

FULL STACK DEVELOPMENT PROJECT

DOMAIN : EDTECH (PLACEMENT MANAGEMENT SYSTEM)

**PROBLEM STATEMENT : COLLEGE PLACEMENT &
INTERNSHIP MANAGEMENT
SYSTEM**

TEAM NAME : CAREERNEST

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SOFTWARE REQUIREMENTS SPECIFICATION

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1. Preface

This document is intended for students, faculty members, evaluators, and developers associated with the College Placement & Internship Portal project.

The purpose of this document is to clearly define the system requirements, scope, objectives, and functionalities of the proposed placement management platform. It serves as a foundational reference for understanding how the placement process is modeled and supported using software engineering principles.

This document represents Version 1.0, prepared during the initial phase of the project as part of requirement engineering and system analysis. The focus is on accurately representing real-world campus placement workflows, roles, rules, and constraints rather than proposing an automated hiring solution.

2. Introduction

2.1 Purpose

The purpose of this project is to design and model a College Placement & Internship Portal that supports and organizes the existing placement process. The system aims to provide a single platform to manage opportunities, applications, recruitment rounds, referrals, and status tracking without replacing human decision-making.

2.2 Proposed Solution

The system provides a centralized digital platform for:

- Managing college-approved job and internship opportunities
- Enforcing eligibility criteria before student applications
- Supporting structured student applications and status tracking
- Providing details of recruitment rounds such as assessments and interviews
- Enabling formal alumni referral requests and responses
- Providing role-based access for students, recruiters, alumni, and Senior placement Officer
- Offering centralized communication and notifications for placement activities
- Monitoring placement progress and basic placement statistics

2.3 System Scope

The system enables:

- Students to view opportunities, apply, track application status, and receive updates
- Recruiters to submit opportunities, review applications, and update recruitment outcomes
- Alumni to provide structured referrals
- Senior Placement Officer to govern, approve, and monitor the overall placement process

2.4 Objectives

- Improve transparency in the placement process
- Reduce manual coordination and tracking errors
- Enforce institutional placement rules consistently
- Provide clear visibility into recruitment stages
- Model real-world placement workflows

3. User Requirements

User requirements describe what the system should support from the perspective of different actors.

1. The system shall allow students to view approved job and internship opportunities along with eligibility details.
2. The system shall allow students to apply for opportunities and upload required documents.
3. The system shall allow students to track application status across recruitment stages.
4. The system shall allow alumni to view and respond to referral requests.
5. The system shall allow recruiters to view applications and manage recruitment rounds.
6. The system shall allow the Senior placement Officer to approve opportunities and oversee placement activities.

4. System Requirements

4.1 Functional Requirements

1) User Registration and Authentication

- Secure login for students, recruiters, alumni and Senior placement Officer
- Role-based access control

2) Opportunity Management

- Recruiters submit job/internship opportunities
- Senior Placement Officer reviews and approves opportunities
- Approved opportunities are published to students

3) Eligibility Validation

- Display eligibility criteria for each opportunity
- Validate student eligibility before application submission

4) Application Management

- Allow students to submit applications
- Maintain application status lifecycle
- Prevent duplicate applications

5) Alumni Referral Management

- Allow students to request referrals
- Allow alumni to approve or decline referrals
- Display referral indicators to relevant actors

6) Recruitment Round Management

- Support multiple recruitment rounds such as assessments and interviews
- Allow recruiters to update outcomes
- Notify students of schedule and status changes

7) Placement Monitoring

- Allow Senior placement Officer to view recruitment progress
- Provide basic placement statistics

4.2 Non-Functional Requirements

1) Performance

- Smooth handling of peak placement activity
- System responses within acceptable time limits

2) Security

- Secure authentication and authorization
- Restricted access to sensitive data

3) Reliability

- Consistent application status tracking
- No loss of recruitment data

4) Availability

- System available during placement season with minimal downtime

5) Usability

- Simple and intuitive user interface
- Clear status messages and notifications

5. Future Enhancements

- Analytics for placement trends
- Improved reporting dashboards
- Enhanced notification customization
- Integration with institutional systems

6. Diagrams Overview

The system is modeled using UML (Unified Modeling Language) diagrams to represent its functional behavior and interaction flow. The following diagrams are used to describe different aspects of the system.

