

Job Portal System - Complete UML Documentation

1. UML Class Diagram

Classes:

- Job (id, name, description)
- Candidate (id, name, additionalInfo)
- Employer (id, name, email)
- LocalEmployer (country) extends Employer
- GlobalEmployer (country) extends Employer
- Package (id, packageName, price)
- CandidatePackage (jobApplyLimit)
- EmployerPackage (jobSubmitLimit)

Relationships:

- Candidate applies Job (Many-to-Many)
- Employer posts Job (One-to-Many)
- Candidate buys Package
- Employer buys Package

2. ER Diagram (Entity Relationship)

Entities:

- Candidate (PK: id)
- Employer (PK: id)
- Job (PK: id, FK: employer_id)
- Package (PK: id)
- Candidate_Package (FK: candidate_id, package_id)
- Employer_Package (FK: employer_id, package_id)
- Application (FK: candidate_id, job_id)

Relationships:

- Candidate --< Application >-- Job
- Employer --< Job
- Candidate --< Candidate_Package >-- Package
- Employer --< Employer_Package >-- Package

3. Use Case Diagram

Actors:

- Candidate
- Employer
- Admin (Optional)

Candidate Use Cases:

- Register/Login
- Apply Job
- Update Profile
- Buy Package
- Change Password

Employer Use Cases:

- Post Job
- Update Job
- View Applications
- Buy Package
- Change Password

4. Sequence Diagram (Apply Job)

```
Candidate -> System: Login()  
Candidate -> System: View Jobs()  
Candidate -> System: Apply Job()  
System -> Database: Save Application  
Database -> System: Success  
System -> Candidate: Application Confirmation
```