SYSTEM REQUIREMENT SPECIFICATION

Functional Requirements

Project Management
The system shall enable project owners to create and manage projects.

Recruitment & Assignment
The system shall allow collaborators to apply for projects and owners to approve applicants and assign tasks.

Task Lifecycle Management
The system shall manage task states: In Progress → In Review→ Approved / Revise.

XP Automation
The system shall award XP only after approval by the project owner.

XP Calculation Rules
XP shall be calculated using:

- Deadline adherence
  Final XP = Base XP + Project XP + Bonus(approved on or before deadline)

Mentorship Support

The system shall provide communication and content-sharing mechanisms that enable mentors to offer guidance and recommendations, while restricting them from evaluating or approving project work.

Audit Logging
All actions shall be logged immutably.

Administration & Enforcement
The system shall support warnings and suspensions

Non-Functional Requirements

Transparency
All workflow activities shall be recorded in audit logs to ensure traceability.

Deterministic
XP calculation shall be rule-based and deterministic.

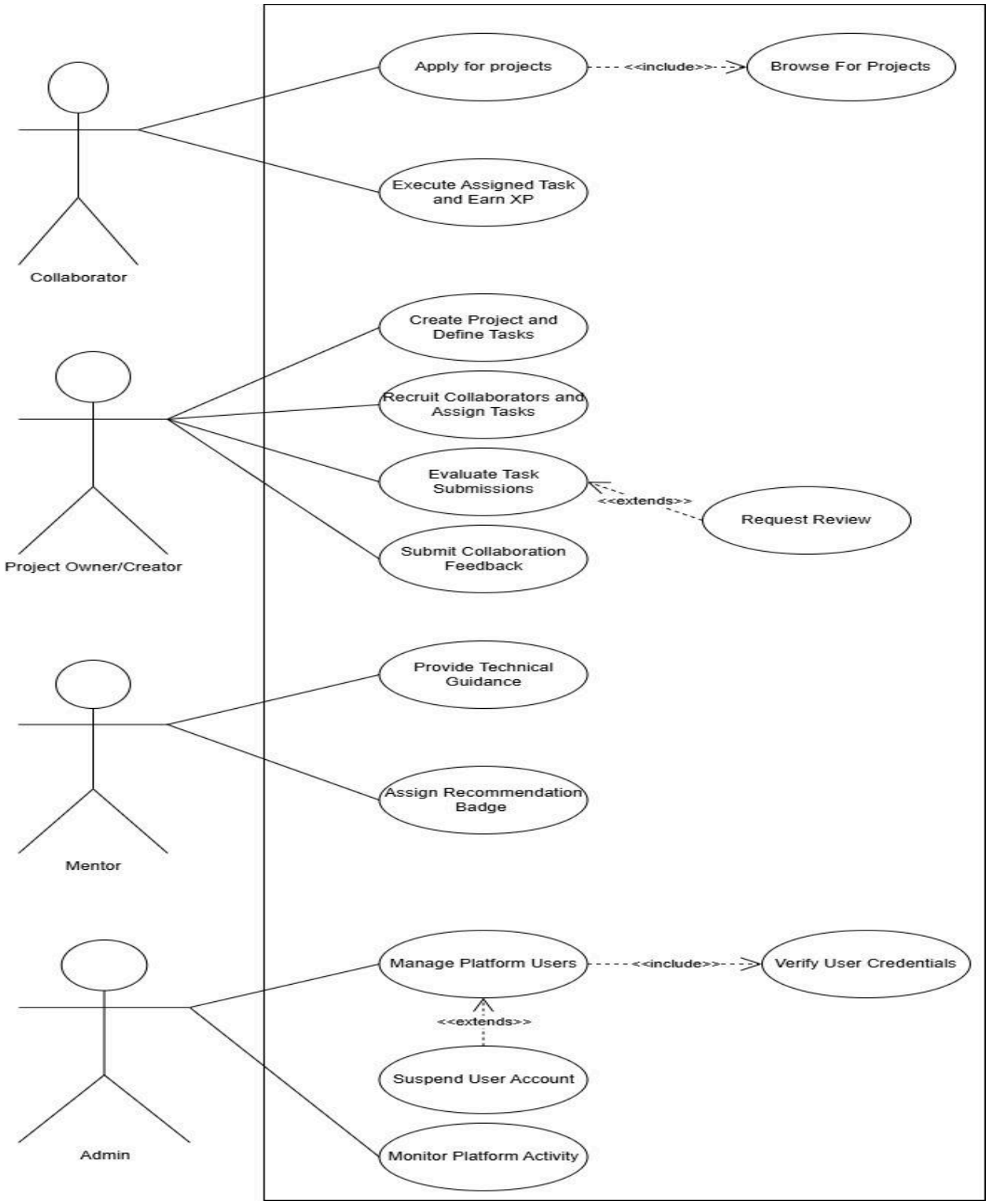
Security
Role-based access control must be enforced.