Use Case Diagram

The Use Case Diagram illustrates the interactions between various actors such as students, recruiters, alumni and the Senior placement Officer with the system. It provides a high-level view of the system's functional requirements and the roles of different actors.

Activity Diagrams

Activity Diagrams represent the detailed workflows of key processes in the system. These diagrams show the sequence of actions, decision points, and outcomes involved in placement-related activities such as

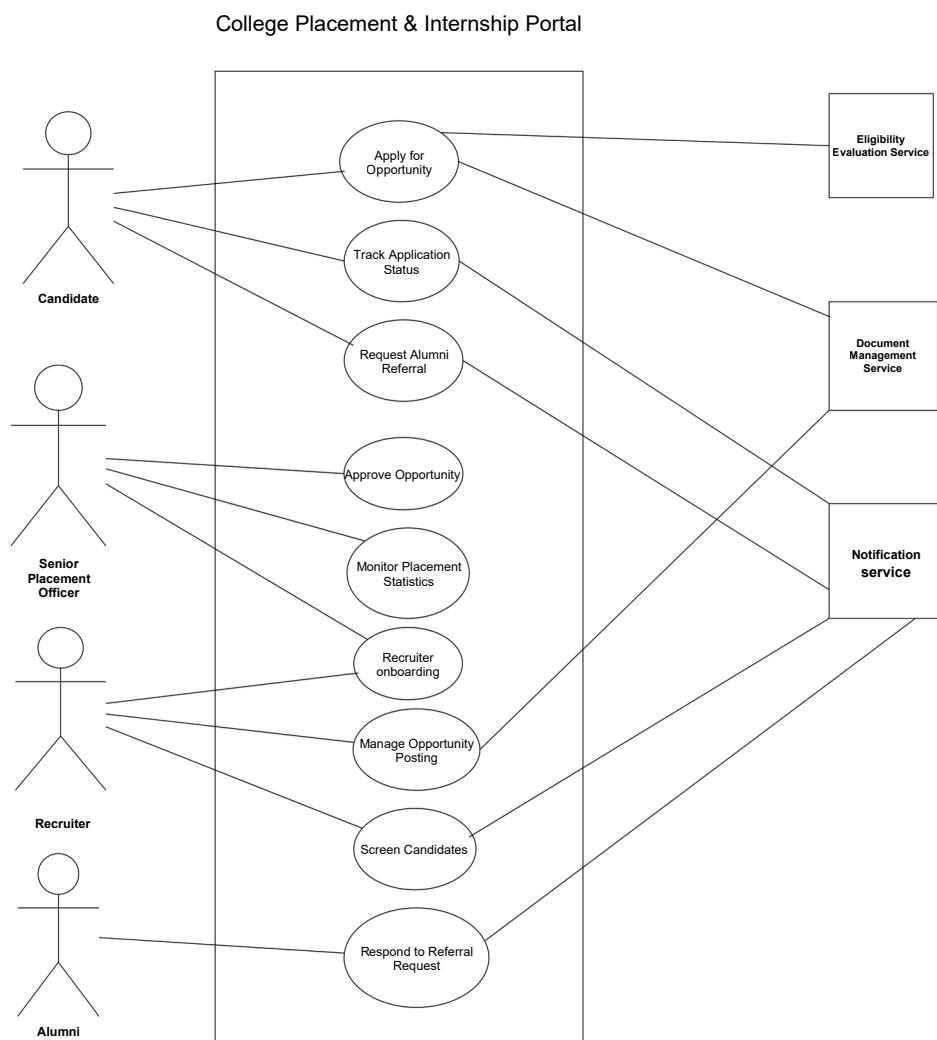
- Apply for Opportunity
- Track Application Status
- Request Alumni Referral
- Approve Opportunity
- Monitor Placement Statistics
- Recruiter Onboarding
- Manage Opportunity Posting
- Screen Candidates
- Respond to Referral request

Sequence Diagram

The Sequence Diagram depicts the time-ordered interaction between system actors and services. It models the end-to-end flow of information during major placement processes, showing how requests, validations, and updates occur across the system.

