A
Project Report
on

Job Seeker Portal

Developed By

Shrabanti De [2205102110013]

Aashi Sah [2205102110012]

Sachin Kumar [2205112110141]

as

Partial Fulfillment of Semester III of

Master of Computer Applications /
Master of Science in information Technology

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Under the Guidance of

Prof. Manoj Kamber

Submitted To

Department of MCA/MScIT
Faculty of IT & Computer Science
PARUL University

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1. About Department of MCA & M.Sc. IT

PARUL University

Parul University is a legitimate university established under Gujarat Private University Act 2009, after legislation passed by the Government of Gujarat on 26 th March 2015 giving University status to Parul Group of Institutes functioning under the aegis of Parul Arogya Seva Mandal Trust.

Faculty of IT & Computer Science

Faculty of IT and Computer Science, Parul University has materialized as one of the prime IT education providers at global level. Various departments under Faculty of IT and Computer Science strive in preparing IT-industry ready professionals by means of various skill development courses, vocational courses, co-curricular & extra-curricular activities, industry visits and expert lectures.

MCA Department

The Department of Master of Computer Application and Master of Science in Information Technology at Parul University emphasizes on building professionals in the domain of computer applications by providing necessary environment by means of facilitating suitable blend of technical and non-technical learning experience. The department cultivates students in various curricular, co-curricular and extra-curricular activities in order to produce future system analysts, system designers, system programmers, application programmers, testing professionals, system managers, project managers, researchers and other leading positions in systems/IT department.

The departments offers various subjects from diversified technical/non-technical areas such as – core IT domain, management, communication skills, mathematics & logic building and rich pool of elective subjects.

The department of MCA and M.Sc. (IT) focuses on project-based learning, and hence students are motivated to work on tiny hands-on projects in practical oriented subjects to get better exposure. Moreover, throughout their MCA studies, students are required to work on around 3 mini/major projects in individual/team to get enough confidence on software-development and thereby become industry-ready.

2. Project Profile

2.1 Project Definition

A job seeker portal is an online platform designed to connect job seekers with potential employers. It provides a centralized location for job seekers to search and apply for job opportunities, create and manage their profiles, and communicate with employers. The goal of a job seeker portal is to streamline the job search process and facilitate the connection between job seekers and employers.

2.2 Project Description

A job seeker portal stands as a testament to the digital age's transformation of the job search landscape. It's a dynamic platform that caters to the evolving needs of individuals on the hunt for meaningful employment and career growth. With its fusion of advanced technology and user-centric features, the job seeker portal presents a comprehensive solution to the multifaceted challenges faced by job seekers today. This project description delves into the intricate layers of the job seeker portal, outlining its various modules and the transformative impact it has on the job search experience. The traditional methods of job searching, marked by newspaper classifieds and physical resumes, have given way to a new era of online connectivity.

The job seeker portal, a result of technological advancement and innovative design, bridges the gap between job seekers and employers like never before. This virtual platform acts as a hub, amalgamating an array of features that cater to every aspect of the job search process. Job seeker portals are more than just tools; they represent the future of job seeking. As technology continues to evolve, these portals are likely to incorporate more advanced features such as augmented reality job fairs, AI-driven interview simulations, and predictive analytics for personalized job recommendations.

In conclusion, the job seeker portal is a transformative force that has revolutionized the job search landscape. By offering a comprehensive ecosystem that caters to every stage of the job seeking process, from exploration to skill development, these portals empower job seekers like never before. As we navigate the complexities of the modern job market, these digital havens serve as beacons of hope, connecting individuals with their dream careers and propelling the workforce into a future defined by innovation, connectivity, and endless possibilities.

2.3 Existing System / Work Environment

The existing job seeker portal systems, while offering valuable services to job seekers, often suffer from various limitations and issues that can hinder the overall user experience and effectiveness. Some of the common problems in the existing system of job seeker portals include:

Complex Navigation: Many job seeker portals have complex and confusing navigation structures, making it difficult for users to find the information they need. This can lead to frustration and discourage users from utilizing the portal's full range of features.

Limited Job Listings: Some portals have a limited number of job listings, especially in niche industries or specific geographic regions. This can restrict users' options and limit their ability to find suitable opportunities.

Outdated Listings: Stale job listings that remain on the portal for an extended period can mislead job seekers and waste their time applying for positions that are no longer available.

Privacy and Security Concerns: Some portals might not prioritize user data privacy and security, which can deter users from sharing their personal information and using the platform.

2.4 Problem Statements

In a country like a India where the population is increasing day by day, people find it difficult to earn and live an average life. People may find it difficult to go physically and find a suitable job. Job seeker portals aggregate job listings from various industries, locations, and employers, providing users with access to a diverse range of job opportunities that they might not have discovered through traditional methods.

2.5 Need for new system

The need for a new system for a job seeker portal arises from the recognition of existing limitations and the aspiration to create a more effective and user-centric platform. The current landscape of job seeker portals presents several challenges that hinder the seamless job search experience and career growth for individuals. It will include features like enhanced user experience, the existing portals might suffer from complex navigation, outdated listings, and limited customization options. A new system aims to provide a user-friendly interface, intuitive navigation, and features that align with users' preferences, making the job search process smoother and more enjoyable. Accurate and Relevant Listings, Outdated job listings and inaccurate search results are common problems in existing portals. A new system can incorporate advanced algorithms that ensure job listings are up-to-date and relevant, saving users from wasting time on irrelevant opportunities. User Feedback Integration: The absence of effective feedback mechanisms hinders platform improvement. A new system can incorporate user feedback channels to actively address concerns and continually enhance the user experience. And moreover, privacy and security is also need to be managed properly.

2.6 Proposed System & Features

The proposed system for the job seeker portal envisions a comprehensive platform that addresses the limitations of existing portals and offers a user-centric experience. The key features such as, Intuitive User Interface: The portal will boast an intuitive and user-friendly interface, ensuring easy navigation and quick access to various

features. Advanced Job Search: Users can utilize advanced search filters to refine job listings based on criteria such as industry, location, experience level, and job type, enabling a more efficient job search. Feedback Mechanism: A dedicated channel for user feedback encourages continuous improvement, allowing the platform to evolve based on user needs.

2.7 Scope

- This system can only be accessed by authorized admin, HRs and recruiters.
- Users can only choose the companies that are registered on the system.
- The boundary of the system is limited to India.

2.8 Outcomes

The implementation of a robust job seeker portal promises a range of positive outcomes that significantly transform the job search landscape. Job seekers can expect a streamlined and efficient job search process, personalized job recommendations, etc. The availability of a dynamic resume builder, enhances the quality of applications submitted, increasing the chances of standing out to potential employers. Overall, a well-implemented job seeker portal not only accelerates the job search process but also equips job seekers with the tools and knowledge to navigate the job market with confidence and success.

