstName": "Raj",
    "lastName": "Kumar",
    // ... other fields
  }
}
```

## 4.3 Update Driver Profile

**Endpoint:** PATCH /drivers/:id **Auth Required:** Yes **Role:** SUPER\_ADMIN , OPERATIONS , MANAGER

**Request Body:**

```
{
  "firstName": "Rajesh",
  "email": "rajesh@example.com"
}
```

**Response (200):**

```
{
  "success": true,
  "data": [
    {
      "id": "uuid",
      "planName": "Weekly Plan",
      "rentalAmount": 3000,
    }
  ]
}
```

```

        "depositAmount": 5000,
        "validityDays": 7,
        "startDate": "2026-01-10T00:00:00.000Z",
        "expiryDate": "2026-01-17T00:00:00.000Z",
        "isActive": true,
        "status": "ACTIVE"
    },
    {
        "id": "uuid-2",
        "planName": "Monthly Plan",
        "rentalAmount": 10000,
        "depositAmount": 5000,
        "validityDays": 30,
        "startDate": "2025-12-01T00:00:00.000Z",
        "expiryDate": "2025-12-31T00:00:00.000Z",
        "isActive": false,
        "status": "EXPIRED"
    }
],
{
    "message": "Plan history retrieved successfully"
}

```

#### Status Values:

- ACTIVE - Current active plan (not expired)
- EXPIRED - Plan has passed expiry date
- INACTIVE - Plan was deactivated before expiry

#### Use Case:

- Show driver's rental history in "My Plans" section
- Display past plans with their validity periods
- Useful for admin to track driver's subscription history

## 4.6 Driver Preferences

### Get My Preferences

**Endpoint:** GET /drivers/me/preference

**Auth Required:** Yes

**Role:** DRIVER

**[!NOTE] Rapido Status Sync:** Driver availability (`isAvailable`) is managed automatically by the backend based on Login, Trip Status, and Breaks. Manual toggling may be overridden.

#### Response (200):

```
{
    "success": true,
    "statusCode": 200,
    "message": "Driver preferences retrieved successfully",
    "data": [
        {
            "key": "prefer_airport_rides",
            "displayName": "Prefer airport rides",
            "value": true
        }
    ]
}
```

```
        "description": "Prioritize airport pickup and drop trips",
        "category": "TRIP",
        "approvalRequired": true,
        "value": true
    }
]
}
```

### Request Preference Change

**Endpoint:** POST /drivers/:id/preference/update

**Auth Required:** Yes

**Role:** DRIVER

#### Request Body:

```
{
  "prefer_airport_rides": true,
  "accept_rentals": true,
  "auto_assign_rides": true
}
```

#### Response (201):

```
{
  "success": true,
  "message": "Preference change request submitted successfully"
}
```

### 4.7 Get Upload URL (S3 Image Upload)

**Endpoint:** GET /drivers/upload-url

**Auth Required:** Yes

**Role:** DRIVER

#### Query Parameters:

- `folder` (required): Folder name - `selfies`, `odometer`, `documents`, `profiles`, `vehicles`
- `fileType` (required): File extension - `jpg`, `jpeg`, `png`, `pdf`

#### Request Example:

```
GET /drivers/upload-url?folder=odometer&fileType=jpg
Authorization: Bearer <ACCESS_TOKEN>
```

#### Response (200):

```
{
  "success": true,
  "data": {
    "uploadUrl": "https://s3.amazonaws.com/driversklub-assets/odometer/uuid.jpg?X-Amz-...",
    "key": "odometer/uuid.jpg",
    "url": "https://driversklub-assets.s3.ap-south-1.amazonaws.com/odometer/uuid.jpg"
  },
  "message": "Upload URL generated successfully"
}
```

#### **Upload Flow:**

1. **Request Upload URL:** Call this endpoint with desired folder and file type
2. **Upload File:** Send a `PUT` request to the `uploadUrl` with the image file as binary body
3. **Use Final URL:** Send the `url` field to other APIs (e.g., `selfieUrl` in check-in, `odometerImageUrl` in check-out)

#### **Example Upload (Dart/Flutter):**

```
// Step 1: Get presigned URL
final response = await http.get(
  Uri.parse('$baseUrl/drivers/upload-url?folder=odometer&fileType=jpg'),
  headers: {'Authorization': 'Bearer $token'},
);
final data = jsonDecode(response.body)['data'];

// Step 2: Upload file to S3
final file = File(imagePath);
await http.put(
  Uri.parse(data['uploadUrl']),
  body: await file.readAsBytes(),
  headers: {'Content-Type': 'image/jpeg'},
);

