Campus Connect - MongoDB Data Modelling and Operations

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Project Name: Campus Connect

# 📂 Data Collections

* users

Stores user credentials and roles.  
- Students: profile, academic info, skills, resume  
- Employers: company info, posted jobs

* jobs

Job postings made by employers including internships, placements, and filters.

* applications

Tracks job applications by students with resume version and status.

* interviews

Interview schedules, links, and feedback for job applications.

* feedbacks

Feedback provided post-interview for learning purposes.

* mentorships

Senior-junior mentorship records, active status, start date.

* resources

Training material, resume templates, industry reports, etc.

* notifications

Job alerts, interview schedules, placement events, etc.

* reviews

Company reviews and ratings submitted by students.

* analytics

Application statistics, student progress, employer engagement.

* badges

Gamification data: earned rewards for student activity.

* discussions

Forums and peer discussions, experience sharing.

# 🔗 Data Relationships

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| From | To | Type | Cardinality | Key Field | Description |
| Users | Jobs | Ownership | One-to-Many | jobs.employerId | Employers post jobs |
| Users | Applications | Apply | One-to-Many | applications.studentId | Students apply for jobs |
| Applications | Interviews | Link | One-to-One | interviews.applicationId | Interview belongs to application |
| Users | Interviews | Schedule | One-to-Many | interviews.interviewerId | Interviewer from employer |
| Users | Feedbacks | Author | One-to-Many | feedbacks.employerId | Feedback from employer |
| Users | Feedbacks | Receiver | One-to-Many | feedbacks.studentId | Feedback to student |
| Users | Mentorships | Mentor | One-to-Many | mentorships.mentorId | Mentor link |
| Users | Mentorships | Mentee | One-to-Many | mentorships.menteeId | Mentee link |
| Users | Reviews | Author | One-to-Many | reviews.userId | Student writes company reviews |
| Users | Notifications | Recipient | One-to-Many | notifications.userId | Notifications for students |
| Users | Analytics | Insight | One-to-One | analytics.userId | Student placement stats |
| Employers | Analytics | Insight | One-to-One | analytics.employerId | Employer engagement stats |
| Users | Discussions | Creator | One-to-Many | discussions.createdBy | Student starts discussion |
| Discussions | Users | Posts | Many-to-Many | discussions.replies[].userId | Reply authors |
| Users | Badges | Earned | Many-to-Many | users.badges[] | Badges awarded |

# 📝 Sample Schema Snippets

users:

{  
 "\_id": "u1001",  
 "role": "student",  
 "name": "Alice Thomas",  
 "email": "alice@example.com",  
 "academic\_details": {  
 "college": "ABC University",  
 "degree": "B.Tech",  
 "branch": "CSE",  
 "year": 2025  
 },  
 "skills": ["Java", "React"],  
 "resume\_url": "https://resume/alice.pdf"  
}

jobs:

{  
 "\_id": "j3001",  
 "title": "Frontend Intern",  
 "location": "Remote",  
 "skills": ["React", "CSS"],  
 "employer\_id": "u2001"  
}

applications:

{  
 "\_id": "a4001",  
 "student\_id": "u1001",  
 "job\_id": "j3001",  
 "status": "Applied"  
}