2.9 Tools & Technology used

Web Development Frameworks: Frameworks like HTML, CSS and Javascript are often used to build responsive and interactive user interfaces, ensuring a consistent and engaging experience across devices.

Backend Development: Backend technologies such as ASP.NET provide the server-side logic required for data processing and communication.

Database Management: Databases like MySQL, or SQL Server Management Studio are used to store and manage user profiles, job listings, application data, and other relevant information.

2.10 Project Plan

Sr. No	Tasks	Date	Duration
1.	Brainstorming	17 August 2023	4 weeks
2.	Design and Development	29 September 2023	6 weeks
3.	Quality Assurance	06 October 2023	1 week
4.	Deployment and Feedback	07 October 2023	-

3. Requirement Analysis

3.1 Feasibility Study

Technical Feasibility:

The job seeker portal should be technically feasible, meaning it should be possible to build and maintain the portal using available technology and resources.

The portal should have the necessary infrastructure, including servers, databases, and networking capabilities, to support the expected user load and data storage requirements.

Economic Feasibility:

The job seeker portal should be economically feasible, meaning it should be financially viable and provide a positive return on investment.

The development and maintenance costs should be reasonable and within the allocated budget.

Operationally Feasibility:

The job seeker portal should be operationally feasible, meaning it should be practical and efficient to operate and manage on an ongoing basis. The portal should have user-friendly interfaces and intuitive navigation to ensure ease of use for both job seekers and employers.

It should have features that automate processes, such as resume parsing and matching algorithms, to streamline the job search and recruitment process.

Social Feasibility:

The job seeker portal should be socially feasible, meaning it should align with the needs and expectations of the target audience, job seekers, and employers. The portal should provide value-added services to job seekers, such as personalized job recommendations, career resources, and networking opportunities.

It should have features that promote diversity, inclusivity, and equal opportunities in the job market.

The portal should prioritize user privacy and data security to build trust and confidence among users.

In conclusion, a feasibility study for a job seeker portal should consider technical, economic, operational, and social aspects to ensure the project is technically viable, financially viable, practical to operate, and aligned with user needs and expectations. Conducting thorough research, cost-benefit analysis, and user testing can help assess the feasibility of the project and make informed decisions.

3.2 Users of the System

In a job seeker portal, there are different roles and responsibilities for each user. The stakeholders are:

Employer/Recruiter:

- Register and create a profile for the company or organization.
- Post job listings with detailed descriptions and requirements.
- Search and filter job seeker profiles based on criteria such as skills and experience.
- Review and evaluate job applications.
- Communicate with job seekers through the portal's messaging system.
- Schedule interviews and manage the hiring process.
- Manage the company's profile and reputation on the portal.
- Access analytics and reports on job postings and applicant data.

Human Resources(HR)

- Add jobs for the recruiters
- Manage the details of the company
- Interaction with the recruiters

Administrator:

- Manage user accounts and profiles.
- Ensure the security and integrity of the portal.
- Handle technical issues and provide support to users.
- Monitor and moderate user-generated content.
- Customize and configure the portal's settings and features.
- Analyze usage data and generate reports.
- Implement updates and improvements to the portal.
- It's important to note that these roles and responsibilities may vary depending on the specific job seeker portal and its features. The above list provides a general overview of the common functionalities and responsibilities for each user role.

3.3 Modules of the System

A job seeker portal typically consists of various modules that collectively provide a comprehensive platform for job seekers, employers, and administrators. Here's an overview of common modules and their features and functionalities:

User Authentication and Profile:

- User registration and login.
- Create and manage personalized profiles (job seeker and employer).
- Upload resumes, cover letters, and other documents.
- Set preferences, notification settings, and privacy options.

Job Listings:

- Browse and search for job openings based on various criteria (location, industry, job type, etc.).
- View detailed job descriptions and requirements.
- Apply to jobs directly through the portal.
- Save jobs for later consideration.
- Receive job alerts and recommendations.

Application Management:

- Track and manage job applications.
- Receive notifications on application status.
- Communicate with employers and recruiters.
- Schedule interviews and manage interview logistics.

Resume Builder and Editor:

- Create, edit, and format resumes online.
- Choose from templates and styles.
- Import existing resumes.
- Export resumes in various formats (PDF, Word, etc.).

Employer Dashboard:

- Post and manage job listings.
- Review and manage job applications.

- Communicate with job seekers.
- Schedule and coordinate interviews.
- Access candidate profiles and resumes.

Admin Dashboard:

- Manage user accounts and profiles.
- Monitor and moderate content, ensuring compliance with platform guidelines.
- Resolve disputes and address user issues.
- Generate reports and analytics on platform usage.

3.4 Process Model

The Iterative Model is a software development approach that focuses on cyclic and incremental development, allowing for continuous refinement and improvement of a software system. In this model, the development process is divided into a series of iterations, each of which encompasses the entire software development lifecycle, including planning, designing, coding, testing, and deployment.

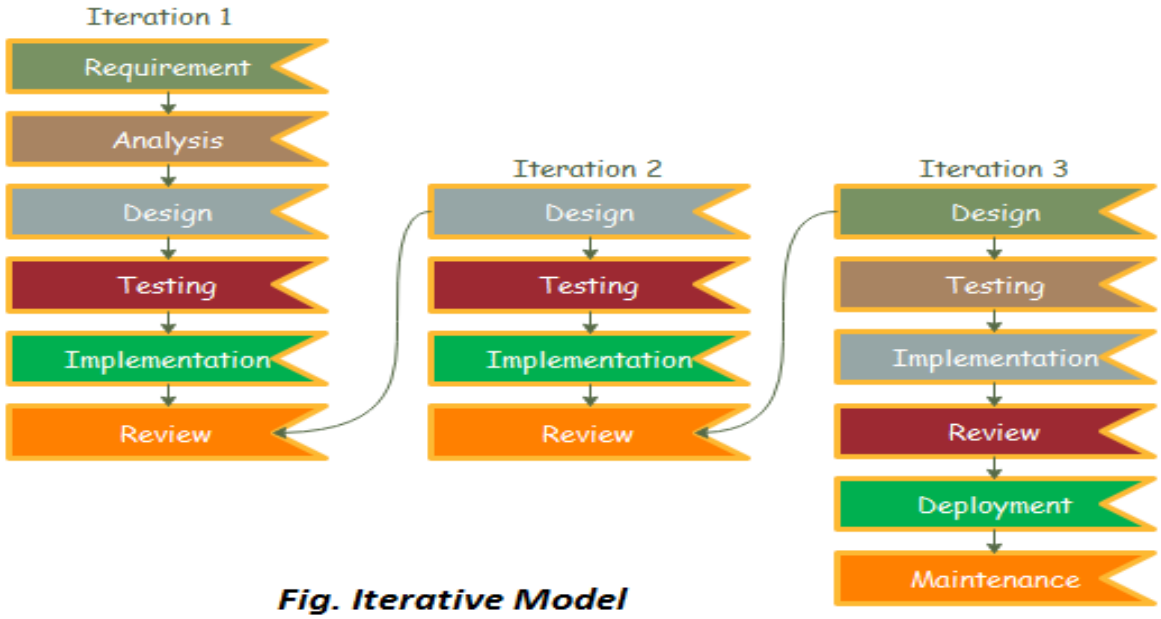


Fig. Iterative Model

1. Requirement gathering & analysis: In this phase, requirements are gathered from customers and check by an analyst whether requirements will fulfil or not. Analyst checks that need will achieve within budget or not. After all of this, the software team skips to the next phase.