// Step 3: Use the final URL
final imageUrl = data['url'];
```

#### **Allowed Folders:**

- `selfies` - Driver check-in selfies
- `odometer` - Odometer reading photos
- `documents` - License, Aadhaar, etc.
- `profiles` - Profile pictures
- `vehicles` - Vehicle photos

**Note:** Presigned URLs expire in 5 minutes. Upload must be completed within this time.

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## **5. Error Handling**

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## 5.1 HTTP Status Codes

Code	Error	Meaning	Action
400	VALIDATION_ERROR	Invalid request body	Check request format
400	TOO_EARLY_START	Cannot start > 2.5h before pickup	Wait until allowed time
400	TOO_EARLY_ARRIVE	Cannot arrive > 30min before pickup	Wait until allowed time
400	GEOFENCE_VIOLATION	Not within 500m of pickup	Move closer to pickup location
400	TOO_EARLY_NOSHOW	Cannot mark no-show < 30min after pickup	Wait until allowed time
401	UNAUTHORIZED	Token Invalid/Expired	Call /auth/refresh or re-login
403	FORBIDDEN	Insufficient permissions	Contact admin
404	NOT_FOUND	Trip/Resource not found	Refresh trip list
422	UNPROCESSABLE_ENTITY	Business logic violation	Check trip status
500	INTERNAL_SERVER_ERROR	Backend crash	Retry after few seconds

## 5.2 Error Response Format

```
{  
    "success": false,  
    "statusCode": 400,  
    "errorCode": "TOO_EARLY_START",  
    "message": "Cannot start trip more than 2.5 hours before pickup",  
    "timestamp": "2025-12-25T09:00:00Z"  
}
```

## 📝 Checklist for Production

- Implement token refresh logic
- Add offline queue mechanism
- Implement background location tracking
- Add geofencing validation before API calls
- Add time constraint validation before API calls
- Implement retry logic for failed requests
- Add comprehensive error handling
- Implement push notifications (FCM)
- Add analytics/crash reporting (Firebase)
- Test all edge cases (offline, poor network, etc.)

## 6. Finance & Rental Plans

---

### 6.1 Get Balance & Financial Status

**Endpoint:** GET /payments/balance **Auth Required:** Yes **Role:** DRIVER

**Response (200):**

```
{
  "success": true,
  "data": {
    "depositBalance": 5100,
    "paymentModel": "RENTAL",
    "hasActiveRental": true,
    "rental": {
      "planName": "Weekly Starter",
      "amount": 2500,
      "startDate": "2026-01-15T00:00:00Z",
      "expiryDate": "2026-01-22T00:00:00Z",
      "daysRemaining": 30,
      "isExpired": false,
      "vehicle": {
        "number": "BR34 QW 1234",
        "model": "TATA Tigor EV"
      }
    }
  }
}
```

---

## 6.2 Rental Management

### 6.2.1 Get Available Plans

**Endpoint:** GET /payments/rental/plans **Description:** List all plans available for subscription.

**Response (200):**

```
{
  "success": true,
  "data": [
    {
      "id": "uuid",
      "name": "Weekly Starter",
      "rentalAmount": 3000,
      "depositAmount": 5000,
      "validityDays": 7,
      "description": "Best for new drivers"
    }
  ]
}
```

```
    ]  
}
```

### 6.2.2 Subscribe to Plan

**Endpoint:** POST /payments/rental **Description:** Initiate payment to subscribe to a plan. Requires checking deposit balance first.

#### Request Body:

```
{  
  "rentalPlanId": "uuid-plan-id"  
}
```

#### Response (200):

```
{  
  "success": true,  
  "data": {  
    "transactionId": "uuid",  
    "paymentUrl": "https://testpay.easebuzz.in/pay/{accessKey}",  
    "accessKey": "0c4d0ab671a967784530587dbca8e2c8...",  
    "txnId": "TXN_1768492822722_AU6QJR"  
  }  
}
```

**Usage:** Open paymentUrl in a WebView or browser to complete payment.

### 6.2.3 Get Active Plan Details

**Endpoint:** GET /drivers/:id/active-plan **Note:** Use Driver ID from GET /drivers/me .

#### Response (200):

```
{  
  "success": true,  
  "data": {  
    "id": "uuid-rental-id",  
    "planName": "Weekly Starter",  
    "rentalAmount": 2500,  
    "depositAmount": 5000,  
    "validityDays": 7,  
    "startDate": "2026-01-15T00:00:00Z",  
    "expiryDate": "2026-01-22T00:00:00Z",  
    "isActive": true,  
    "daysRemaining": 5,  
    "vehicle": {  
      "number": "BR34 QW 1234",  
      "model": "TATA Tigor EV"  
    }  
  }  
}
```

```
    }
}
```

## 6.3 Security Deposit

### 6.3.1 Initiate Top-up

**Endpoint:** POST /payments/deposit **Description:** Add money to security deposit via PG.

**Request Body:**

