Driver Service API Documentation

List of APIs

1. Create Driver

- **Endpoint**: POST /drivers
- **Description**: Creates a new driver profile
- **Request Format**:

```json
{
  "driverId": "driver123",
  "name": "John Doe",
  "vehicleType": "sedan",
  "licensePlate": "ABC123",
  "phoneNumber": "+1234567890"
}
```

- **Response Format**:

```json
{
  "success": true,
  "message": "Driver created successfully",
  "data": {
    "driverId": "driver123",
    "name": "John Doe",
    "vehicleType": "sedan",
    "licensePlate": "ABC123",
    "phoneNumber": "+1234567890"
  },
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

2. Update Driver

- **Endpoint**: PUT /drivers/driverId
- **Description**: Updates an existing driver's profile
- **Request Format**:

```json
{
  "name": "John Smith",
  "vehicleType": "SUV",
  "licensePlate": "XYZ789",
  "phoneNumber": "+1987654321"
}
```

- **Response Format**:

```json
{
  "success": true,
  "message": "Driver updated successfully",
  "data": {
    "driverId": "driver123",
```

```
    "name": "John Smith",
    "vehicleType": "SUV",
    "licensePlate": "XYZ789",
    "phoneNumber": "+1987654321"
  },
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

3. Get All Drivers

- **Endpoint**: GET /drivers/all
- **Description**: Retrieves all driver profiles
- **Request Format**: No request body
- **Response Format**:

```
{
  "success": true,
  "message": "Drivers retrieved successfully",
  "data": [
    {
      "driverId": "driver123",
      "name": "John Smith",
      "vehicleType": "SUV",
      "licensePlate": "XYZ789",
      "phoneNumber": "+1987654321"
    },
    {
      "driverId": "driver456",
      "name": "Jane Doe",
      "vehicleType": "sedan",
      "licensePlate": "ABC123",
      "phoneNumber": "+1234567890"
    }
  ],
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

4. Set Driver Status

- **Endpoint**: PATCH /drivers/driverId/status
- **Description**: Sets a driver's online/offline status
- **Request Format**:

```
{
  "isOnline": true,
  "latitude": 37.7749,
  "longitude": -122.4194
}
```

- **Response Format**:

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

```json
  "message": "Driver status updated successfully",
  "data": {
    "driverId": "driver123",
    "name": "John Smith",
    "vehicleType": "SUV",
    "licensePlate": "XYZ789",
    "phoneNumber": "+1987654321",
    "latitude": 37.7749,
    "longitude": -122.4194,
    "timestamp": 1625097600000,
    "isOnline": true
  },
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

5. Update Driver Location

- **Endpoint**: POST /drivers/location

- **Description**: Updates a driver's current location

- **Headers**:

- driver-id: driver123

- latitude: 37.7749

- longitude: -122.4194

- **Request Format**:

```json
{
  "isOnline": true
}
```

- **Response Format**:

```json
{
  "success": true,
  "message": "Driver location updated successfully",
  "data": {
    "driverId": "driver123",
    "latitude": 37.7749,
    "longitude": -122.4194,
    "timestamp": 1625097600000,
    "isOnline": true
  },
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

6. Get Driver Location

- **Endpoint**: GET /drivers/driverId
- **Description**: Retrieves a driver's current location
- **Request Format**: No request body

- **Response Format**:

```json
{
  "success": true,
  "message": "Driver location retrieved successfully",
  "data": {
    "driverId": "driver123",
    "latitude": 37.7749,
    "longitude": -122.4194,
    "timestamp": 1625097600000,
    "isOnline": true
  },
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

7. Get Driver Details

- **Endpoint**: GET /drivers/driverId/details
- **Description**: Retrieves complete driver details including profile and location
- **Request Format**: No request body
- **Response Format**:

```json
{
  "success": true,
  "message": "Driver details retrieved successfully",
  "data": {
    "driverId": "driver123",
    "name": "John Smith",
    "vehicleType": "SUV",
    "licensePlate": "XYZ789",
    "phoneNumber": "+1987654321",
    "latitude": 37.7749,
    "longitude": -122.4194,
    "timestamp": 1625097600000,
    "isOnline": true
  },
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

8. Find Nearby Drivers

- **Endpoint**: GET /drivers/nearby

- **Description**: Finds drivers within a specified radius of given coordinates

- **Headers**:

- latitude: 37.7749

- longitude: -122.4194

- **Query Parameters**:

- radius: 5 (in kilometers, optional)

- **Request Format**: No request body
- **Response Format**:

```json
{
  "success": true,
  "message": "Nearby drivers found successfully",
  "data": {
    "drivers": [
      {
        "driverId": "driver123",
        "latitude": 37.7749,
        "longitude": -122.4194,
        "timestamp": 1625097600000,
        "isOnline": true
      },
      {
        "driverId": "driver456",
        "latitude": 37.7750,
        "longitude": -122.4195,
        "timestamp": 1625097600000,
        "isOnline": true
      }
    ]
  },
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

9. Health Check

- **Endpoint**: GET /health
- **Description**: Checks the health status of the service
- **Request Format**: No request body
- **Response Format**:

```json
{
  "success": true,
  "message": "Health check successful",
  "data": {
    "service": "driver-service",
    "status": "healthy",
    "redis": "connected",
    "timestamp": "2023-01-01T00:00:00.000Z"
  },
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

Error Response Format

- **Format for all error responses**:

```json
{
  "success": false,
```

```
  "error": "Error message description",
  "timestamp": "2023-01-01T00:00:00.000Z"
}
```

Common Error Codes

- 400: Bad Request - Invalid input parameters
- 404: Not Found - Resource not found
- 500: Internal Server Error - Server-side error