Intern Task: Full-stack Backend System for Keypoint & Image Capture using MediaPipe.

Objective:

Develop a backend system that:

1. Extracts keypoints from images using MediaPipe.
2. Stores keypoints in an **SQL database** (e.g., PostgreSQL or MySQL)
3. Stores the original image in a **NoSQL database** (e.g., MongoDB)
4. Provides a **REST API for full CRUD.**
5. Uses a **Cron job to zip all data daily.**
6. Sends a confirmation email via **SendGrid (or any SMTP service)**

Tech Stack

- **Backend**: Node.js (Express)
- **SQL DB**: PostgreSQL or MySQL
- **NoSQL DB**: MongoDB
- **Image Processing**: Python + MediaPipe
- **Cron Jobs**: node-cron
- **Zipping**: archiver (Node.js)
- **Email**: SendGrid / Nodemailer

Task Requirements

A. MediaPipe Keypoint Extraction

- Use MediaPipe Pose to extract 33 body keypoints from the input image.
- Return JSON of keypoints and store the original image.
- The script should be callable via API (/extract-pose)

B. Cron Job

- Use node-cron to run **daily at 11:59 PM**
- Export entire SQL & NoSQL DB contents as a ZIP
- Zip format: /backup/yyyy-mm-dd-backup.zip
- Use the archiver npm package.

C. Email Notification

- Send a ZIP file as an email attachment or a download link via SendGrid.
- Subject: "Daily DB Backup - {{DATE}}"

Deliverables

1. Complete source code (Node.js + Python)
2. Sample database dump (.SQL + MongoDB export)
3. Readme file with:
    - Setup instructions
    - API usage
    - Cron configuration
    - Screenshots of responses or Postman results