Scalability
System shall support concurrent users and multiple projects.

Compatibility
System should be compatible with commonly used web browsers.

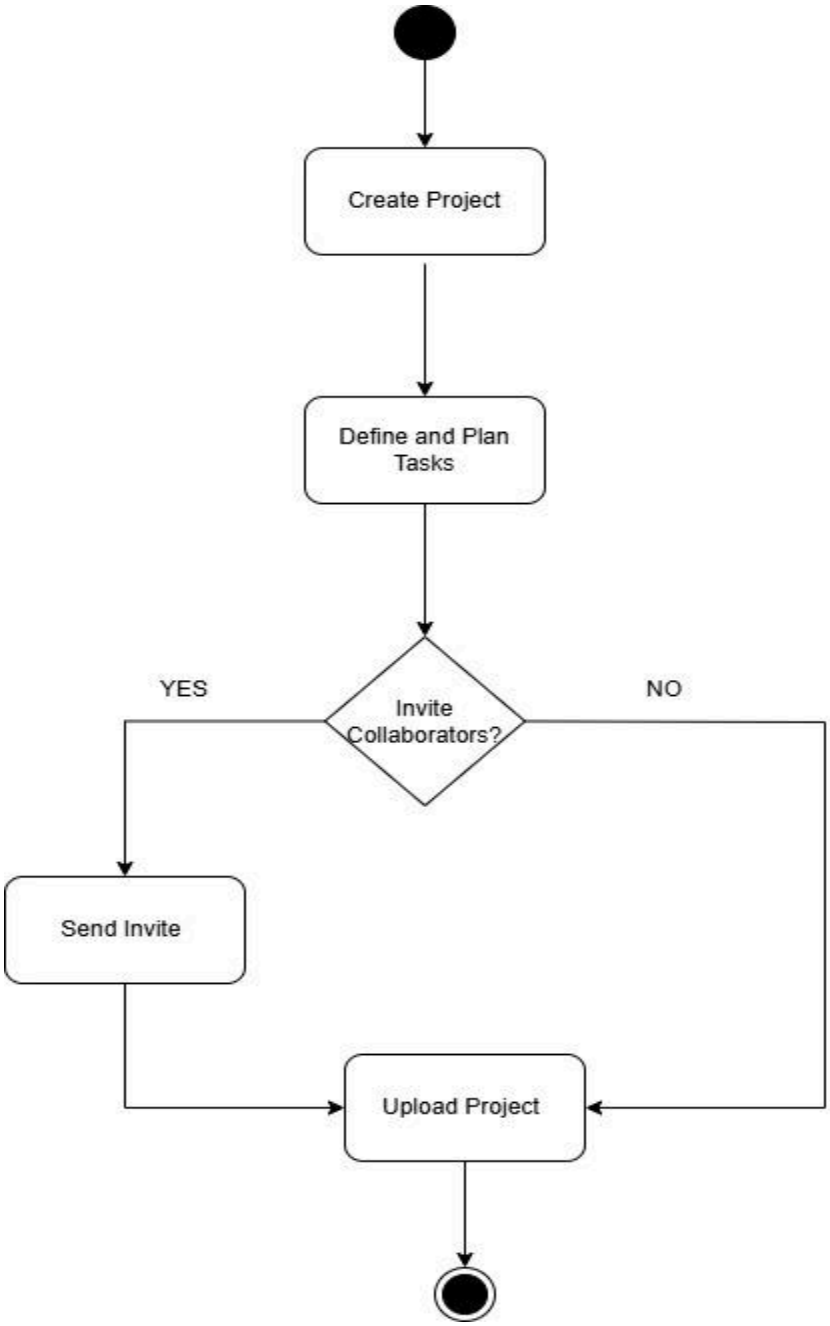
Usability
The system shall provide an user friendly interface suitable for all users.