7. Use Case Diagram

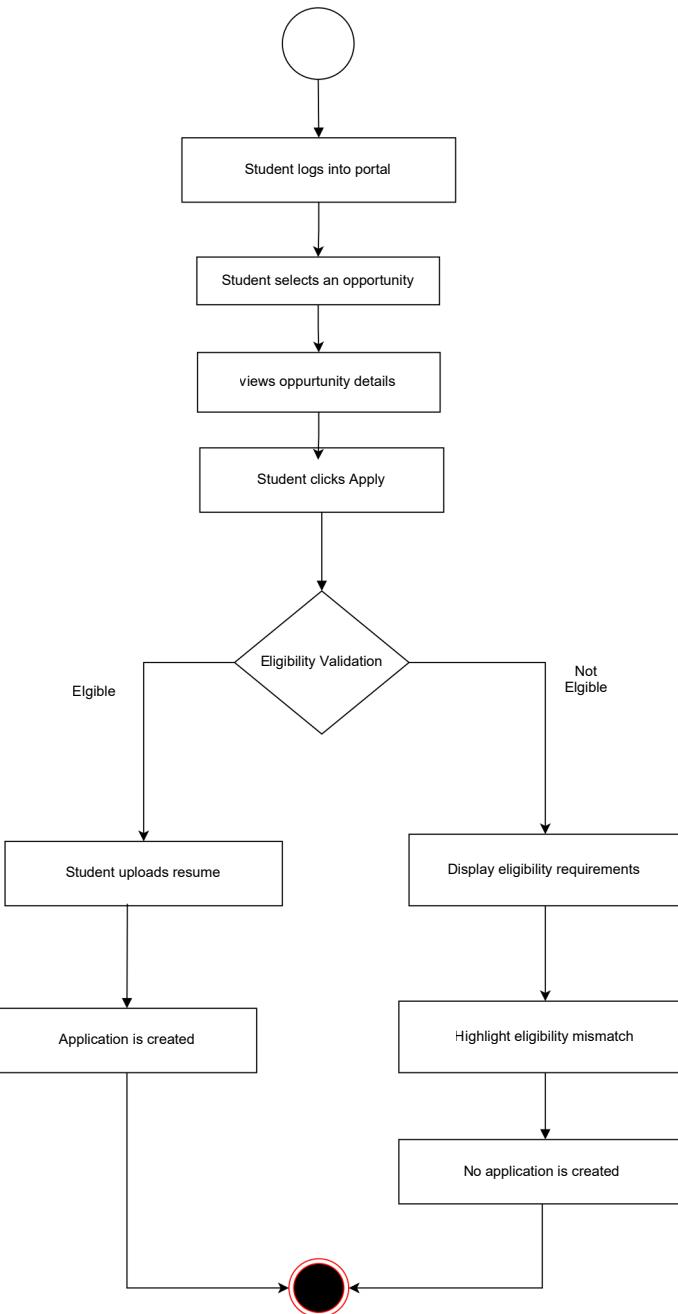
College Placement & Internship Portal



8. Activity Diagrams

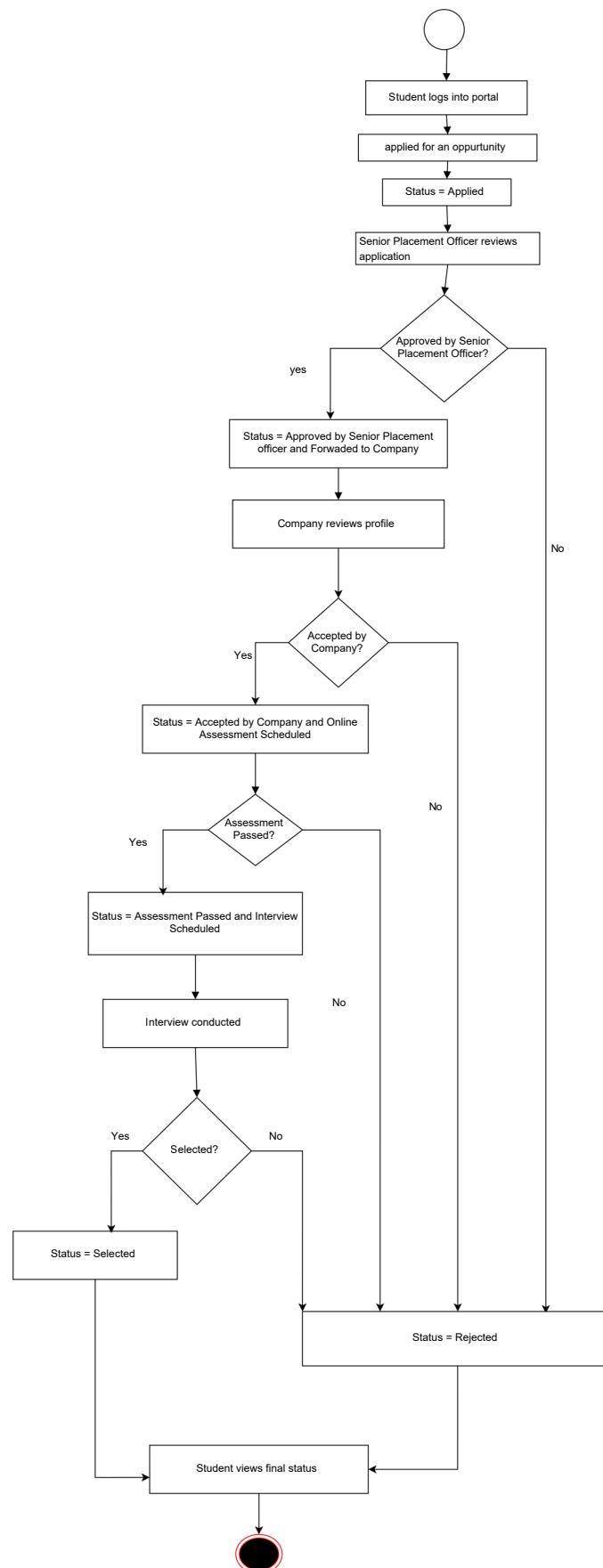