2. Design: In the design phase, team design the software by the different diagrams like Data Flow diagram, activity diagram, class diagram, state transition diagram, etc.

3. Implementation: In the implementation, requirements are written in the coding language and transformed into computer programmes which are called Software.

4. Testing: After completing the coding phase, software testing starts using different test methods. There are many test methods, but the most common are white box, black box, and grey box test methods.

5. Deployment: After completing all the phases, software is deployed to its work environment.

6. Review: In this phase, after the product deployment, review phase is performed to check the behaviour and validity of the developed product. And if there are any error found then the process starts again from the requirement gathering.

7. Maintenance: In the maintenance phase, after deployment of the software in the working environment there may be some bugs, some errors or new updates are required. Maintenance involves debugging and new addition options.

3.5 Hardware & Software Requirements

3.5.1 H/w & S/w configuration at Developer's End

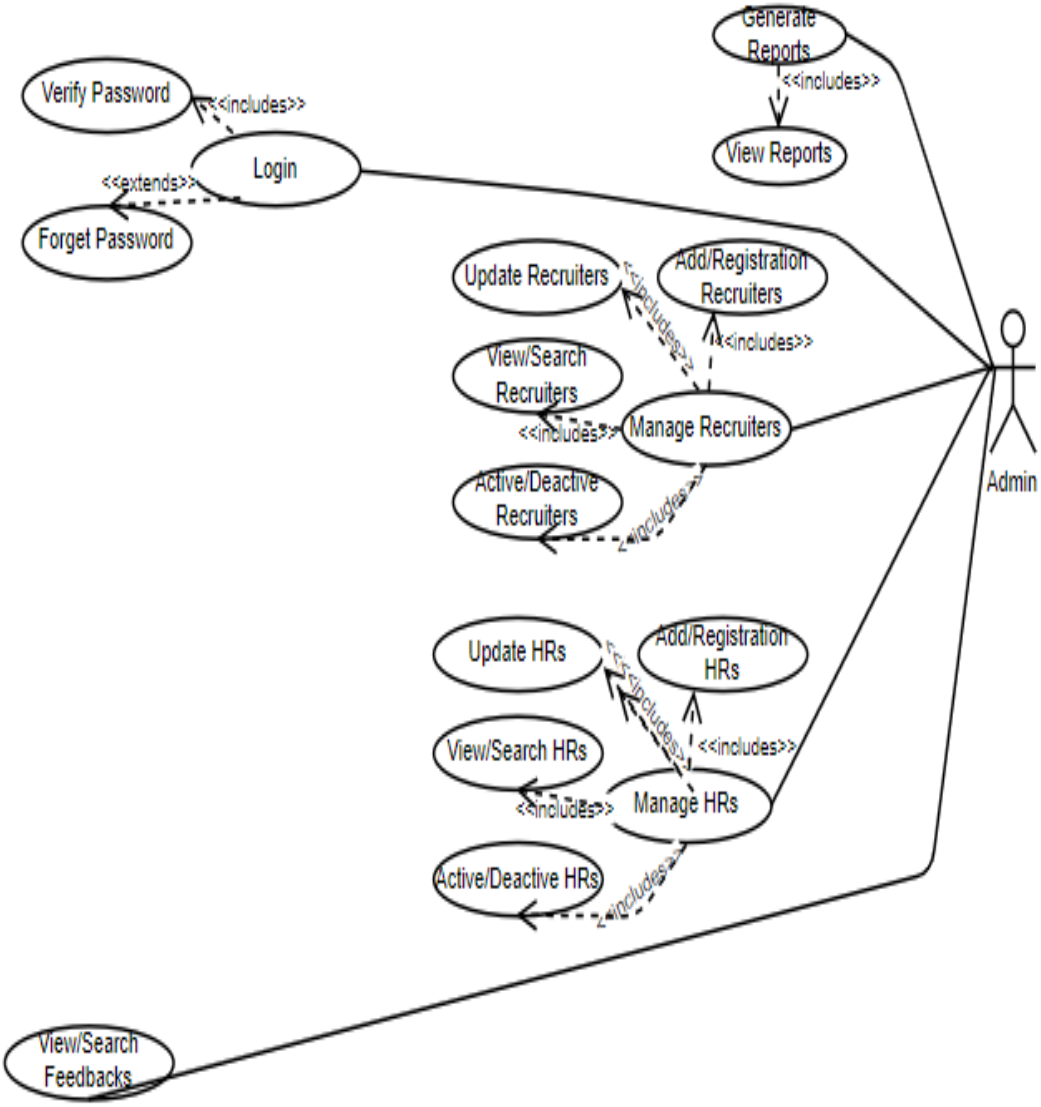
Type	Web - Based Application
Front-End	HTML, HTML5, BOOTSTRAP, JQUERY
Back-End	C#
Operating System	All versions of Windows and Ubuntu.
Tools	Visual Studio 2019,SQL Server Management Studio

3.5.2. Min. H/w & S/w requirement at Client's/User's End

Utilities	Needs
RAM	2 GB
Hard Disk	10 GB
Display	1023 x 768
Browser	Google Chrome, Firefox, Opera Mini, Microsoft Edge

