**🧠 AI Modules for Job Apply App**

**1. JD Extractor (Text/OCR)**

* **Purpose:** Job description ko clean aur structured form mn convert krna.
* **Input:** Raw text / screenshot image.
* **Output JSON:** {role, company, requirements, skills, contact\_email, jd\_text}
* **Tools:**
  + Text: LLM + regex.
  + Screenshot: Tesseract/EasyOCR + LLM cleanup.

**2. Profile Parser**

* **Purpose:** User ke uploaded CV se **skills, experience, education** structured form mn extract krna (one-time at signup).
* **Output:** {skills, education, experience, achievements}
* **Use:** Taake AI ko pata ho ki resume ko tailor krte waqt kya cheezen include/reorder krni hain.

**3. CV Tailor (Resume Customizer)**

* **Purpose:** JD ke keywords aur requirements match kr k CV ko auto-update karna.
* **Steps:**
  1. Pick relevant skills/experience from Profile Parser.
  2. Inject JD keywords naturally.
  3. Export to **docx → PDF**.
* **Output:** Tailored CV PDF.

**4. Cover Letter Generator**

* **Purpose:** Specific job aur company ke liye custom cover letter likhna.
* **Input:** {profile\_info, jd\_info}
* **Output:** Cover letter (docx/pdf or text).

**5. Email Composer + Sender**

* **Purpose:** HR email detect krna aur customized CV + Cover Letter attach kr k send karna.
* **Input:** {to\_email, subject, body, attachments}
* **Output:** Success/fail status.
* **Note:** Gmail API / Outlook API use krna.

**6. Company Insight Generator**

* **Purpose:** Company ka short research summary (overview, mission, size, industry).
* **Input:** {company\_name}
* **Output:** Text summary (for user awareness + interview prep).
* **Tools:** Web scraping (SerpAPI / requests + LLM summarization).

**7. Interview Question Generator**

* **Purpose:** JD aur tailored CV k base pr possible interview questions generate krna.
* **Input:** {jd\_info, tailored\_cv\_info}
* **Output:** List of questions (technical + behavioral).

**8. Job Tracker Brain**

* **Purpose:** Job apply hone k baad structured log bnana.
* **Input:** {company, role, date, status}
* **Output:** Stored record in DB + chatbot UI thread.

**9. Chatbot Orchestrator**

* **Purpose:** User ko ek conversational flow dena (“paste JD → AI runs pipeline → results shown → confirm → send”).
* **Work:** Saare modules ko ek thread mn orchestrate krna.
* **Output:** Conversational UX, har job ek new chat.

**🔑 TL;DR Modules List**

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2. **Profile Parser**
3. **CV Tailor**
4. **Cover Letter Generator**
5. **Email Composer + Sender**
6. **Company Insight Generator**
7. **Interview Question Generator**
8. **Job Tracker Brain**
9. **Chatbot Orchestrator**