8.1 Apply For Opportunity

Apply for Opportunity

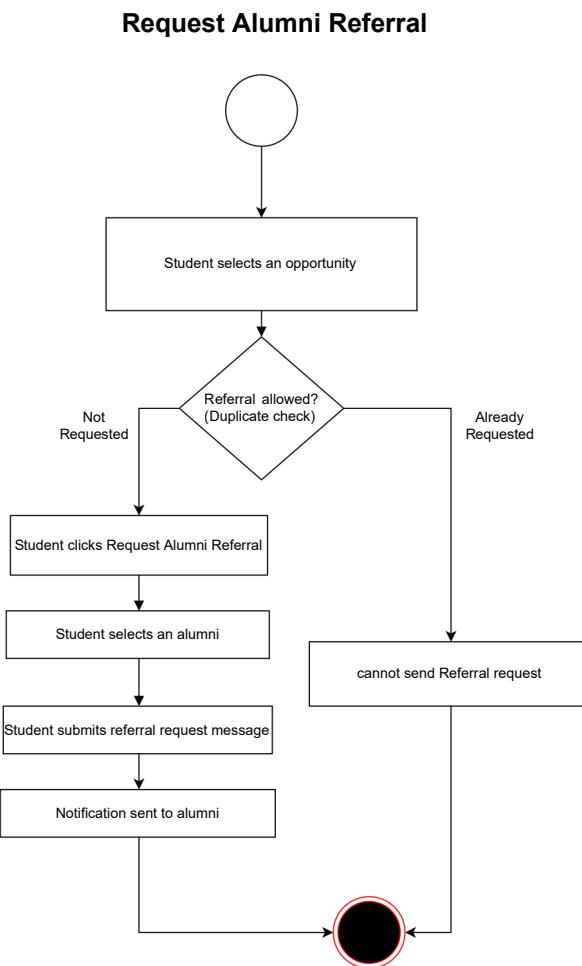


8.2 Track Application Status

