Recruitment Portal

(Technical Document)

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Java as Technology Stack

1. In terms of complexity the system was a bit simple with no power of analytics or heavy processing needed so I took java as the technology stack as it was even my field of expertise.
2. The system would be more efficient if it is a low latency system, so for lock free programming java was a good option as a technology stack.
3. Time to market is also an important point to keep in mind while selecting a technology stack as java has a very big developers community with a wide range of support libraries was a good option.
4. Junit framework for testing in java helps in test driven approach which eases the process of bug finding and fixing.
5. For a web application, Security is an important concern. With Spring Security framework of java, implementing security in the system becomes very easy and efficient.
6. For Rest API's java provides built in features with Spring REST Controllers.
7. Development cost is also a crucial aspect for a startup so with a big developer community, java resources are easy to find with affordable cost rather then the costly technologies like ruby and Scala.
8. Scalability was point on which it was difficult for me to go with java but considering the all above points like cost, security, ease of support and expertise, I choose java as the technology stack for this system.

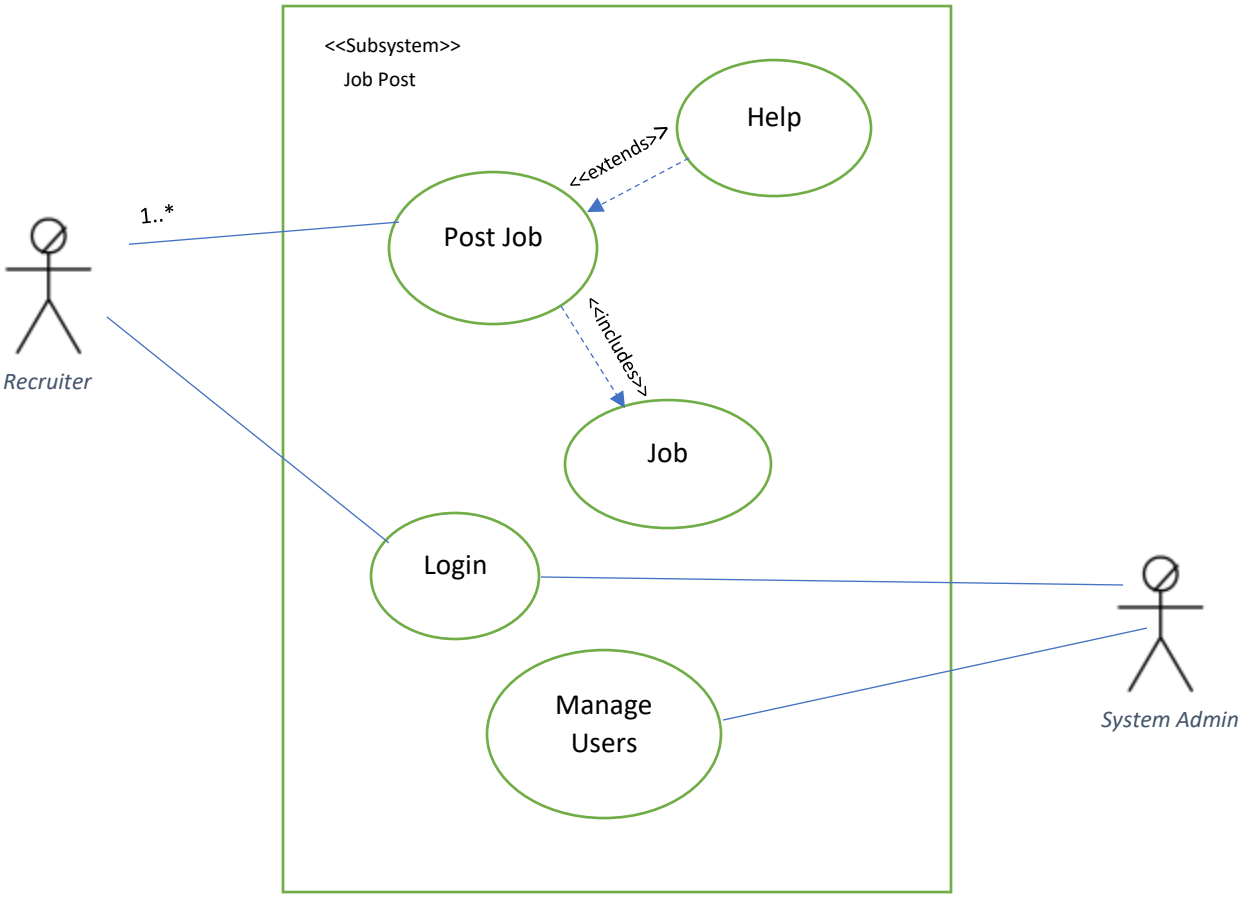
