# **Depannini API Documentation**

#### **Overview**

The Depannini API provides backend services for a roadside assistance application. It allows clients to request assistance and assistants to respond to these requests. The system supports real-time communication through WebSockets and location tracking.

## **Base URL**

https://api.depannini.com/

## **Authentication**

Most endpoints require authentication using JWT (JSON Web Token).

#### **Headers**

Authorization: Bearer <your\_token>

## **User Types**

• Client: Users who request roadside assistance

• **Assistant**: Users who provide roadside assistance services

# **API Endpoints**

#### **Authentication**

## Register a New User

• URL: (/api/auth/register/)

Method: POST

• Authentication: Not required

• Request Body:

```
json
{
  "phone_number": "string",
  "email": "string",
  "name": "string",
  "password": "string",
  "password_confirm": "string",
  "user type": "client|assistant",
  "service_type": "towing|repair",
  "vehicle_type": "string",
  "driving license cat": "c|b",
  "driving_license_num": "string",
  "driving_license_expiry": "dd:mm:yy",
  "vehicle_registration_num": "integer",
  "current lat": "number",
  "current_lng": "number",
  "address": "string"
}
```

#### Notes:

- Fields required for assistants: (service\_type), (vehicle\_type), (current\_lat), (current\_lng), (driving\_license\_cat), (driving\_license\_num), (driving\_license\_expiry), (vehicle\_registration\_num)
- driving\_license\_expiry must be in the future

#### **Email Login**

- URL: (/api/auth/login/email/)
- Method: POST
- Authentication: Not required
- Request Body:

```
json
{
    "email": "string",
    "password": "string"
}
```

• **Response**: Returns JWT access and refresh tokens

#### **Phone Login**

• **URL**: (/api/auth/login/phone/)

- Method: POST
- Authentication: Not required
- Request Body:

```
json
{
    "phone_number": "string",
    "password": "string"
}
```

• **Response**: Returns JWT access and refresh tokens

### **Google Login**

- **URL**: (/api/auth/login/google/)
- Method: POST
- Authentication: Not required
- Request Body:

```
json
{
    "token": "string"
}
```

#### **Email Verification**

- URL: (/api/auth/verify-email/)
- Method: POST
- Authentication: Not required
- Request Body:

```
json
{
    "email": "string",
    "code": "string"
}
```

#### **Phone Verification**

- URL: (/api/auth/verify-phone/)
- Method: POST
- Authentication: Not required

• Request Body:

```
json
{
    "phone_number": "string",
    "code": "string"
}
```

## **Password Reset Request**

• **URL**: (/api/auth/password-reset/)

• Method: POST

• Authentication: Not required

• Request Body:

```
json
{
    "email": "string"
}
```

#### **Password Reset Confirmation**

• **URL**: (/api/auth/password-reset/confirm/)

• Method: POST

• Authentication: Not required

• Request Body:

```
json
{
    "email": "string",
    "code": "string",
    "new_password": "string",
    "new_password_confirm": "string"
}
```

#### **Resend Verification Code**

• **URL**: (/api/auth/resend-verification/)

• Method: POST

• Authentication: Not required

#### **Refresh Token**

- **URL**: /api/auth/token/refresh/
- Method: POST
- Authentication: Not required
- Request Body:

```
json
{
    "refresh": "string"
}
```

• **Response**: Returns a new access token

## **Profile Management**

#### **Get User Profile**

- URL: (/api/profile/user/)
- Method: GET
- Authentication: Required
- **Response**: User profile data

#### **Get Assistant Profile**

- **URL**: (/api/profile/assistant/)
- Method: GET
- Authentication: Required (Assistant only)
- Response: Assistant profile data

### **Update Location**

- **URL**: (/api/profile/update-location/)
- Method: POST
- Authentication: Required
- Request Body:

```
json
{
    "latitude": "number",
    "longitude": "number"
}
```

#### **Update Assistant Status**

- URL: (/api/profile/assistant-status/)
- Method: POST
- **Authentication**: Required (Assistant only)
- Request Body:

```
json
{
    "is_active": "boolean"
}
```

#### **List All Assistants**

- URL: (/api/assistants/)
- Method: (GET)
- Authentication: Required
- **Response**: List of available assistants

## **Assistance Management**

### **Request Assistance**

- **URL**: (/api/assistance/request/)
- Method: POST
- **Authentication**: Required (Client only)
- Request Body:

```
json
{
    "pickup": {
        "lat": "number",
        "lng": "number"
    },
    "dropoff": {
        "lat": "number",
        "lng": "number"
    }
}
```

- Notes:
  - The dropoff field is optional
  - This endpoint will notify nearby assistants via WebSockets

• Response:

```
json
{
 "assistance": {
    "id": "integer",
    "status": "string",
    "client": {
      "id": "integer",
      "name": "string",
      "phone number": "string"
    },
    "assistant": null,
    "pickupLocation": {
      "lat": "number",
      "lng": "number"
    },
    "dropoffLocation": {
      "lat": "number",
      "lng": "number"
    },
    "distance_km": "number",
    "total_price": "number",
    "createdAt": "string",
    "updatedAt": "string"
  },
  "nearby_assistants": [
    {
      "assistant_id": "integer",
      "distance": "number"
    }
  1
}
```

#### **View Assistance Requests**

- URL: (/api/assistance/view/)
- Method: GET
- Authentication: Required
- **Response**: List of assistance requests associated with the user
- **Notes**: Returns different data depending on user type (client or assistant)