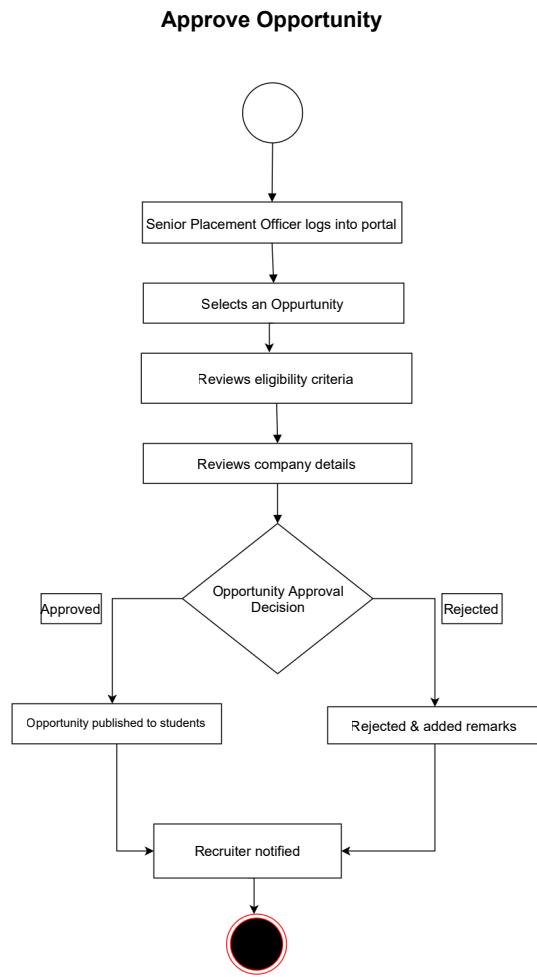
Track Application Status



8.3 Request Alumni Referral

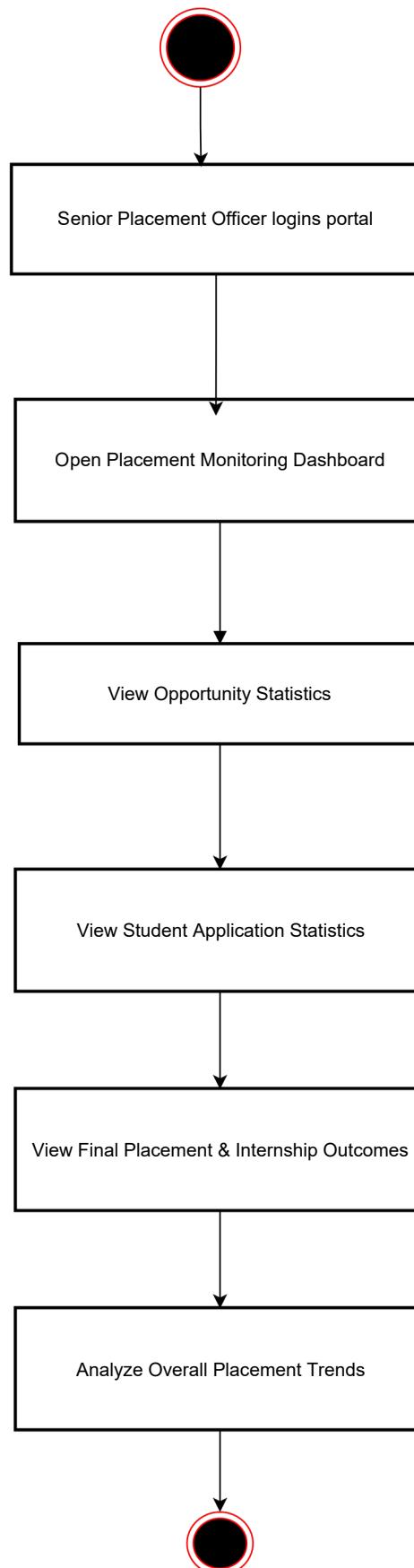


8.4 Approve Opportunity