ACTORS & SYSTEM USE CASE DIAGRAM

Job Seeker

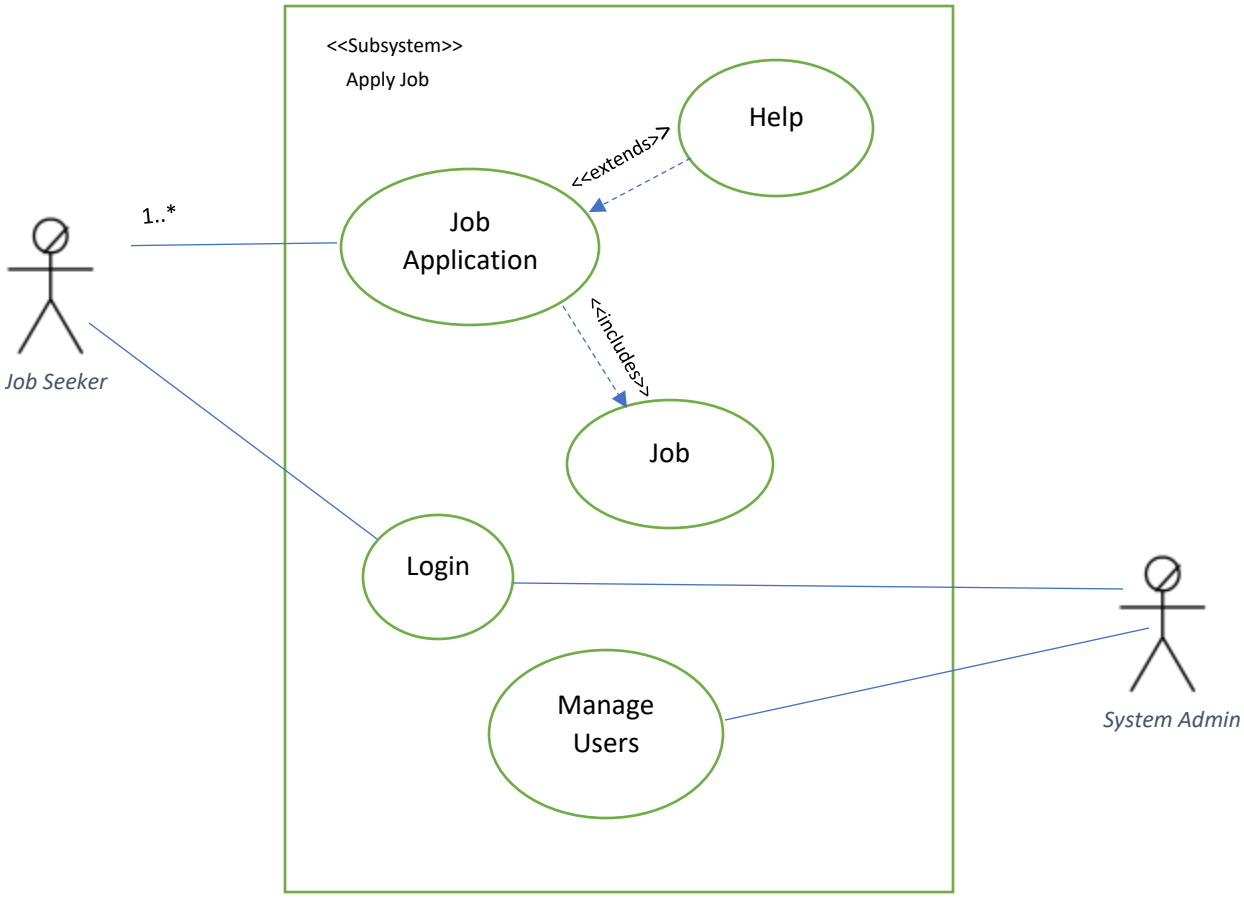
Recruiter

System Admin

Subsystem: Job Post

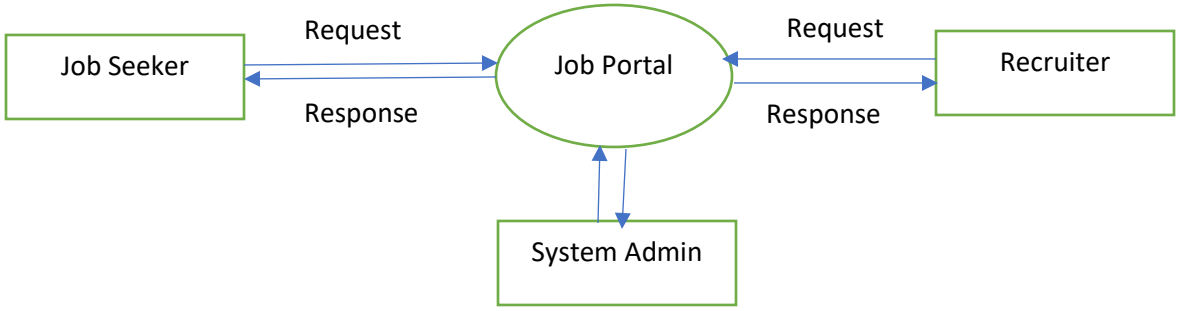


Subsystem: Apply Job

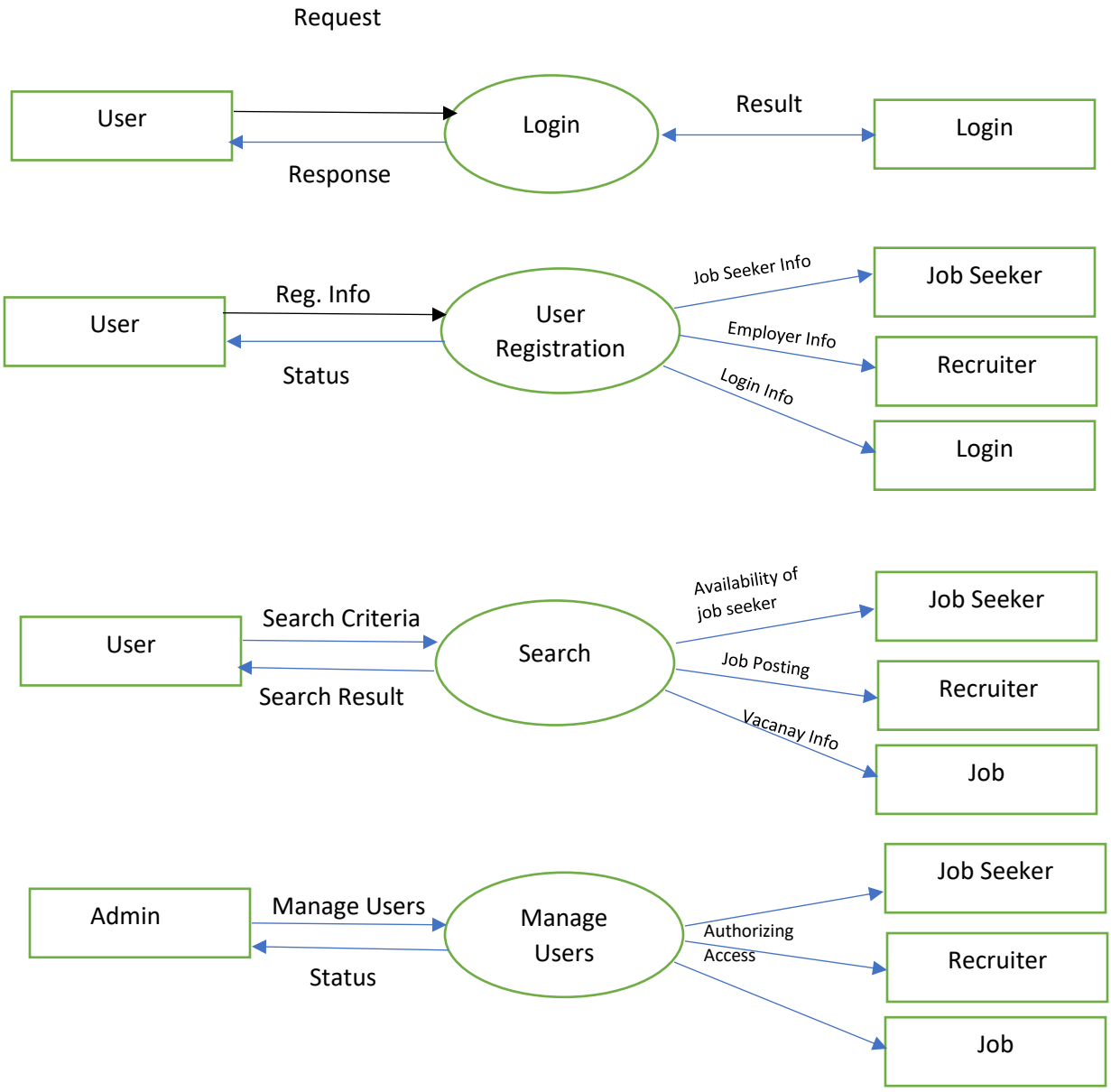


Data Flow Diagram

Level 0



Level 1



CLASSES/MODELS

1. **User**
    - userId – unique key for user
    - userName – user name
    - email – email id
    - firstName – first name
    - lastName – last name
    - role – Recruiter or Job seeker
2. **Job**
    - jobId – unique key for job
    - jobTitle – job title
    - company – company for which job is posted
    - jobDescription – job description
    - openings – number of openings
    - recruiter – recruiting system user
    - postedOn
    - expireyOn
3. **Company**
    - companyId
    - companyName
    - aboutUs
    - address
    - country
    - state
    - city – city and state for filter the job as per the applicant desired area
4. **JobApplication**
    - jobApplicationId
    - jobApplicant – system user applying for job
    - job – application for which job
    - appliedOn
    - reviewedOn
    - status – pending, selected or rejected by the recruiter.

CRUD API'S

1. **Post Job**

   URL:
   http://localhost:8080/recruitmentPortal/rest/recruiter/applyPost?key=QOLABX

   Method: POST

   URL Params:
   Required: Key=[String] //Security key i.e. QOLABX

   Data Params:
   jobTitle=[String]
   jobDescription=[String]
   openings=[String]