#### **View Specific Assistance Request**

• **URL**: (/api/assistance/view/<assistance\_id>/)

- Method: GET
- Authentication: Required
- **Response**: Details of the specified assistance request

#### **Accept Assistance Request**

- URL: (/api/assistance/accept/<assistance\_id>/)
- Method: (PATCH)
- Authentication: Required (Assistant only)
- Notes: Updates the assistance status to 'accepted' and assigns the assistant
- **Response**: Updated assistance details

#### **Update Assistance Status**

- **URL**: (/api/assistance/update/<assistance\_id>/)
- Method: PATCH
- Authentication: Required
- Request Body:

```
json
{
    "status": "ongoing|completed|canceled"
}
```

- Notes:
  - Clients can only cancel an assistance
  - Assistants can update to ongoing, completed, or canceled
  - Cannot update an assistance that is already completed or canceled

## **WebSockets**

The application uses WebSockets for real-time communication between clients and assistants.

#### **Assistant Channel**

- URL: (ws://your-domain.com/ws/assistant/<assistant\_id>/)
- **Purpose**: Assistants connect to this channel to receive new assistance requests

#### **Events Received**

• **new\_assistance\_request**: When a new assistance request is created near the assistant

```
fyson

{
    "type": "new_assistance_request",
    "assistance_id": "integer",
    "pickup_location": {
        "lat": "number",
        "lng": "number"
    },
    "client": {
        "id": "integer",
        "name": "string"
    }
}
```

### **Assistance Channel**

- URL: (ws://your-domain.com/ws/assistance/<assistance\_id>/)
- **Purpose**: Both clients and assistants connect to this channel to receive updates about a specific assistance request

#### **Events Received**

• **status**: When assistance status changes

```
igson

{
    "type": "status",
    "status": "accepted|ongoing|completed|canceled",
    "assistant": {
        "id": "integer",
        "name": "string"
    },
    "client": {
        "id": "integer",
        "name": "string"
    }
}
```

• **location**: When assistant location updates

```
fyson

{
    "type": "location",
    "lat": "number",
    "lng": "number",
    "user_id": "integer"
}
```

• **chat**: For chat messages

```
json
{
    "type": "chat",
    "message": "string",
    "sender": "string"
}
```

#### **Events Sent**

• location update: Clients or assistants can send location updates

```
json
{
    "type": "location",
    "lat": "number",
    "lng": "number",
    "user_id": "integer"
}
```

## **Data Models**

## User

- Fields:
  - (id): Integer (Primary Key)
  - (email): String (Optional, Unique)
  - (name): String
  - (phone\_number): String (Unique)
  - (profile\_photo): Image (Optional)
  - address: String (Optional)
  - current\_lat): Float (Optional)
  - current\_lng): Float (Optional)

- (user\_type): String ('client' or 'assistant')
- (service\_type): String ('towing' or 'repair') (Required for assistants)
- (vehicle\_type): String (Required for assistants)
- (is\_active\_assistant): Boolean
- (driving\_license\_cat): String ('c' or 'b') (Required for assistants)
- (driving\_license\_num): String (Required for assistants)
- driving\_license\_expiry): Date (Required for assistants)
- (vehicle\_registration\_num): Integer (Required for assistants)

#### **Assistance**

- Fields:
  - (id): Integer (Primary Key)
  - (client): ForeignKey (User)
  - (assistant): ForeignKey (User, Optional)
  - (pickup\_lat): Float
  - (pickup\_lng): Float
  - (dropoff\_lat): Float (Optional)
  - (dropoff\_lng): Float (Optional)
  - (created\_at): DateTime
  - updated\_at : DateTime
  - (status): String ('requested', 'accepted', 'ongoing', 'completed', 'canceled')
  - (rating): Integer
  - (distance\_km): Float
  - (total\_price): Decimal

# **Error Handling**

The API returns standard HTTP status codes:

- (200): OK Request successful
- (201): Created Resource created successfully
- 202: Accepted Request has been accepted for processing
- 400: Bad Request Invalid request parameters
- (401): Unauthorized Authentication required

- (403): Forbidden User doesn't have permission
- (404): Not Found Resource not found
- (409): Conflict Request conflicts with server state
- (500): Internal Server Error Server error occurred

## **Example Workflows**

## **Client Requesting Assistance**

- 1. Client logs in using (/api/auth/login/phone/)
- 2. Client requests assistance using (/api/assistance/request/)
- Client connects to WebSocket (ws://your-domain.com/ws/assistance/<assistance\_id>/)
- 4. Client receives updates about assistance status and assistant location

## **Assistant Accepting Assistance**

- 1. Assistant logs in using (/api/auth/login/phone/)
- 2. Assistant updates status to active using (/api/profile/assistant-status/)
- 3. Assistant connects to WebSocket (ws://your-domain.com/ws/assistant/<assistant\_id>/)
- 4. Assistant receives notification about new assistance request
- Assistant accepts request using (/api/assistance/accept/<assistance\_id>/)
- 6. Assistant connects to WebSocket (ws://your-domain.com/ws/assistance/<assistance\_id>/)
- 7. Assistant updates status to ongoing when arriving using (/api/assistance/update/<assistance\_id>/)
- 8. Assistant periodically sends location updates via WebSocket
- 9. Assistant updates status to completed after service using (/api/assistance/update/<assistance\_id>/)