Registration API with JWT Authentication - Requirements Document

Overview

The Registration API provides user registration using JWT (JSON Web Token). It ensures secure user sign-up for applications requiring identity management.

Functional Requirements

1. **User Registration**

   o Accepts user details: first name, middle name, last Name, phone number, date of birth, gender, instrument Type.

   o Validates phone number format.

   o Prevents duplicate phone number registrations.

   o Sends an OTP for phone number verification.

   o Returns a JWT token upon successful registration.

Non-Functional Requirements

- HTTPS enforcement.

- Rate limiting to prevent abuse.

- Scalability to handle concurrent registrations.

API Endpoint

POST /register - Registers a new user and returns a JWT token.

Technologies

- Backend: Python (Django + Django REST Framework)

- Database: PostgreSQL

- Authentication: JWT (djangorestframework-simplejwt)

- OTP Service: MSG91 (https://docs.msg91.com/overview)

Security Measures

- Implement CORS policies.

- Secure JWT storage (HttpOnly cookies or secure local storage).

- Use environment variables for sensitive data.

Assumptions

- Users provide a valid phone number.

- Database supports user indexing.

- API consumers handle JWT securely.