   expiryOn=[String] //date as string in format mm/dd/yyyy

   Success Response:
   Code: 100
   Status: success

   Error Response:
   Code: 102
   Status: Authorization failed
   Or
   Code: 500
   Status: Internal Server Error

2. **Get Posted Job for Recruiter**

URL:
http://localhost:8085/recruitmentPortal/rest/recruiter/getMyPostedJobs?key=QOLABX

Method: POST

URL Params:

Required: Key=[String] //Security key i.e. QOLABX

Data Params:

None

Success Response:

Code: 100

Status: success

Response: [

{
"jobId": 1,
"jobTitle": "Backend Developer",
"company": {
"companyId": 1,
"companyName": "Qolabx Technologies",
"aboutUs": "QolabX is a collaborative talent acquisition & management platform focused to tackle the most challenging aspects of Talent Acquisition and Recruitment. We believe technological innovation is at the core of future of the recruitment Industry",
"address": "Pune",
"city": "Pune",
"state": "Maharastra",
"country": "India"
},
"jobDescription": "Backend Developer with 2-3 year experience",
"openings": 5,
"recruiter": {
"userId": 1,
"userName": "Dushyant",
"email": "dushyant@mail.com",
"role": "RECRUITER",
"firstName": "Dushyant",
"lastName": "Bhati"
},
"postedOn": 1537900200000,
"expiryOn": 1540837800000
}

Error Response:

Code: 102

Status: Authorization failed

Or

Code: 500

Status: Internal Server Error

3. **Get Job Posted for a Company**

URL:
http://localhost:8085/recruitmentPortal/rest/recruiter/getJobsForCompany?key=QOLABX

Method: POST

