### ****Career Cradle User System Database****

#### ****Entities in Career Cradle****

* **Users** (Job Seekers, Employers, Admins)
* **Profiles** (User Details, Resume, Company Info)
* **Jobs** (Job Postings, Applications, Saved Jobs)
* **Applications** (Job Seeker Applications, Status Updates)
* **Messages** (Chats between Job Seekers and Employers)
* **Notifications** (Job Alerts, Application Status, Messages)
* **Saved Jobs & Candidates** (Shortlisted Jobs & Applicants)
* **Reviews & Ratings** (Employer & Employee Feedback)
* **Subscriptions** (Premium Membership, Paid Features)

#### ****Entity Relationships in Career Cradle****

| **Entity 1** | **Entity 2** | **Relationship Type** |  |
| --- | --- | --- | --- |
| Users → Profiles | One-to-One | Each user has one profile. |  |
| Users → Jobs | One-to-Many | An employer can post multiple jobs, but each job has one employer. |  |
| Users → Applications | One-to-Many | A job seeker can apply to multiple jobs. |  |
| Users → Messages | Many-to-Many | A user can chat with multiple users. |  |
| Jobs → Applications | One-to-Many | A job can have multiple applications. |  |
| Users → Saved Jobs | Many-to-Many | Users can save multiple jobs, and a job can be saved by multiple users. |  |
| Users → Saved Candidates | Many-to-Many | Employers can save multiple candidates. |  |
| Users → Reviews | One-to-Many | A user can leave multiple reviews. |  |
| Users → Subscriptions | One-to-One | A user can have one active subscription. |  |

### ****Key Features in Career Cradle Schema****

✅ **Role-Based Users:** Differentiates Job Seekers, Employers, and Admins.  
✅ **Embedded vs. Referenced Data:**

* User Profile, Resume, and Job Preferences are embedded for quick access.
* Job Listings, Applications, and Messages are referenced for scalability.

✅ **Defined Relationships:**

* **One-to-Many:** Employers post multiple jobs.
* **Many-to-Many:** Job seekers apply to multiple jobs, and jobs receive multiple applications.
* **One-to-One:** A user can have one profile and one subscription.

### 

### ****Users Schema (Embedded + Referenced)****

json

CopyEdit

{

"\_id": ObjectId("user001"),

"name": "John Doe",

"email": "john.doe@careercradle.com",

"phone": "+14155552678",

"role": "Job Seeker", // Can be "Job Seeker", "Employer", "Admin"

"profile\_picture": "https://careercradle.com/profiles/john.jpg",

"resume": "https://careercradle.com/resumes/john.pdf",

"saved\_jobs": ["job001", "job002"],

"applications": ["app001", "app002"],

"messages": ["msg001", "msg002"],

"notifications": ["notif001", "notif002"],

"subscription": "premium",

"createdAt": ISODate("2025-03-11T10:00:00Z"),

"updatedAt": ISODate("2025-03-11T10:00:00Z")}

**Example of an Employer User Document**

json

CopyEdit

{

"\_id": ObjectId("user002"),

"name": "Sarah Thompson",

"email": "sarah.thompson@company.com",

"phone": "+14155558932",

"role": "Employer",

"profile\_picture": "https://careercradle.com/profiles/sarah.jpg",

"company": "Tech Innovations Ltd.",

"posted\_jobs": ["job003", "job004"],

"saved\_candidates": ["user001", "user005"],

"messages": ["msg003"],

"reviews": ["review001"],

"notifications": ["notif003"],

"subscription": "enterprise",

"createdAt": ISODate("2025-03-11T10:00:00Z"),

"updatedAt": ISODate("2025-03-11T10:00:00Z")}

### ****Example of an Admin User Document****

json

CopyEdit

{

"\_id": ObjectId("user003"),

"name": "Michael Donovan",

"email": "admin@careercradle.com",

"phone": "+14155551234",

"role": "Admin",

"permissions": ["manage\_users", "monitor\_reports", "approve\_jobs", "ban\_users"],

"createdAt": ISODate("2025-03-11T10:00:00Z"),

"updatedAt": ISODate("2025-03-11T10:00:00Z")}