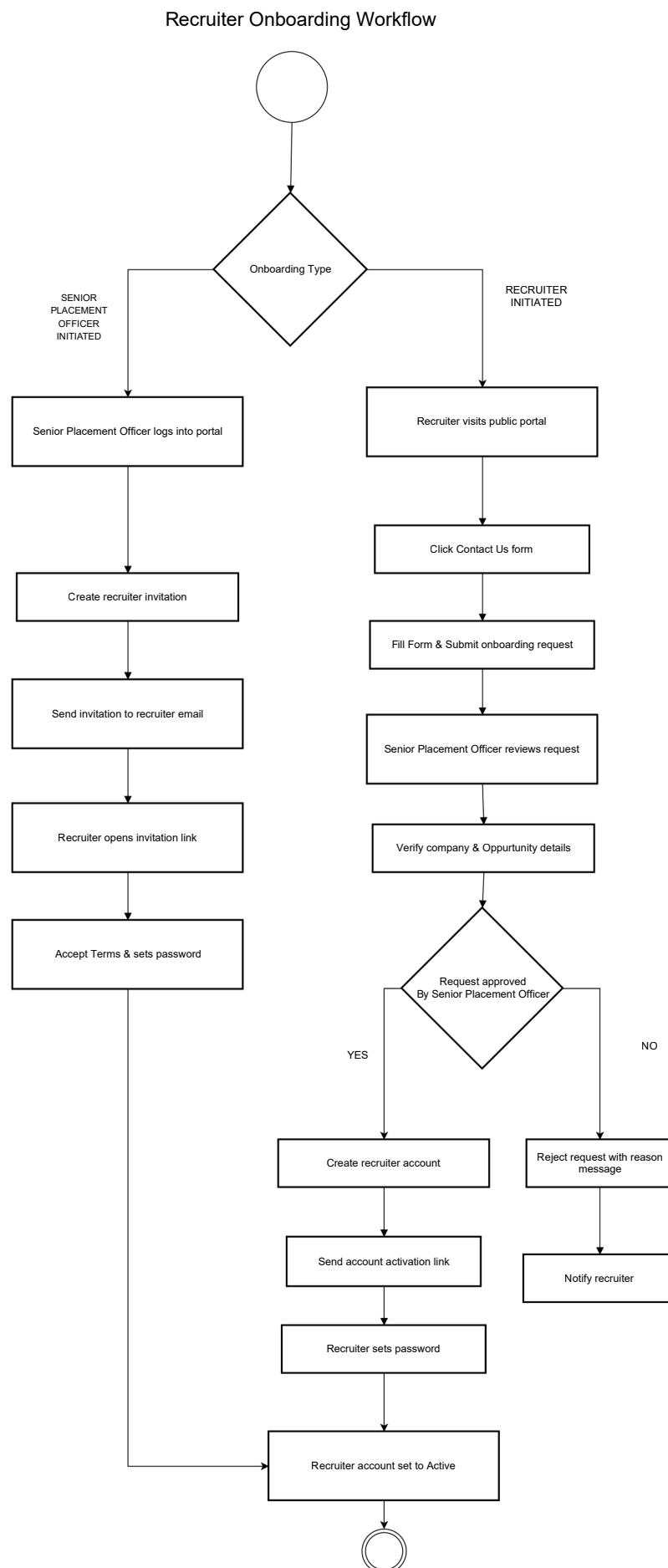


8.5 Monitor Placement Statistics

Monitor Placement Statistics

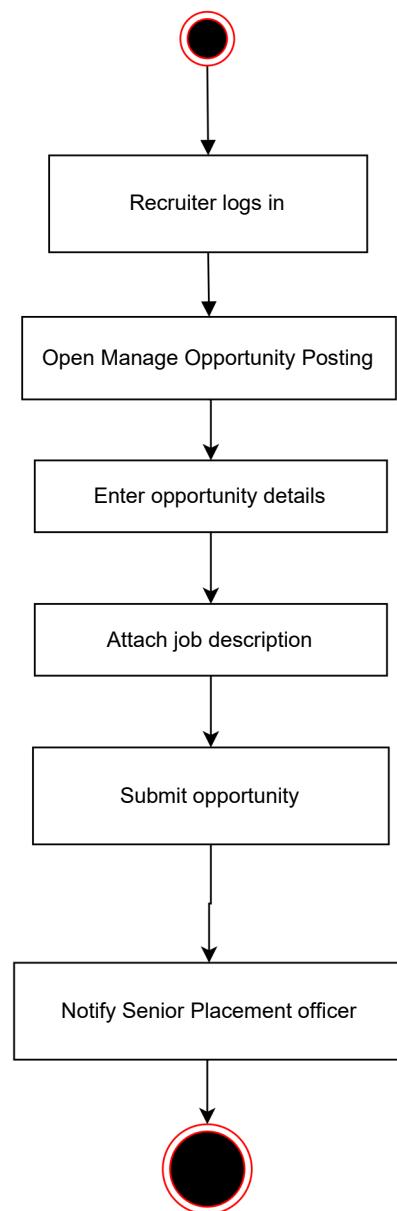


