Quick Start Guide - Medicine Recognition API

Setup in 3 Minutes

POWERSHELL

```
# 1. Install & Migrate
cd e:/Temp/GRAD
python -m venv venv
venv\Scripts\Activate
pip install -r requirements.txt
cd medrec
python manage.py migrate

# 2. Run Server
python manage.py runserver
```

Server: http://127.0.0.1:8000/

Admin: http://127.0.0.1:8000/admin/ (admin/admin123)

API Endpoints Cheatsheet

Auth

```
POST /auth/register/      → Register + get tokens
POST /auth/login/         → Login + get tokens
POST /auth/logout/        → Logout (blacklist token)
POST /auth/token/refresh/ → Refresh access token
GET  /auth/profile/       → Get user info
PATCH /auth/profile/update/ → Update profile
POST /auth/password/change/ → Change password
```

Uploads

```
POST /api/uploads/new/    → Upload medicine image
GET  /api/uploads/        → List user's uploads
```

Quick Test

1. Register

```bash
BASH
curl -X POST http://127.0.0.1:8000/auth/register/ \
  -H "Content-Type: application/json" \
  -d '{"username":"demo","email":"demo@test.com","password":"Demo123!","password2":"Demo123!
```

Response: Gets `access` and `refresh` tokens

2. Upload Image

```bash
BASH
curl -X POST http://127.0.0.1:8000/api/uploads/new/ \
  -H "Authorization: Bearer YOUR_ACCESS_TOKEN" \
  -F "image=@medicine.jpg"
```

Response: Gets image URL and AI result

Flutter Connection

```dart
DART
// Android Emulator
static const baseUrl = 'http://10.0.2.2:8000';

// iOS Simulator
static const baseUrl = 'http://127.0.0.1:8000';

// Real Device (use your PC's IP)
static const baseUrl = 'http://192.168.1.5:8000';
```

Run server for mobile:

```powershell
POWERSHELL
python manage.py runserver 0.0.0.0:8000
```

JWT Token Usage

All authenticated requests need:

```
Authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGc...
```

Token Lifetime:

• Access: 1 hour

• Refresh: 7 days

Refresh when expired:

```bash
curl -X POST http://127.0.0.1:8000/auth/token/refresh/ \
  -H "Content-Type: application/json" \
  -d '{"refresh":"YOUR_REFRESH_TOKEN"}'
```

Project Structure

```
medrec/
■■■ accounts/        → Auth (register, login, profile)
■■■ api/             → Uploads (image upload, AI inference)
■■■ core/            → AI service (ai_service.py - EDIT THIS)
■■■ medrec/          → Settings
■■■ media/           → Uploaded images
```

Add Your AI Model

Edit: `medrec/core/ai_service.py`

```python
PYTHON
def infer(image_path: str) -> dict:
    # Replace with your model
    # Example: TensorFlow, PyTorch, API call

    return {
        'predicted_name': 'aspirin',
        'confidence': 0.95,
        'description': 'Details...'
    }
```

Full Documentation

- API_DOCUMENTATION.md - All endpoints (English)
- API_DOCUMENTATION_AR.md - All endpoints (Arabic)
- FLUTTER_INTEGRATION.md - Flutter code (English)
- FLUTTER_INTEGRATION_AR.md - Flutter code (Arabic)
- README.md - Main README

Common Commands

```powershell
POWERSHELL
# Create superuser
python manage.py createsuperuser

# Make migrations
python manage.py makemigrations
python manage.py migrate

# Run server
python manage.py runserver

# Run server for mobile
python manage.py runserver 0.0.0.0:8000

# Shell
python manage.py shell
```

Quick Fixes

Can't connect from Flutter?

→ Use `0.0.0.0:8000` and correct IP

Upload fails?

→ Check token in Authorization header

Token expired?

→ Use refresh endpoint

Image not showing?

→ Check `MEDIA_URL` and `MEDIA_ROOT` in settings

Built for Graduation Project ■