URL Params:

Required: Key=[String] //Security key i.e. QOLABX

Data Params:

companyId=[number] //For testing companyId 1 and 2 can be used

Success Response:

Code: 100

Status: success

Response: [

{
"jobId": 1,
"jobTitle": "Backend Developer",
"company": {
"companyId": 1,
"companyName": "Qolabx Technologies",
"aboutUs": "QolabX is a collaborative talent acquisition & management platform focused to tackle the most challenging aspects of Talent Acquisition and Recruitment. We believe technological innovation is at the core of future of the recruitment Industry",
"address": "Pune",
"city": "Pune",
"state": "Maharastra",
"country": "India"
},
"jobDescription": "Backend Developer with 2-3 year experience",
"openings": 5,
"recruiter": {
"userId": 1,
"userName": "Dushyant",
"email": "dushyant@mail.com",
"role": "RECRUITER",
"firstName": "Dushyant",
"lastName": "Bhati"
},
"postedOn": 1537900200000,
"expiryOn": 1540837800000
}

Error Response:

Code: 102

Status: Authorization failed

Or

Code: 500

Status: Internal Server Error

4. **Delete Job**

   http://localhost:8085/recruitmentPortal/rest/recruiter/deleteJob?key=QOLABX

   Method: POST

   URL Params:
   Required: Key=[String] //Security key i.e. QOLABX
   Data Params:
   jobId=[number] //For testing jobId 1 and 2 can be used
   Success Response:
   Code: 100
   Status: success
   Error Response:
   Code: 102
   Status: Authorization failed
   Or
   Code: 500
   Status: Internal Server Error