8.6 Recruiter Onboarding Workflow

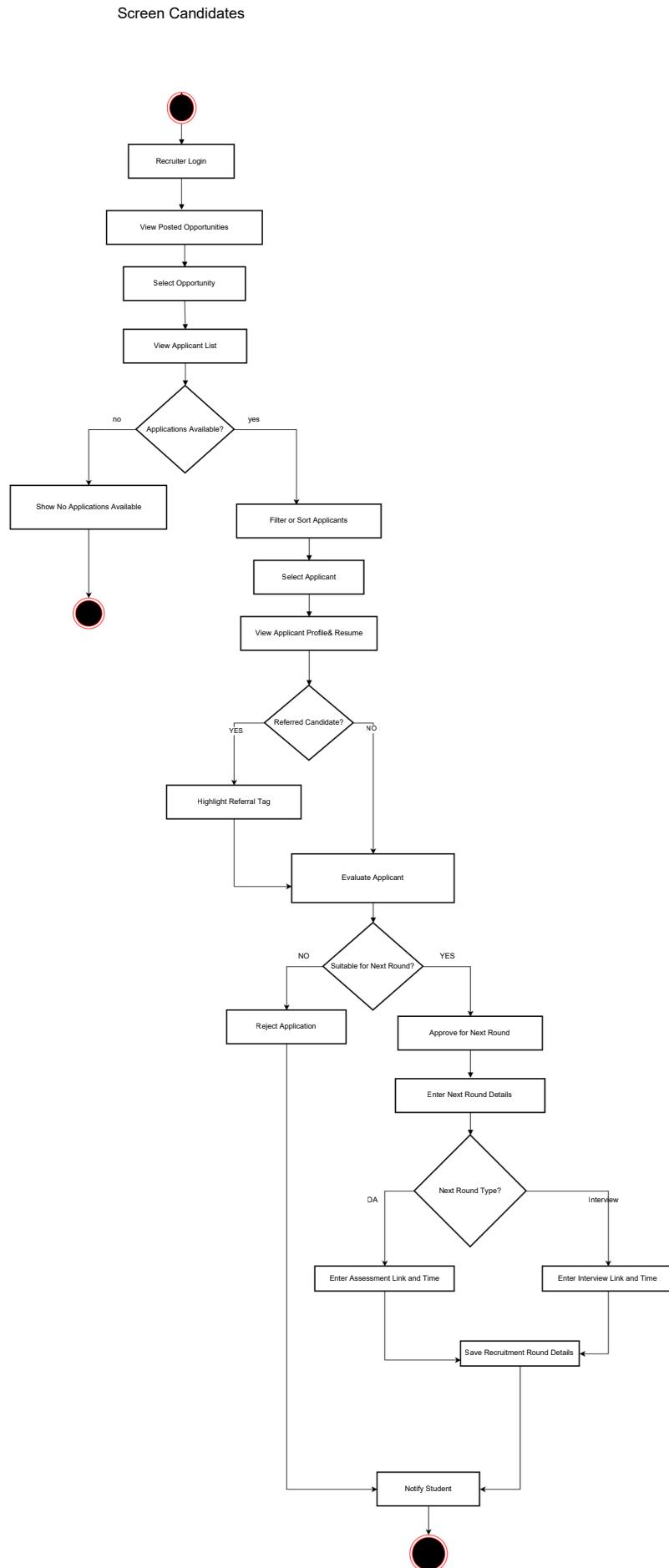


8.7 Manage Opportunity Posting

Manage Opportunity Posting