USE CASE DIAGRAM

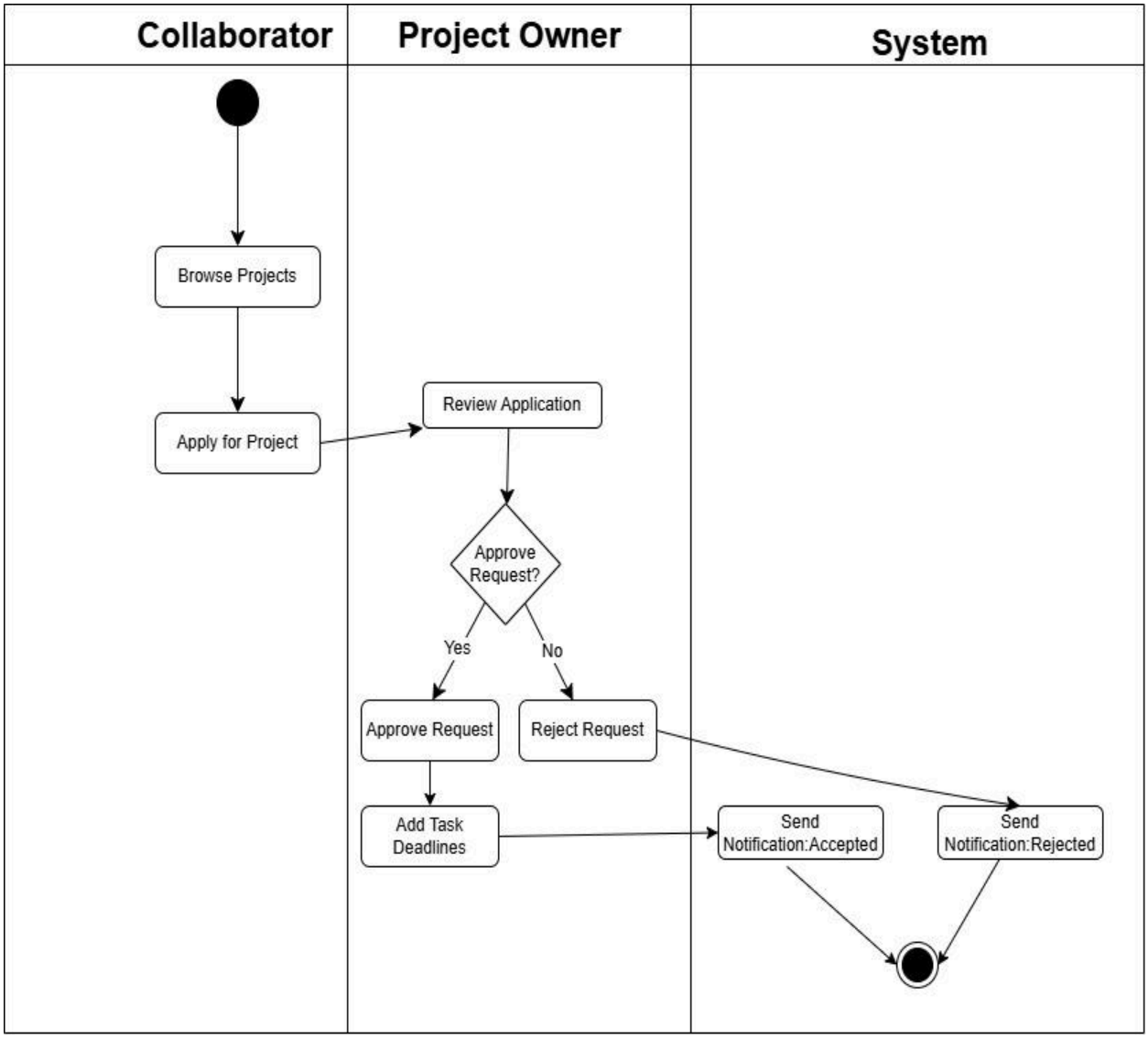


ACTIVITY DIAGRAMS