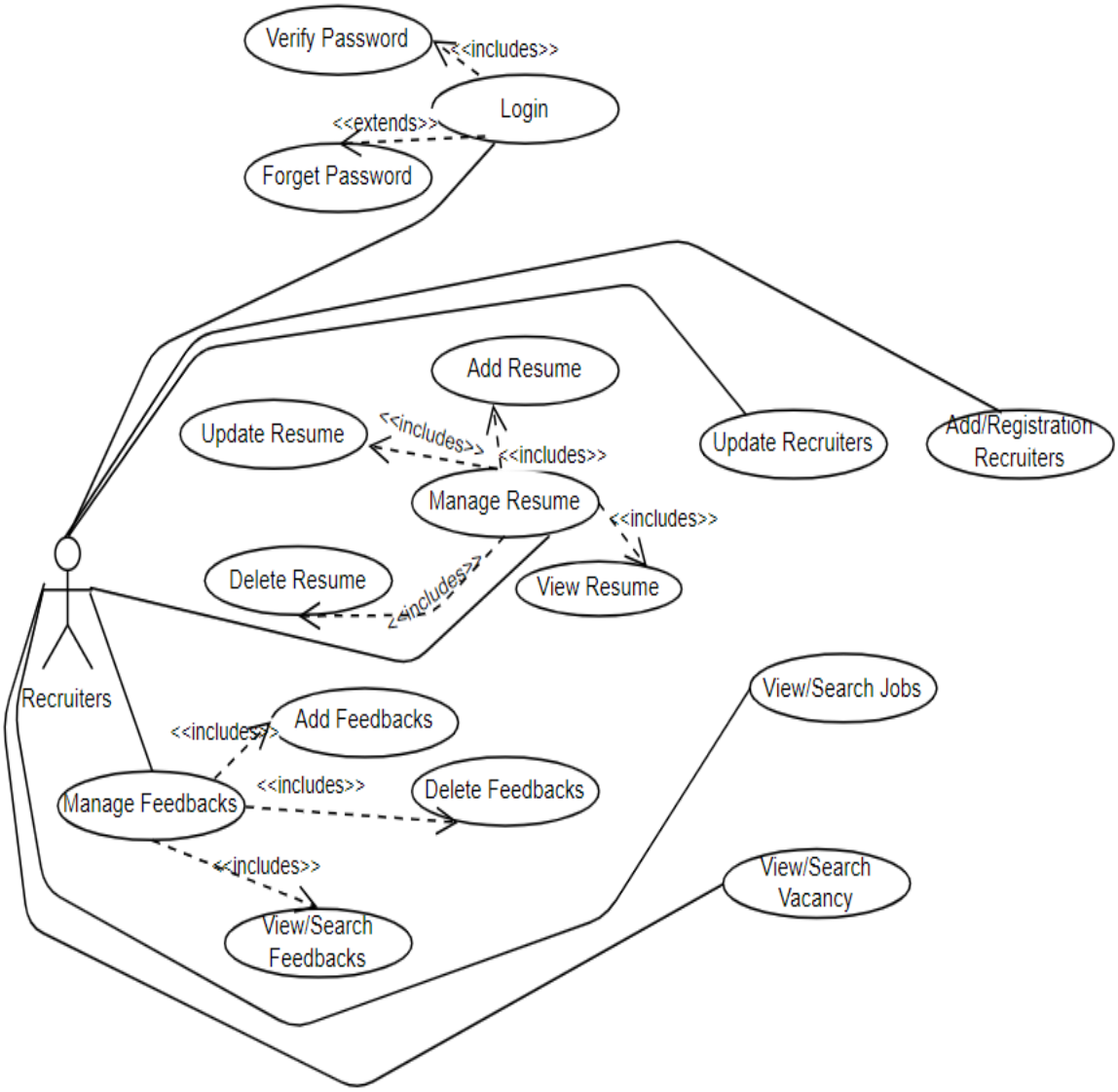
3.6 Use Cases

Admin



Human Resources

Recruiters


Verify Password
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Login
<<extends>>
Forget Password
Add Resume
Update Resume
<<includes>>
<<includes>>
Update Recruiters
Add/Registration Recruiters
Manage Resume
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Delete Resume
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View Resume
Recruiters
View/Search Jobs
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Add Feedbacks
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Delete Feedbacks
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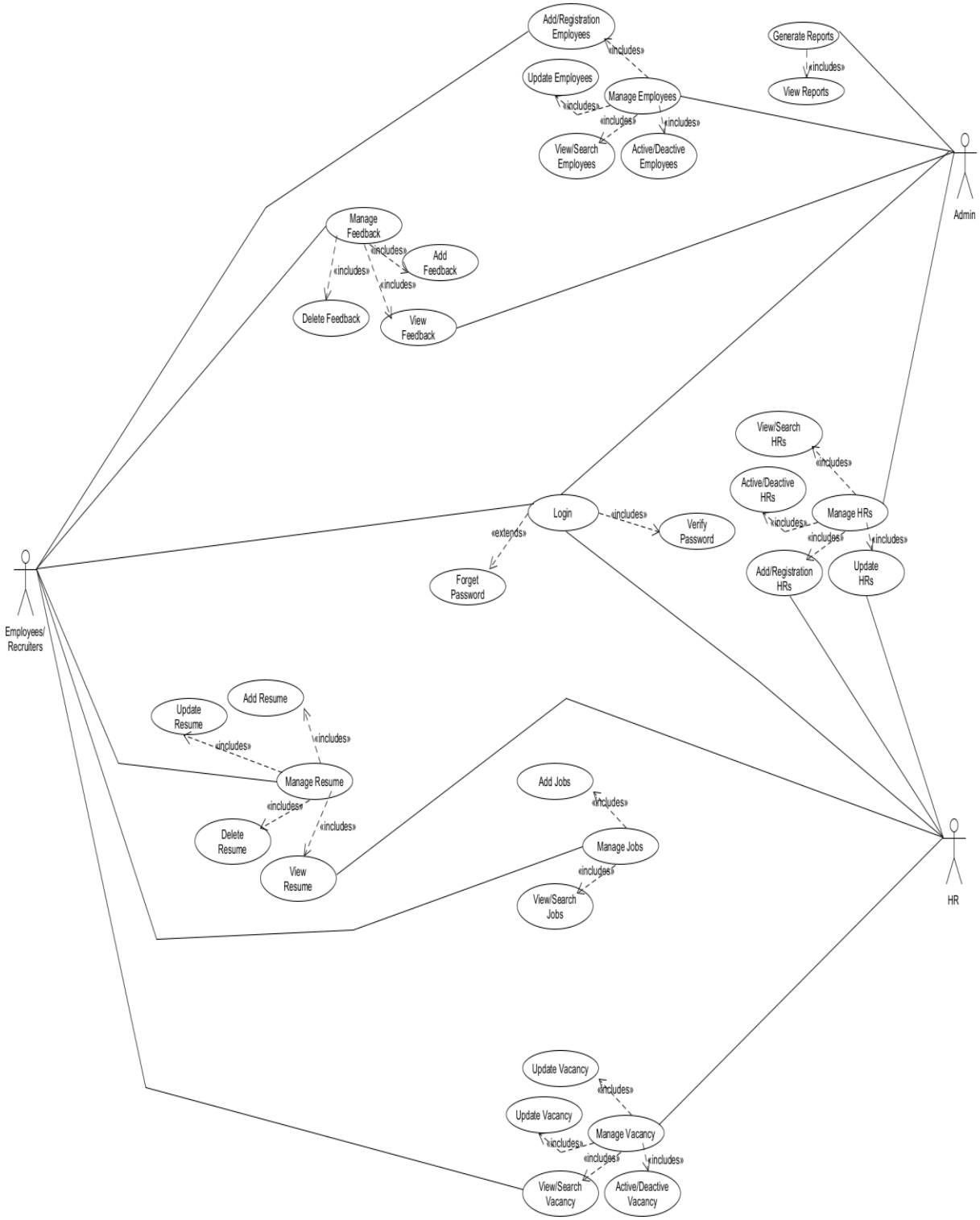
View/Search Vacancy
View/Search Feedbacks

3.7 Use Case Diagram



4. Design

4.1 Use Case Scenarios

Use Case: Job Apply

Goal: Employee applies for a job.