```
{
  "amount": 2000
}
```

**Response (200):**

```
{
  "success": true,
  "data": {
    "transactionId": "uuid",
    "paymentUrl": "https://testpay.easebuzz.in/pay/{accessKey}",
    "accessKey": "0c4d0ab671a967784530587dbca8e2c8...",
    "txnId": "TXN_1768492822722_AU6QJR"
  }
}
```

**Usage:** Open `paymentUrl` in a WebView or browser to complete payment.

## 6.4 Transactions & Summary

### 6.4.1 Get Transaction History

**Endpoint:** GET /payments/transactions **Query Params:** page , limit , type (DEPOSIT, RENTAL, PENALTY, INCENTIVE)

**Response (200):**

```
{
  "success": true,
  "data": {
    "transactions": [
      {
        "id": "uuid",
        "type": "DEPOSIT",
        "amount": 5000,
        "status": "SUCCESS",
        "createdAt": "2025-12-01T10:00:00Z"
      }
    ]
  }
}
```

```
        ]
    }
}
```

#### 6.4.2 Get Incentives

**Endpoint:** GET /payments/incentives

#### 6.4.3 Get Penalties

**Endpoint:** GET /payments/penalties

#### 6.4.4 Get Daily Collections (Payout Model)

**Endpoint:** GET /payments/collections

#### 6.4.5 Get Weekly Earnings Summary

**Endpoint:** GET /payments/earnings/weekly

**Auth Required:** Yes

**Role:** DRIVER

##### Query Parameters:

- `weeks` (optional, default: 5): Number of weeks to fetch (1-12)

##### Response (200):

```
{
  "success": true,
  "data": {
    "currentWeek": {
      "type": "current",
      "weekNumber": 3,
      "startDate": "2026-01-13",
      "endDate": "2026-01-19",
      "tripCount": 15,
      "tripEarnings": 4500,
      "incentives": 500,
      "penalties": 200,
      "netEarnings": 4800
    },
    "previousWeeks": [
      {
        "weekNumber": 2,
        "startDate": "2026-01-06",
        "endDate": "2026-01-12",
        "tripCount": 12,
        "tripEarnings": 3800,
        "incentives": 300,
        "penalties": 100,
        "netEarnings": 4000
      }
    ],
    "totalEarnings": 8800
  }
}
```

```
}
```

#### Use Case:

- **Earnings Dashboard:** Show weekly summary card on driver home screen
- **Historical Trends:** Track performance over multiple weeks

## 7. Rapido Status Management

### [!IMPORTANT] Automatic Availability Control:

The backend **automatically manages** the driver's Rapido availability based on their internal schedule.

1. **Busy:** When on an internal trip, break, or upcoming assignment (< 45m).
2. **Available:** When idle.

**Do NOT implement** a manual "Go Online/Offline" toggle for Rapido status in the driver app. If a driver manually overrides this in the Rapido app, the backend will **force them back** to the correct state immediately.

## 8. Pricing & Utilities

### 8.1 Check Fare Estimate

**Endpoint:** POST /pricing/preview

**Auth Required:** Yes

**Role:** DRIVER

#### Request Body:

```
{
  "pickup": "Connaught Place, New Delhi",
  "drop": "Cyber City, Gurgaon",
  "tripType": "INTER_CITY",
  "tripDate": "2024-05-20T10:00:00.000Z",
  "bookingDate": "2024-05-19T10:00:00.000Z",

  // Vehicle (use one):
  "vehicleType": "EV",           // Option 1
  "vehicleSku": "TATA_TIGOR_EV", // Option 2

  "distanceKm": 25.5 // Optional fallback
}
```

#### Response (200):

```
{  
    "success": true,  
    "data": {  
        "distanceSource": "GOOGLE_MAPS", // or "CLIENT_PROVIDED"  
        "billableDistanceKm": 26,  
        "ratePerKm": 25,  
        "baseFare": 650,  
        "totalFare": 780,  
        "breakdown": {  
            "distanceFare": 650,  
            "tripTypeMultiplier": 1.2,  
            "bookingTimeMultiplier": 1.0,  
            "vehicleMultiplier": 1.0  
        },  
        "currency": "INR"  
    },  
    "message": "Fare calculated successfully"  
}
```

[!NOTE] **Distance Calculation:** The mobile app should calculate distance using Google Maps SDK, Mapbox, or similar before calling this endpoint. The backend uses the provided `distanceKm` to calculate fare based on trip type, booking advance, and vehicle type.

**See Also:** [Pricing Engine Documentation](#) for complete fare calculation details.

## 9. Google Maps Service

**Base URL:** /maps

These endpoints allow the app to proxy Google Maps requests through the backend, securing the API Key.

### 9.1 Autocomplete

**Endpoint:** GET /maps/autocomplete **Query Parameters:** `query` (required) **Use Case:** Address search bar.

### 9.2 Geocode

**Endpoint:** GET /maps/geocode **Query Parameters:** `address` (required) **Use Case:** Convert address to Lat/Lng.