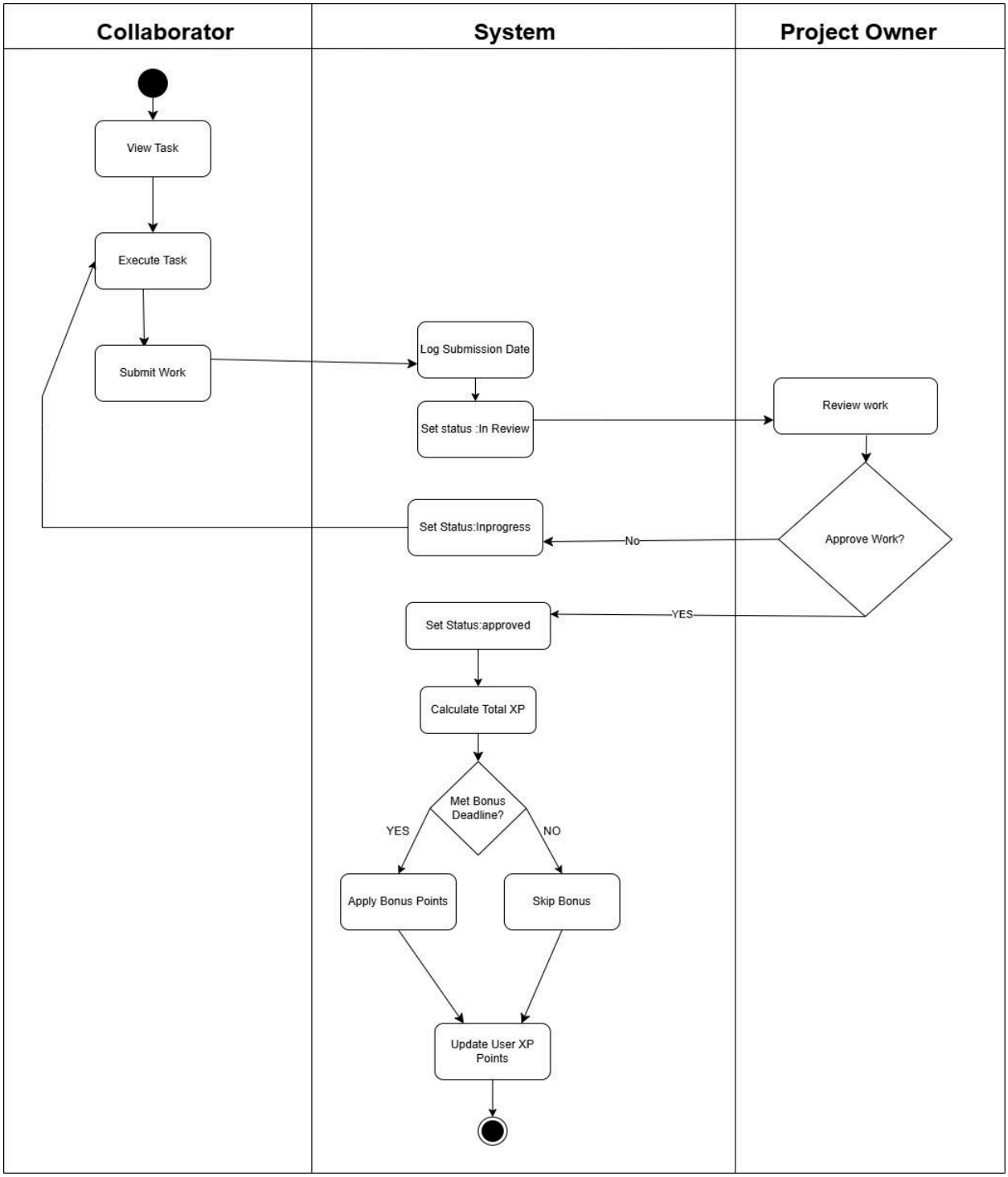
PROJECT CREATION