Level : User-goal

Primary Actor: Employee

Pre-conditions: The primary actor is logged into the system

Main Success Scenario:

1. Employee actor indicates that he/she wants to search for a specific job.
2. Employees selects the job category.
3. System displays the searched results that match the employee supplied criteria.
4. Employees selects a specific job.
5. System confirms the availability of the vacancy in the job.
6. System interacts with the HRs and informs the primary actor that the job is being applied.
7. Employee acknowledges.

Extension Points:

1. Employees indicates that he/she wishes search another job search.
2. Employees indicates to see the details of job and vacancies.

Use Case: Hiring Employees

Goal: HRs can select the specific candidates

Level : User-goal

Primary Actor: HR

Pre-conditions: The primary actor is logged into the system

Main Success Scenario:

1. HR actor indicates that he/she wants to search for appropriate employees.
2. HR selects the employee.
3. System confirms the hiring of the employee for the job.
4. System interacts with the employees and informs the primary actor about the further procedures.
5. HRs acknowledges.

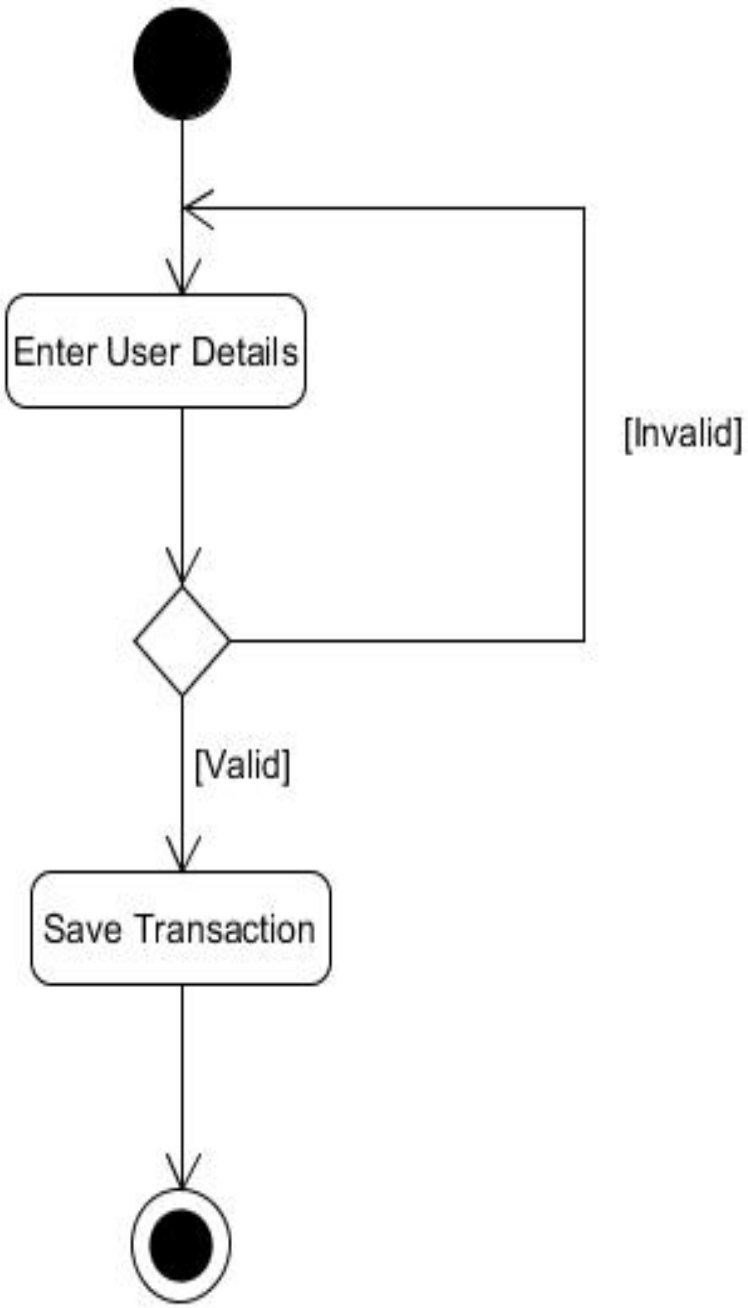
Extension Points:

1. HR indicates that he/she approve or disapprove the applied employees.
2. HR indicates that he/she to view the resume of the applied employees.
3. HR indicates that he/she to see the feedback of the company.