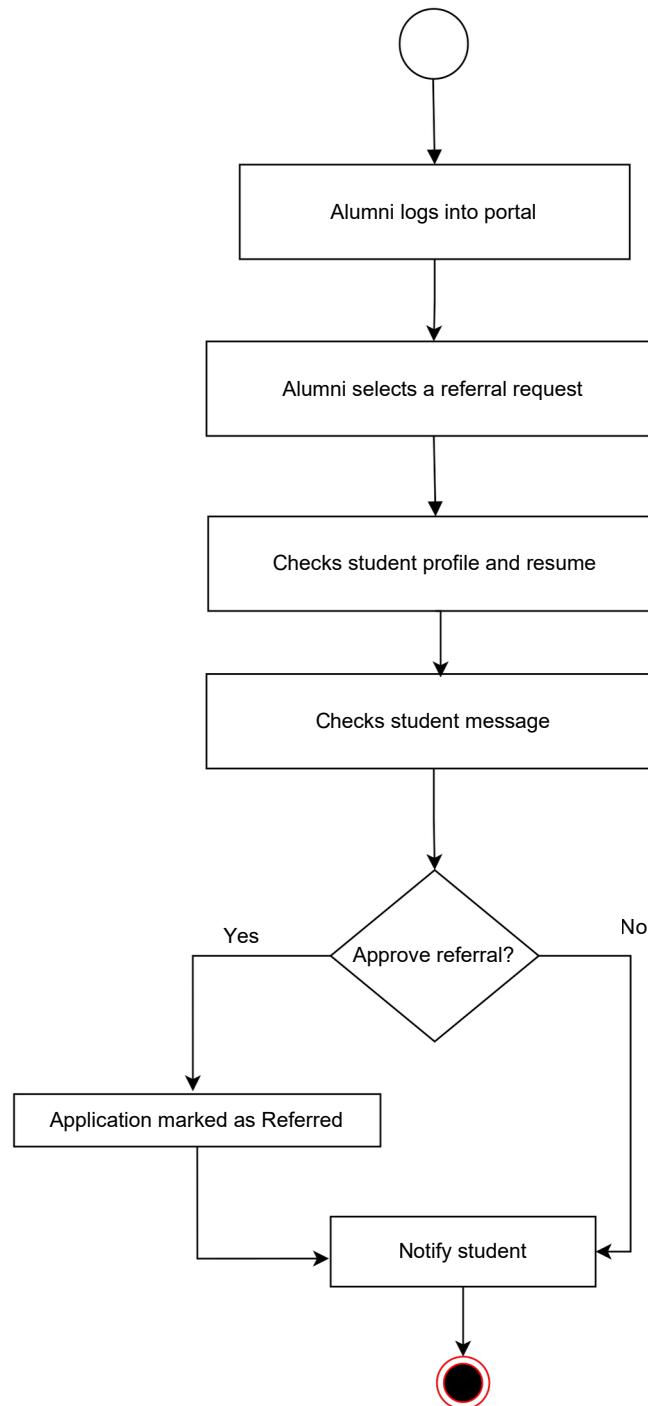


8.8 Screen Candidates



8.9 Respond to Referral Request

Respond to Referral request



End-to-End Placement Workflow