5. **Apply for Job**

   URL:
   http://localhost:8085/recruitmentPortal/rest/jobSeeker/applyJob?key=QOLABX

   Method: POST

   URL Params:
   Required: Key=[String] //Security key i.e. QOLABX
   Data Params:
   user={ userId=[Integer]} //For testing jobId 1 and 2 can be used
   Job={jobId=[Integer]} //For testing jobId 1 and 2 can be used

   Success Response:
   Code: 100
   Status: success
   Error Response:
   Code: 102
   Status: Authorization failed
   Or
   Code: 500
   Status: Internal Server Error

6. View Job Application for User

http://localhost:8085/recruitmentPortal/rest/jobSeeker/viewJobApplications?key=QOLABX

Method: POST

URL Params:

Required: Key=[String] //Security key i.e. QOLABX

Data Params:

userId=[number] //For testing userId 3 can be used

Success Response:

Code: 100

Status: success

Response: [{


```
"jobApplicationId": 1,
"jobApplicant": {
"userId": 3,
"userName": "rahul",
"email": "rahul@mail.com",
"role": "JOB_SEEKER",
"firstName": "Rahul",
"lastName": "Parwal"
},
"job": {
"jobId": 1,
"jobTitle": "Backend Developer",
"company": {
"companyId": 1,
"companyName": "Qolabx Technologies",
"aboutUs": "QolabX is a collaborative talent acquisition & management platform focused to tackle the most challenging aspects of Talent Acquisition and Recruitment. We believe technological innovation is at the core of future of the recruitment Industry",
"address": "Pune",
"city": "Pune",
"state": "Maharastra",
"country": "India"
},
"jobDescription": "Backend Developer with 2-3 year experience",
"openings": 5,
"recruiter": {
"userId": 1,
"userName": "Dushyant",
"email": "dushyant@mail.com",
"role": "RECRUITER",
"firstName": "Dushyant",
"lastName": "Bhati"
},
"postedOn": 1537900200000,
"expiryOn": 1540837800000
},
"appliedOn": 1533011116545,
"reviewedOn": null,
"status": "PENDING"
}
```

Error Response:

Code: 102
Status: Authorization failed
Or
Code: 500
Status: Internal Server Error

7. View All Job Openings

URl:
http://localhost:8085/recruitmentPortal/rest/jobSeeker/getAllJobs?key=QOLABX

Method: GET

URL Params:

Required: Key=[String] //Security key i.e. QOLABX

Success Response:

Code: 100
Status: success
Response: [

{
"jobId": 1,
"jobTitle": "Backend Developer",
"company": {
"companyId": 1,
"companyName": "Qolabx Technologies",
"aboutUs": "QolabX is a collaborative talent acquisition & management platform focused to tackle the most challenging aspects of Talent Acquisition and Recruitment. We believe technological innovation is at the core of future of the recruitment Industry",
"address": "Pune",
"city": "Pune",
"state": "Maharastra",
"country": "India"
},
"jobDescription": "Backend Developer with 2-3 year experience",
"openings": 5,
"recruiter": {
"userId": 1,
"userName": "Dushyant",
"email": "dushyant@mail.com",
"role": "RECRUITER",
"firstName": "Dushyant",
"lastName": "Bhati"
},
"postedOn": 1537900200000,
"expiryOn": 1540837800000
},
{
"jobId": 2,
"jobTitle": "Frontend Developer",
"company": {

```
"companyId": 2,
"companyName": "Amdigit",
"aboutUs": "Amdigit is a collaborative talent acquisition & management platform focused to tackle the most challenging aspects of Talent Acquisition and Recruitment. We believe technological innovation is at the core of future of the recruitment Industry",
"address": "Mumbai",
"city": "Mumbai",
"state": "Maharastra",
"country": "India"
},
"jobDescription": "Frontend Developer with 3 year experience",
"openings": 2,
"recruiter": {
"userId": 3,
"userName": "rahul",
"email": "rahul@mail.com",
"role": "JOB_SEEKER",
"firstName": "Rahul",
"lastName": "Parwal"
},
"postedOn": 1537900200000,
"expiryOn": 1540837800000
}
],
```


Error Response:

Code: 102

Status: Authorization failed

Or

Code: 500

Status: Internal Server Error