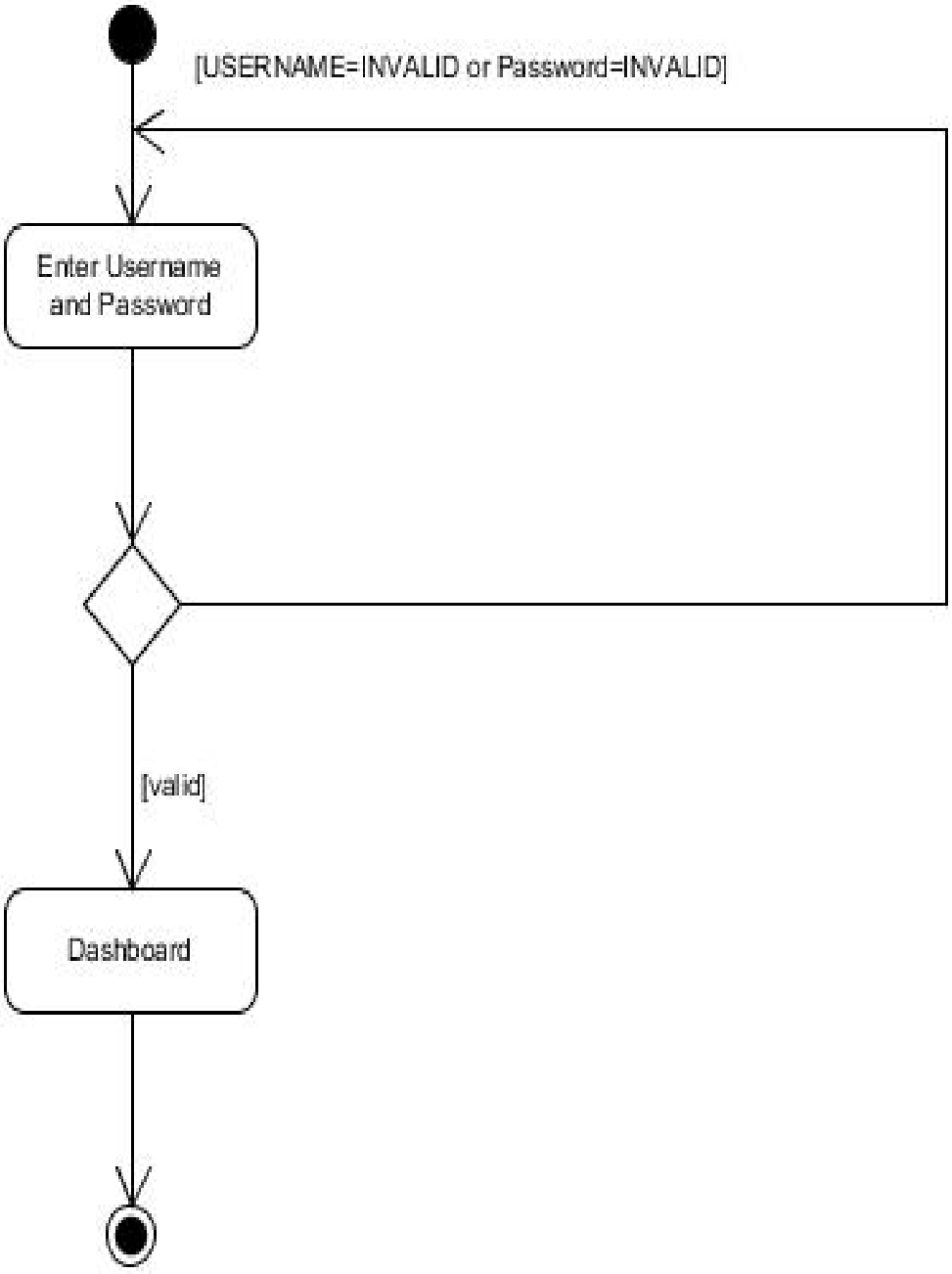
4.2 Diagrams

4.2.1 UML

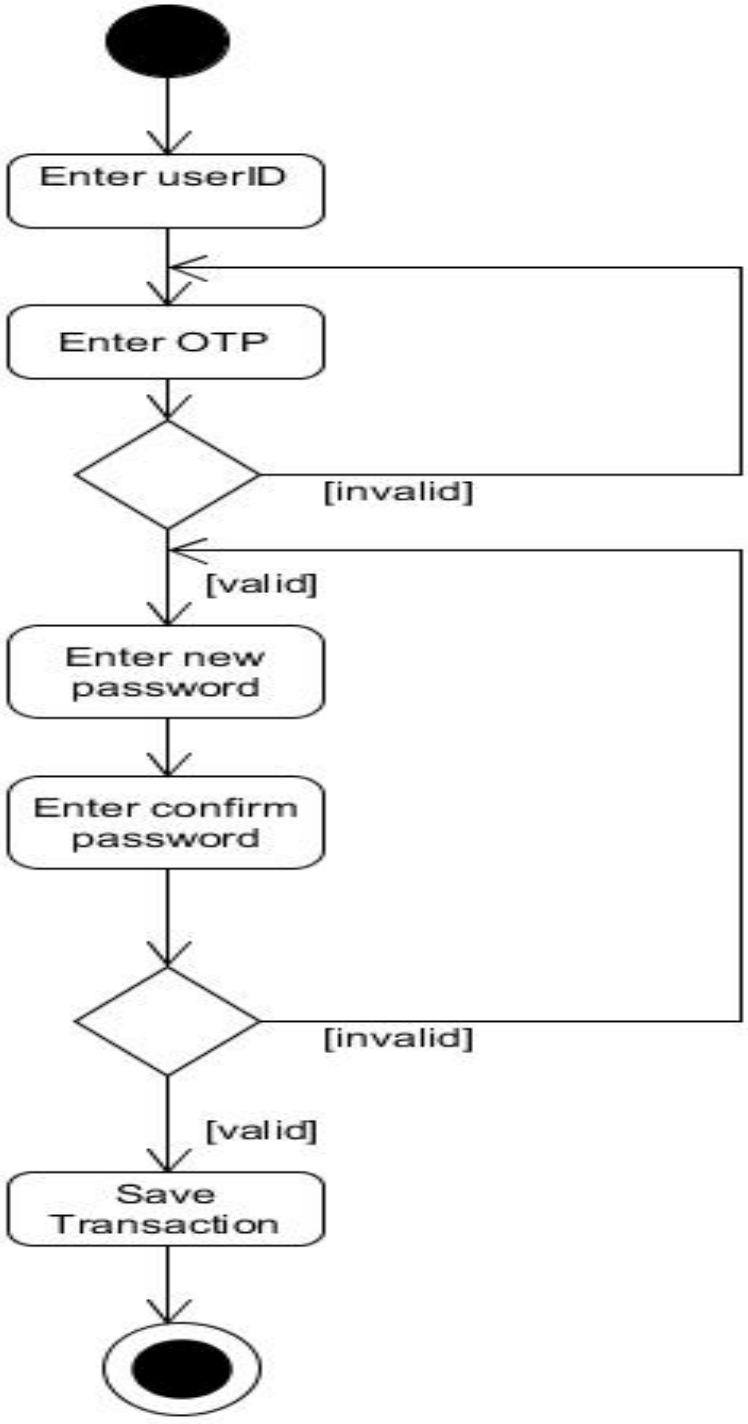
1) Activity Diagram for Registration



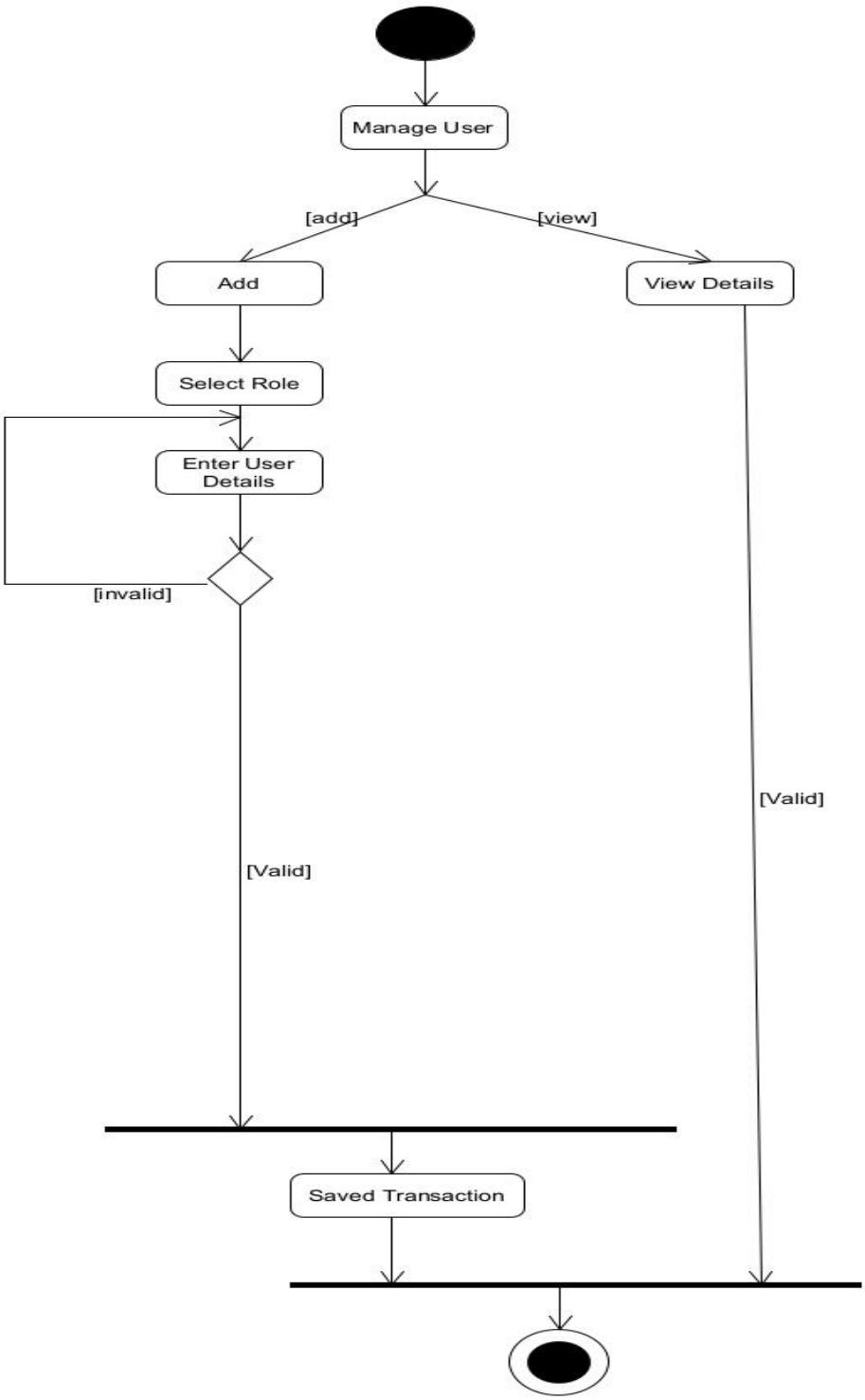
2) Activity Diagram for Login



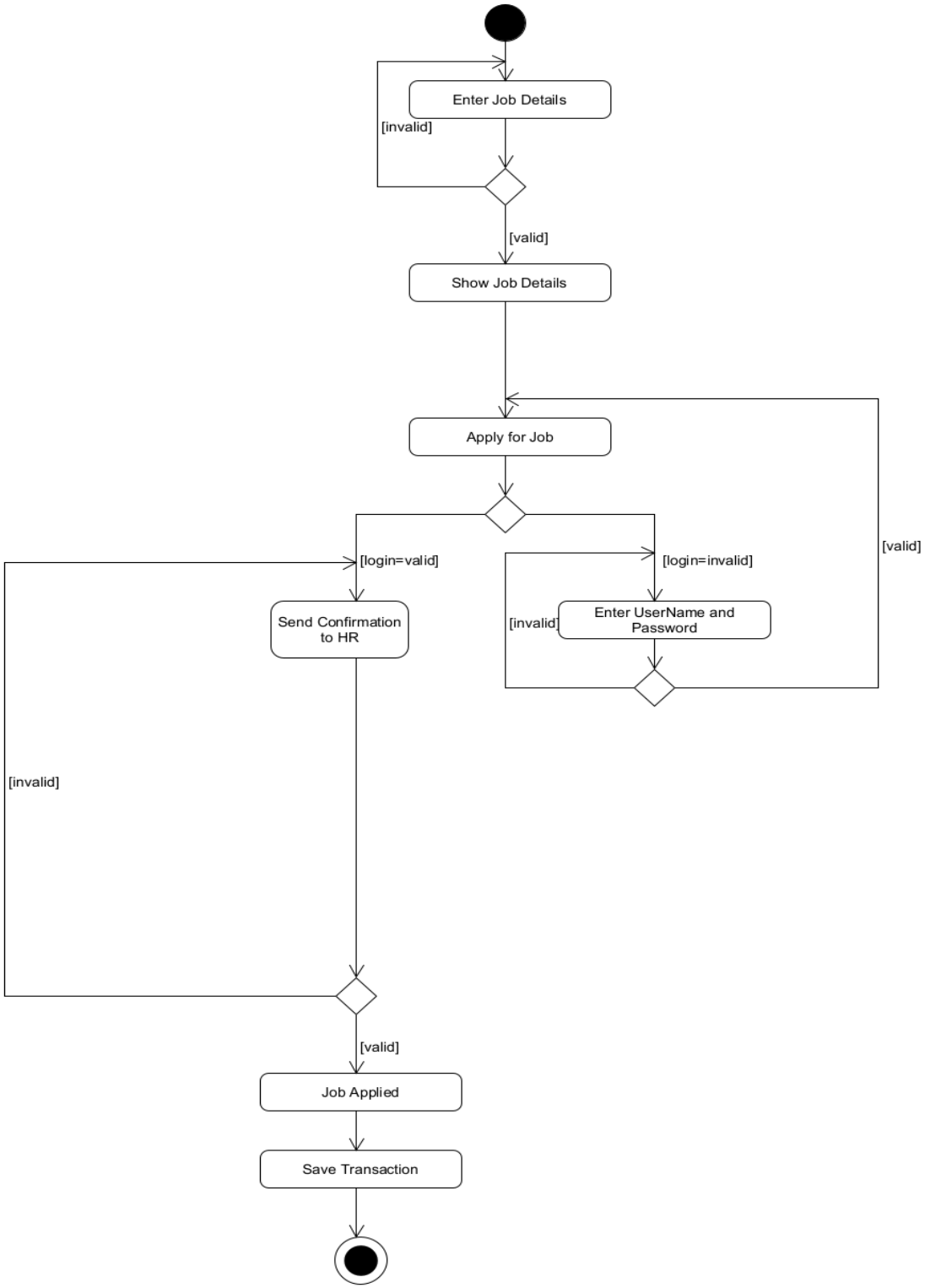
3) Activity Diagram for Forget Password



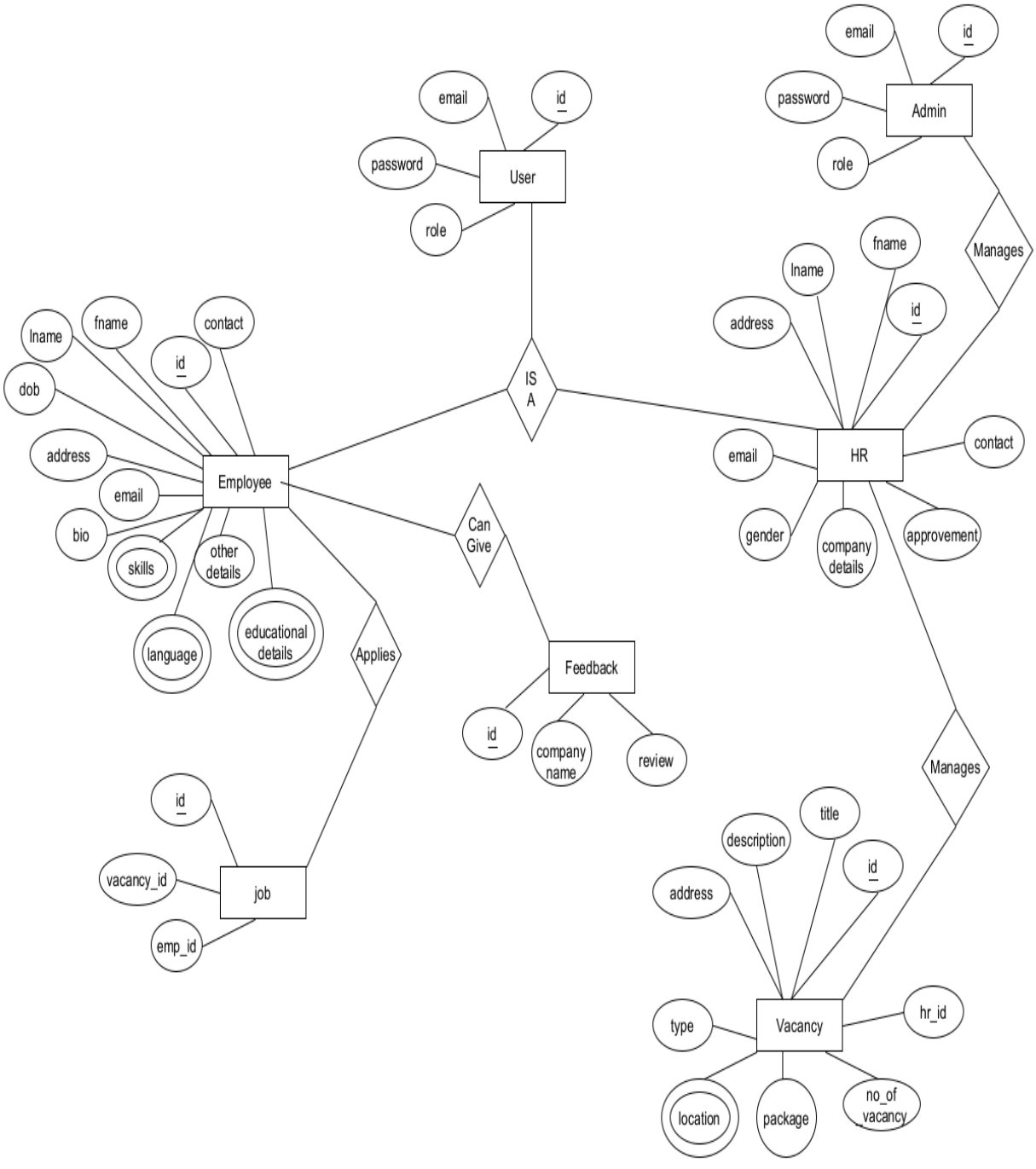
4) Activity Diagram for Manage User



4) Activity Diagram for Manage Job



4.2.2 Entity Relationship Diagram



4.3 Data Dictionary

1. tbluser

SR. NO.	FIELD NAME	DATATYPE	SIZE	CONSTRAINTS	DESCRIPTION
1	User_id	int	-	Primary Key	ID of particularuser
2	User_email	Varchar	100	Not Null	Email of particular user
3	User_password	Varchar	50	Not Null	Password of particular user
4	User_role	int	-	Not Null	Role of user

2. tblemployee

SR. NO.	FIELD NAME	DATATYPE	SIZE	CONSTRAINTS	DESCRIPTION
1	Employee_id	int	-	Primary Key	ID of particular Employee
2	Employee_fname	Varchar	50	Not Null	First Name of Employee
3	Employee_lname	Varchar	50	Not Null	Last Name of Employee
