

## Assignment: Build a Candidate Referral Management System

### Objective:

Simulate a part of Worko's functionality by building a **Candidate Referral Management**

**System.** The goal is to test your ability to build and integrate APIs, manage state in a React frontend, and implement basic backend functionality.

### Requirements:

#### Frontend (React):

1. Build a user interface with the following features:
  - **Dashboard:**
    - Display a list of referred candidates (fetched from the backend API).
    - Each candidate card should display:
      - Name
      - Job Title
      - Status (e.g., Pending, Reviewed, Hired)
    - A search bar to filter candidates by job title or status.
  - **Referral Form:**
    - Allow users to refer a candidate.
    - Form fields:
      - Candidate Name
      - Email
      - Phone Number
      - Job Title
      - Resume (optional, accept only .pdf format).
    - On submission, the form should make a POST request to the backend API.
  - **Update Candidate Status:**
    - Add a dropdown or button to update a candidate's status from Pending to Reviewed or Hired.

Use **React Hooks** (e.g., `useState`, `useEffect`) or a state management library like **Redux** for managing data and API calls.

#### Backend (Node.js + Express):

1. **API Endpoints:**
  - a. POST `/candidates`: Save a new candidate's data.
  - b. GET `/candidates`: Fetch all referred candidates.
  - c. PUT `/candidates/:id/status`: Update the status of a candidate (e.g., Pending → Reviewed).
  - d. Optional: DELETE `/candidates/:id`: Delete a candidate.
2. **Database:**
3. any DB (**NoSql** is preferred) to store candidate details:
  - a. Name, Email, Phone, Job Title, Status, and Resume File URL (if uploaded).
4. **Validation:**
  - a. Ensure email and phone number formats are valid.
  - b. Restrict resume uploads to .pdf files.
5. **Error Handling:**

- a. Return appropriate error responses for invalid data or server issues.

**Bonus Points (Optional):**

- **Authentication:** Add basic user authentication using JWT or session-based login.
- **Deployment:** Deploy the application (frontend + backend) and share the live URL.
- **Resume Upload:** Store resumes on cloud storage (e.g., AWS S3, Google Cloud Storage).
- **Metrics Dashboard:** Display basic stats like:
  - Total candidates referred.
  - Candidates by status (Pending/Reviewed/Hired).

**Deliverables:**

1. Source code hosted on a repository (GitHub/GitLab).
2. Postman Collection or API documentation for backend endpoints.
3. README file detailing:
  - a. Features implemented.
  - b. Steps to run the project locally.
  - c. Any assumptions or limitations.
4. (Optional) Live demo link, if deployed.