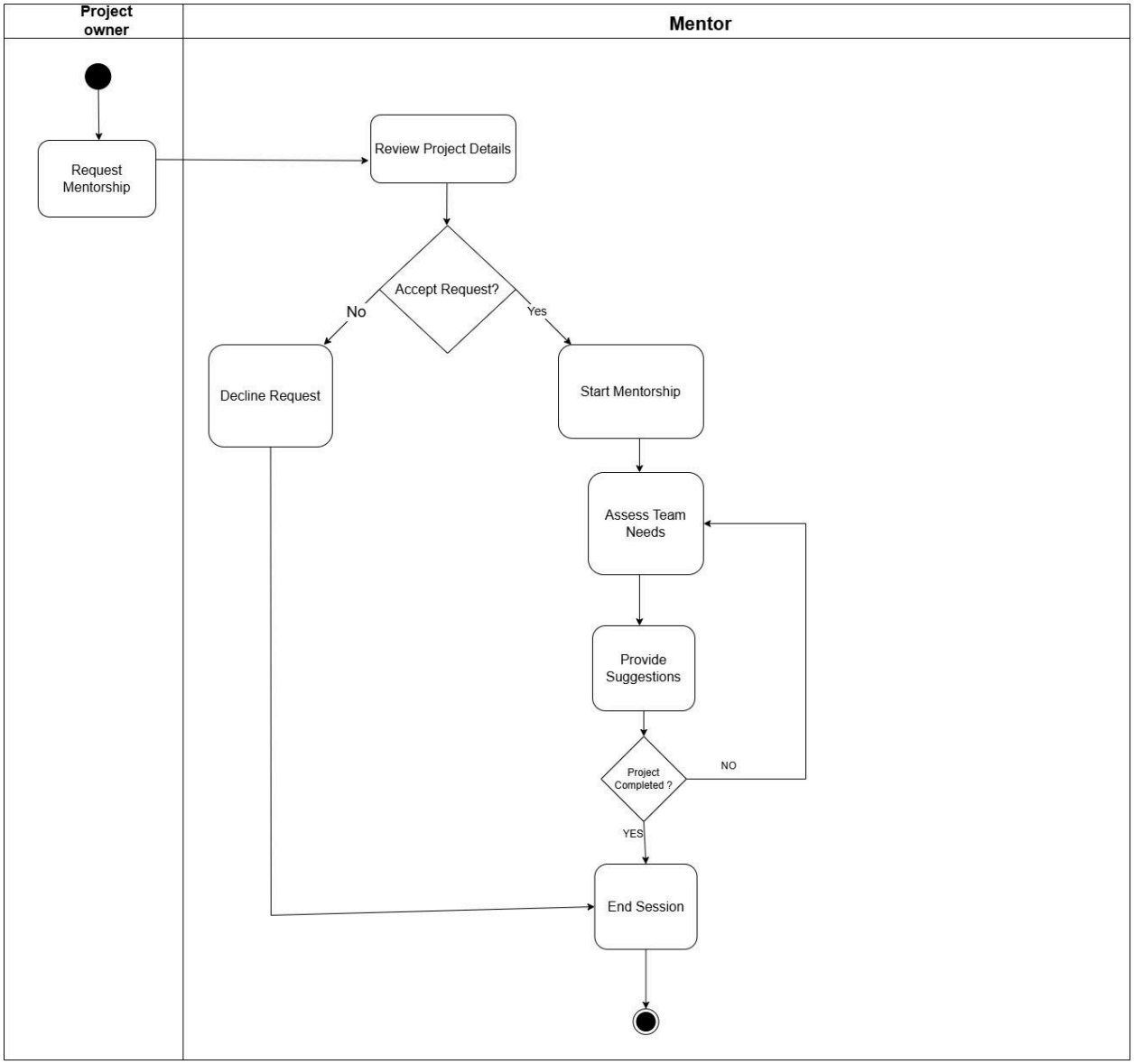
RECRUITMENT