4	Employee _dob	date	-	Not Null	Date of Birth of Employee
5	Employee_contact No	Big Int	10	Not Null, Unique	Contact Number of Employee
6	Employee_address	Varchar	50	Not NULL	Address of Employee
7	Employee _Email	Varchar	100	Not Null, Unique	Email of Employee
8	Employee_bio	Varchar	100	-	Bio of Employee
9	Educational_Details	Varchar	255	Not Null	Education of Employee
10	Employee_Skills	Varchar	255	Not Null	Skills of Employee
11	Employee_Languages	Varchar	100	Not Null	Languages Known
12	Employee_otherdetails	Varchar	255	Not Null	Other Details of Employee

3. tblhr

SR. NO.	FIELD NAME	DATATYPE	SIZE	CONSTRAINTS	DESCRIPTION
1	hr_id	int	-	Primary Key	ID of particular HR
2	hr_fname	Varchar	50	Not Null	First Name of HR
3	hr _lname	Varchar	50	Not Null	Last Name of HR
4	Hr_companyname	Varchar	100	Not Null	Companyname of Hr
5	Hr_gender	Char	1	Not Null	Gender of Hr
6	Hr_contact	Big Int	10	Not Null,Unique	Contact Number ofhr
7	Hr_address	Varchar	50	Not NULL	City of Bus Owner
8	hr _Email	Varchar	100	Not Null,Unique	Email of hr
