

# UML DIAGRAMS

1. Class Diagram: We created the class diagram using Plant UML editor. This gives us an overview of entire database.

```
@startuml
class Users {
    +user_id: int
    +email: String
    +password: String
    +role: enum
    +created_at: Timestamp
    +last_login: Timestamp
}

class Jobseekers {
    +jobseeker_id: int
    +user_id: int
    +full_name: String
    +contact_number: String
    +location: String
    +education_level: String
    +skills: Text
    +work_experience: Text
    +resume_path: String
    +skill_completion_score: float
}

class Employers {
    +employer_id: int
    +user_id: int
    +company_name: String
    +contact_person: String
}
```

```

+company_industry: String
+contact_number: String
+company_location: String
}

class JobPostings {
+job_id: int
+employer_id: int
+job_title: String
+job_description: Text
+required_skills: Text
+location: String
+salary_range: String
+employment_type: enum
+posted_date: Timestamp
+job_status: enum
}

class JobApplications {
+application_id: int
+jobseeker_id: int
+job_id: int
+status: enum
+application_date: Timestamp
+match_score: float
}

class Skills {
+skill_id: int
+skill_name: String
+category: String
}

class JobseekerSkills {
+jobseeker_id: int
+skill_id: int

```

```
}
```

```
class CourseRecommendations {  
  +recommendation_id: int  
  +jobseeker_id: int  
  +course_name: String  
  +skill_gap: Text  
  +recommendation_reason: Text  
  +course_link: String  
  +recommended_date: Timestamp  
}
```

```
class Interviews {  
  +interview_id: int  
  +job_application_id: int  
  +interview_date: Timestamp  
  +interview_type: enum  
  +interview_status: enum  
  +meeting_link: String  
}
```

Users "1" → "1" Jobseekers

Users "1" → "1" Employers

Employers "1" → "\*" JobPostings

JobPostings "1" → "\*" JobApplications

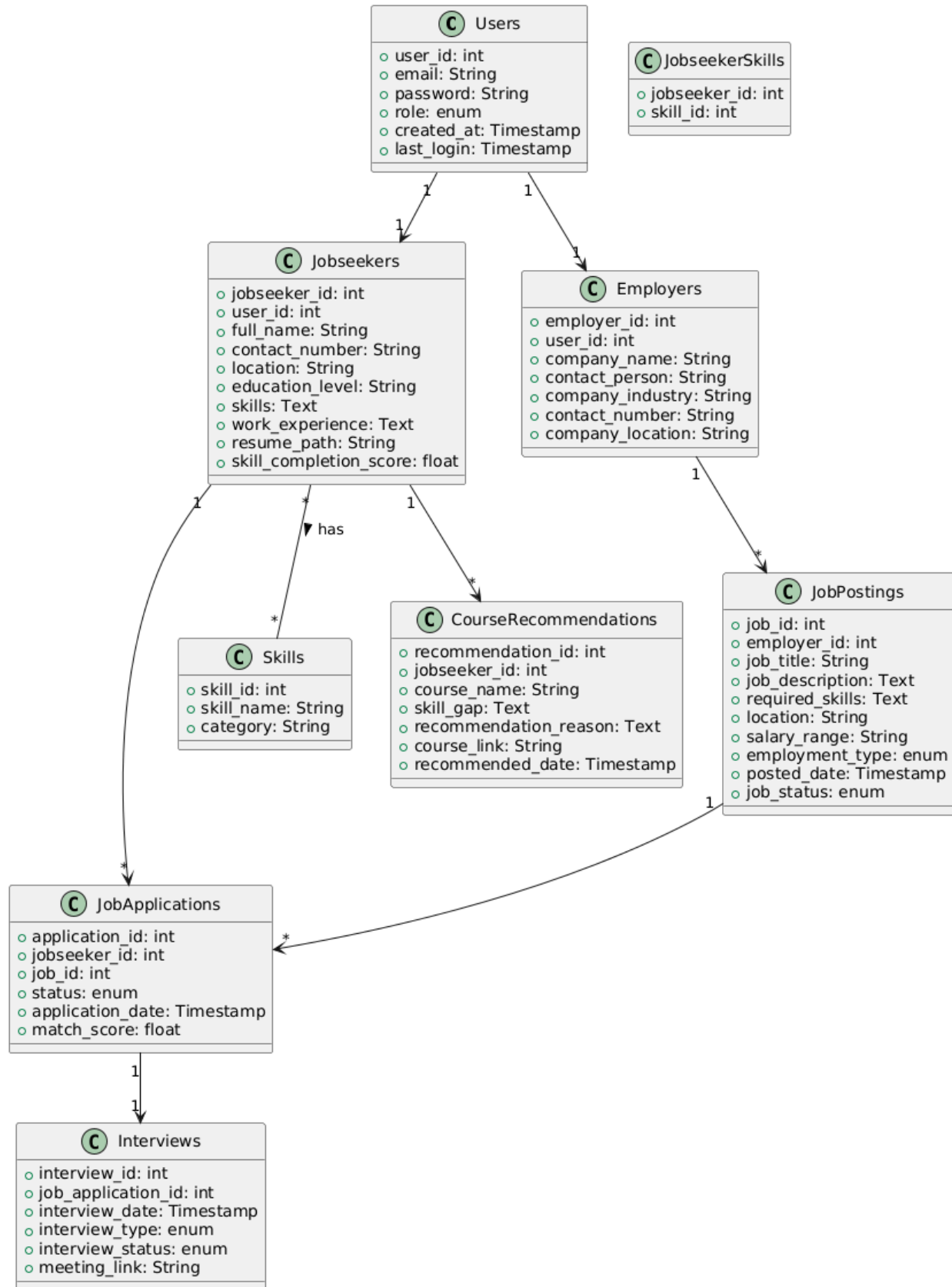
Jobseekers "1" → "\*" JobApplications

Jobseekers "\*" -- "\*" Skills : has >

JobApplications "1" → "1" Interviews

Jobseekers "1" → "\*" CourseRecommendations

@enduml



2. Sequence Diagram: We used <https://sequencediagram.org/> to create our sequence diagram. The creation of the diagram required us to write up the diagram description in the format that the tools needs. This was an easy and intuitive way to get a sequence diagram done which was really simple and fast.

title Jobseeker Registration and Job Application

entryspacing 0.9

Jobseeker→Users: Register(email, password, role='JOBSEEKER')

Users→Jobseeker: user\_id

Jobseeker→Jobseekers: Create Profile(user\_id, full\_name, contact, location, res

Jobseekers→Jobseeker: jobseeker\_id

Jobseeker→JobPostings: View Open Jobs

JobPostings→Jobseeker: List of Jobs

Jobseeker→JobApplications: Apply to Job(jobseeker\_id, job\_id)

JobApplications→Jobseeker: Application Confirmed

note over Jobseeker,JobApplications: status='APPLIED', match\_score calculated

JobApplications→CourseRecommendations: Check Skill Gaps

CourseRecommendations→Jobseeker: Recommended Courses

