Backend Assignment: API Development Task

Assignment Title: This assignment aims to assess your backend development skills by requiring you to implement at least two fully functional APIs from a provided Postman collection. The APIs should adhere to the specified request/response structure and seamlessly integrate with the given frontend codebase and a PostgreSQL database.

Login Credentials: Phone Number: `7760873976` Password: `to_share@123`
Resources:

- **Postman Collection:** KPA_form data.postman_collection.json
- **Hosted API (for reference):** https://kpa.suvidhaen.com
- **Frontend Code:** https://github.com/s2pl/KPA-ERP-FE/
- **API Documentation (SwaggerHub):**
  https://app.swaggerhub.com/apis/sarvasuvidhaen/kpa-form_data/1.0.0

Assignment Description:

Choose any two APIs from the provided Postman collection and implement them using a backend framework of your choice, preferably Python FastAPI or Django.Key Requirements:

1. **API Selection:**
   ○ Select any two APIs from the SwaggerHub documentation.
   ○ Ensure the chosen APIs demonstrate diverse functionalities (e.g., a combination of POST/GET, file upload, or database operations).
2. **API Functionality:**
   ○ Implement API endpoints precisely as defined in the Postman examples (URL, method, request body, and response format).
   ○ Utilize PostgreSQL for database operations.
   ○ Verify that the complete flow works by running the Flutter frontend and calling your developed API endpoints, ensuring data is stored in the PostgreSQL database.
3. **Documentation & Testing:**
   ○ Provide an updated Postman collection including your implemented API endpoints.
   ○ Thoroughly test your APIs using Postman to confirm correct status codes and expected responses.
4. **Preferred Tech Stack:**
   ○ Python (FastAPI / Django REST Framework)

Deliverables:

- **Source Code:** Hosted on GitHub or provided as a zipped folder.

- **Updated Postman Collection:** With functional API responses.
- **README File:** A concise README file that includes:
    - Setup instructions for the project.
    - The technologies and tech stack used.
    - A list and description of the implemented APIs.
    - Any limitations or assumptions made.
- **Screen Recording:** A screen recording (approximately 2-5 minutes) explaining your project features, technologies, and stack.
    - Upload the recording to your Google Drive.
    - Rename the video file with your name as a prefix (e.g., `rohan_flutter_assignment.mp4`).
    - If multiple links are required for different aspects (e.g., project features, technical explanation), label them clearly (e.g., `project-features: <link>`, `project-technical: <link>`).

Optional (Bonus Points):

- **Dockerize** the implemented BE code(FastAPI or Django).
- Implement basic input validation (e.g., required fields, data types).
- Utilize environment-based configuration (e.g., `.env` file for database credentials or base URL).
- Integrate Swagger/OpenAPI (if using FastAPI).

Evaluation Criteria:

- Functional correctness of API implementations.
- Adherence to API request/response structures.
- Code clarity and modularity.
- Postman demonstration with working responses.
- Completeness and clarity of documentation.

Submission Instructions:

Mail the following details to `contact@suvidhaen.com`:

- **CV:** Share your resume in the mail as well
- **Source Code:**
  `[https://drive.com/yourname_api_assignment.zip](https://drive.com/yourname_api_assignment.zip)` (or GitHub link)
- **Postman Collection:**
  `[https://drive.com/yourname_postman_collection.json](https://drive.com/yourname_postman_collection.json)`
- **README:**
  `[https://drive.com/yourname_readme.txt](https://drive.com/yourname_readme.txt)`
- **Screen Recording:** `<link to your screen recording>`