9	Approvement	int	1	Not Null	Stores the approveand pending

4. tblvacancy

SR. NO.	FIELD NAME	DATATYPE	SIZE	CONSTRAINTS	DESCRIPTION
1	vacancy_id	int	-	Primary Key	ID of Job
2	vacancy_title	Varchar	100	Not null	Title of the job
3	vacancy _description	Varchar	255	Not null	Description of the Job
4	vacancy _type	Varchar	15	Not null	Type of job
5	location	Varchar	30	Not null	Specifies the location of job
6	Package	Float	(9,2)	Not null	Specifies the package
7	No_of_vacany	int	-	Not null	Number of vacancies
8	Hrid	Int	-	Foreign Key, not null	Reference id of hr

5. tbljob

SR. NO.	FIELD NAME	DATATYPE	SIZE	CONSTRAINTS	DESCRIPTION
1	job_id	int	-	Primary Key	ID of job
2	vacancy_Id	Int	-	Foreign Key, not null	Reference id of vacancy
3	Emp_id	Int	-	Foreign Key, not null	Reference id of employee

6. tblfeedback

SR. NO.	FIELD NAME	DATATYPE	SIZE	CONSTRAINTS	DESCRIPTION
1	Feedback_id	Int	-	Primary Key	It stores the feedback ID
2	companyname	Varchar	100	Not Null	It stores the company name
3	Review	Varchar	100	Not null	It stores thereview