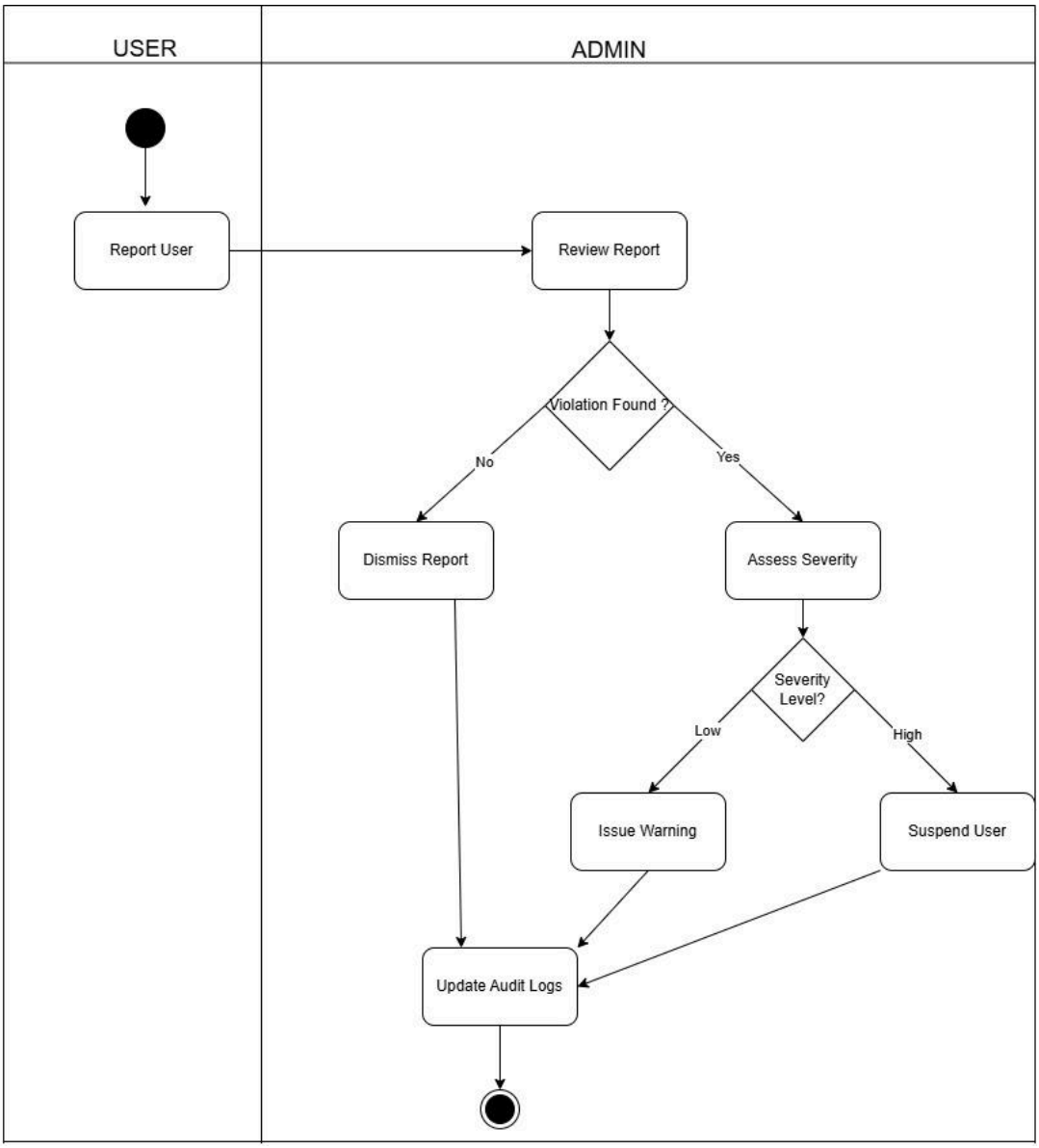
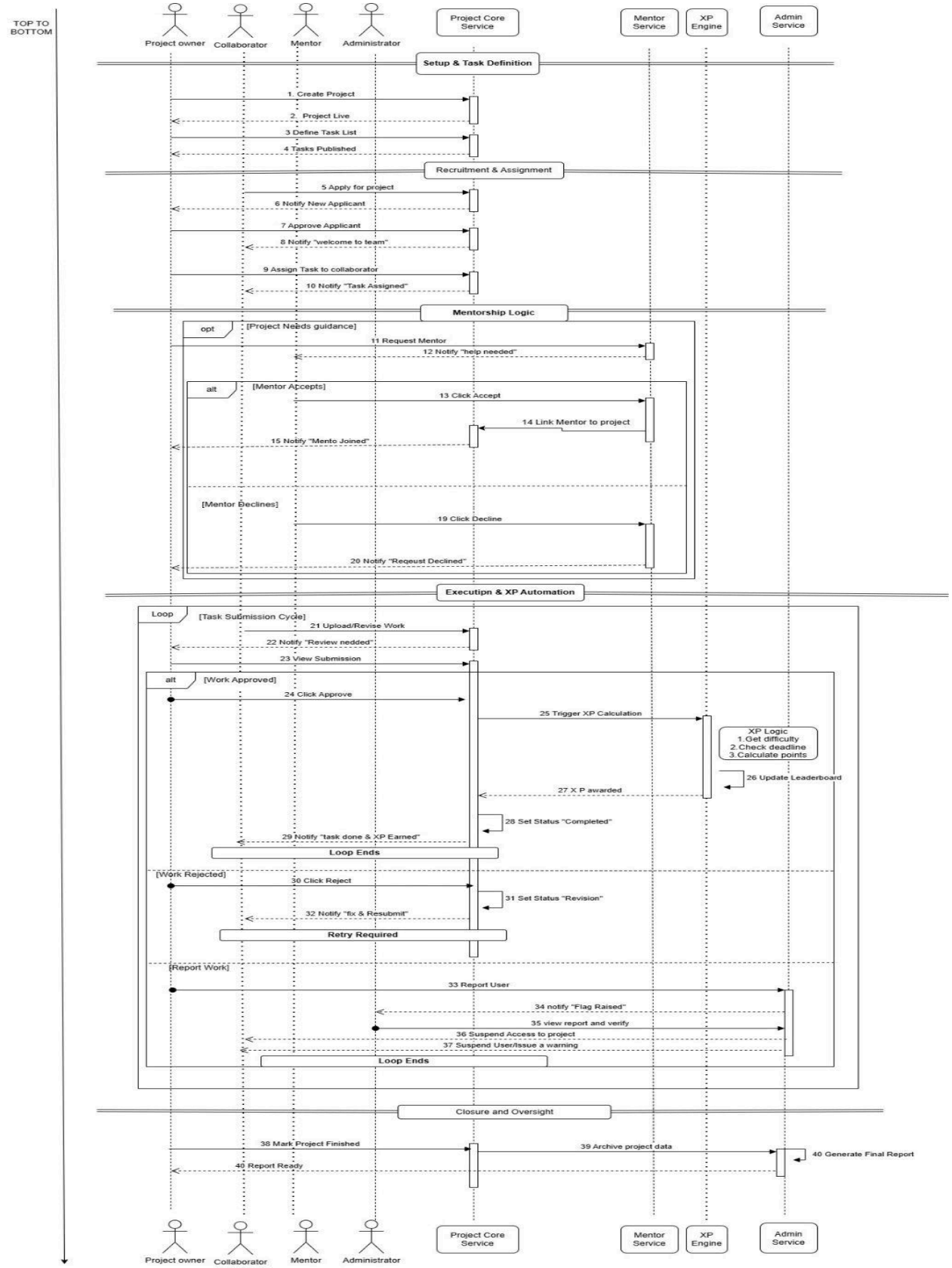
TASK EXECUTION



MENTORSHIP WORKFLOW



ADMIN WORKFLOW



SEQUENCE DIAGRAM