**Project Requirement: AI-Driven Automated Bench Sales System**

**Objective**

To automate the current manual bench sales process using a suite of AI and automation tools, enhancing efficiency, accuracy, and outreach effectiveness, while reducing manual intervention.

**Current Manual Workflow Overview**

The current process involves manual steps to:

* Scrape job postings.
* Identify and extract poster/contact details.
* Match resumes to job descriptions.
* Send personalized outreach emails with follow-ups.
* Track outcomes.

**Proposed AI-Driven Workflow Components**

**1. Job Data Scraping Module**

* **Input:** List of target technologies or job keywords.
* **Sources:** Dice, LinkedIn, Indeed.
* **Output Fields:**
  + Job URL
  + Job Title
  + Job Description
  + Job Location
  + Posting Company
  + Poster Name (if available)
  + Poster Email (if available)
  + Poster Phone Number (if available)
* **Tech Requirements:**
  + Web scraping framework (e.g., Scrapy, Selenium)
  + Proxy rotation and anti-bot techniques
  + Scheduled/cron scraping
  + Support for structured data output (JSON/CSV/Excel)

**2. Poster Information Enrichment Module**

* **Primary Enrichment from Source HTML:**
  + Extract poster contact details from the page source (especially Dice).
  + Use regex/DOM parsing to detect emails/phone numbers in unstructured data.
* **Secondary Enrichment from LinkedIn:**
  + When name is available, use LinkedIn and tools like Apollo.io API or similar to get:
    - Email
    - Phone Number
    - LinkedIn Profile URL
    - Role and Location
* **Tertiary Enrichment (When Poster Unknown):**
  + Identify company LinkedIn page.
  + Find up to 5 employees at the job location with titles like:
    - Recruiter
    - Talent Acquisition Manager
    - HR Manager
  + Extract contact details via tools like Apollo.io or People Data Labs.

**3. Data Organization & Storage**

* **Structure:**
  + Store all collected and enriched data in a single Excel/Google Sheets file.
  + Columns include:
    - Job Metadata (title, URL, location, company, etc.)
    - Poster Metadata (name, email, phone, LinkedIn, etc.)
    - Resume Matching Status
    - Outreach Status (sent/follow-up/no response)
* **Features:**
  + Auto-update rows when enriched data becomes available.
  + Export/import in XLSX and Google Sheets format.

**4. Resume Optimization Module**

* **Input:** Candidate resume and scraped job description.
* **Functionality:**
  + Use AI (e.g., GPT or Resume Matching tools) to:
    - Tailor resume content to match job description.
    - Optimize for at least 80% ATS (Applicant Tracking System) score.
  + Save revised resume under job-specific naming convention.
* **Output:** Optimized resume file (PDF/Docx).

**5. Email Outreach Automation Module**

* **Initial Outreach:**
  + Personalized email with attached optimized resume.
  + Sent to all available poster contact emails.
* **Follow-Up Campaign:**
  + Up to 6 follow-up emails with 1-day interval.
  + Smart follow-up using sequences (e.g., mail merge or via tools like Lemlist, Instantly.ai, Mailshake).
* **Fallback Communication:**
  + After 6 emails, send text or WhatsApp (if phone available).
  + If still no response, mark as **No Response**.

**6. Tracking & Reporting Dashboard**

* **Status Tracking:**
  + Resume Sent
  + Email Opened
  + Response Received
  + Follow-up Number
  + WhatsApp Sent
  + Final Status (Hired, Rejected, No Response)
* **Features:**
  + Dashboard with filters (tech, date, location, status).
  + Exportable reports.
  + Notification system for positive responses or required actions.

**Tech Stack Recommendations**

* **Scraping:** Python (Scrapy, BeautifulSoup, Selenium)
* **Data Storage:** Google Sheets API or Excel automation (OpenPyXL, Pandas)
* **Resume Optimization:** GPT-based API or resume parsing engines (e.g., Resumatch.io)
* **Email Automation:** Integration with Gmail/Outlook + 3rd party outreach tools
* **Enrichment Tools:** Apollo.io, People Data Labs, Hunter.io
* **Dashboard:** Streamlit, Dash, or Google Data Studio

**Success Criteria**

* 80% automation of the current manual process.
* Average resume-to-job match ATS score ≥ 80%.
* Outreach email open rate ≥ 50%.
* Response rate (email/text) ≥ 10%.
* Time savings of at least 60% over manual process.

Would you like this turned into a formal PDF or split into deliverables/milestones for a development team?

**You said:**

turn into formal pdf. Include details about the UI. UI should have the ability to provide access to admin, profile managers and actual job seekers. Admin will have full contriol. Profile managers can have access to assigned job seekers. Job seekers will have aces to their details and their submissions.

**ChatGPT said:**

Failed to generate

To turn this into a formal PDF, you'll need to log in to ChatGPT so we can use ChatGPT canvas together. Once you're logged in, I can help you structure and generate the PDF with all the UI and access control details included. Let me know when you're ready!

**You said:**

Update the above text with inclusion of permission level expectayion UI should have the ability to provide access to admin, profile managers and actual job seekers. Admin will have full contriol. Profile managers can have access to assigned job seekers. Job seekers will have aces to their details and their submissions.

**ChatGPT said:**

Here is the **updated formal project requirement** with the **User Interface and Permission Levels** section included:

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**7. User Interface (UI) & Role-Based Access Permissions**

The platform will include a web-based UI accessible on desktop and mobile browsers. Access is controlled by user role with clearly defined permissions.

**User Roles & Permissions**

**Admin**

* Full system access.
* User and role management (add/edit/remove users).
* Assign profile managers to job seekers.
* Configure scraping and email automation schedules.
* View/edit all data including dashboards and logs.
* Override or reassign submissions.

**Profile Manager**

* View and manage assigned job seekers.
* Access to:
  + Scraped job data.
  + Resume optimization tools for their assigned profiles.
  + Email tracking and outreach history.
  + Analytics dashboard (limited to their assigned job seekers).
* Cannot access job seekers not under their scope.
* Cannot create/edit user roles or modify automation settings.

**Job Seeker**

* Access only their personal portal.
* View:
  + Their job submissions.
  + Optimized resumes.
  + Outreach history and status.
* Receive alerts for responses or status changes.
* Can request resume updates or raise flags to profile manager.

**Tech Stack Recommendations**

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* **Email Automation:** Integration with Gmail/Outlook + 3rd party outreach tools
* **Enrichment Tools:** Apollo.io, People Data Labs, Hunter.io
* **Dashboard & UI:** React.js (frontend), Django/Node.js (backend), PostgreSQL
* **Authentication & RBAC:** Auth0 or Firebase with role-based access control

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