



Group 20

Assignment Report - Homework 3

ID2207 HT25 Modern Methods in Software Engineering

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1 Entity Objects

Object Name	Description
Client	Customer information, including historical event records, discount eligibility, etc.
Event	Basic information about an event, such as type, date, budget, status, etc.
EventRequest	An event request form containing customer requirements and initial information.
Employee	Basic information for all employees, including their roles, departments, etc.
Task	Tasks assigned to sub-teams, including priority, description, assigner, etc.
BudgetRequest	A request for budget adjustments, initiated by production or service departments.
RecruitmentRequest	A request for recruitment or outsourcing, initiated by a department manager.
Report	Various reports generated by the system (e.g., for clients, events, employee utilization).

2 Boundary Objects

Object Name	Description
LoginView	The login interface.
EventRequestForm	The form for clients to fill out an event request.
TaskAssignmentView	The interface for managers to assign tasks.
BudgetNegotiationView	The interface for financial managers to negotiate budgets with clients.
RecruitmentRequestForm	The form for human resources requests.
ClientRecordView	The interface for viewing client records.
EmployeeScheduleView	The interface for viewing employee schedules and task assignments.
ReportGenerationView	The interface for generating reports.

3 Control Objects

Object Name	Description
EventRequestController	Handles the creation, forwarding, and approval of event requests.
TaskController	Handles the assignment, updating, and completion of tasks.

Object Name	Description
BudgetController	Handles budget requests and negotiations.
RecruitmentController	Handles recruitment and outsourcing requests.
ReportController	Generates various types of reports.
AuthenticationController	Handles user login and permission authentication.

4 Sequence Diagram

4.1 Create Event Planning Request

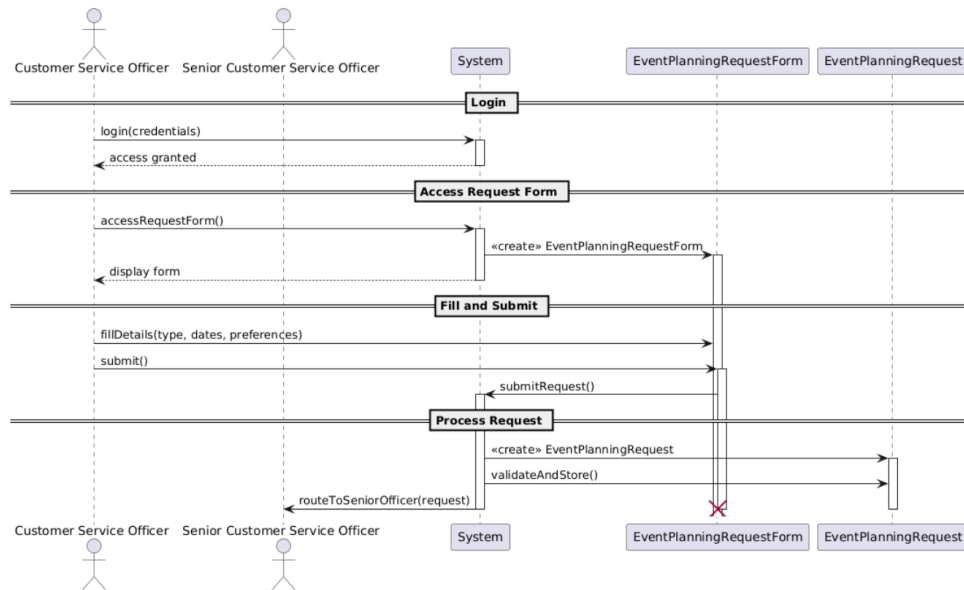


Figure 1: Sequence Diagram of Create Event Planning Request Use Case

4.2 Review and Approve Budget

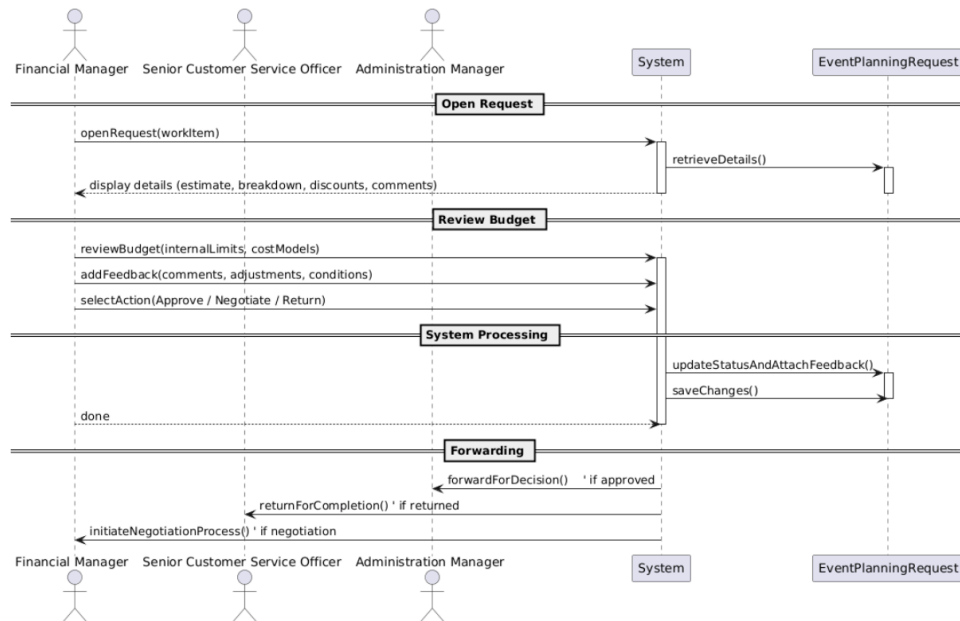


Figure 2: Sequence Diagram of Review and Approve Budget Use Case

4.3 Assign Tasks to Sub-teams

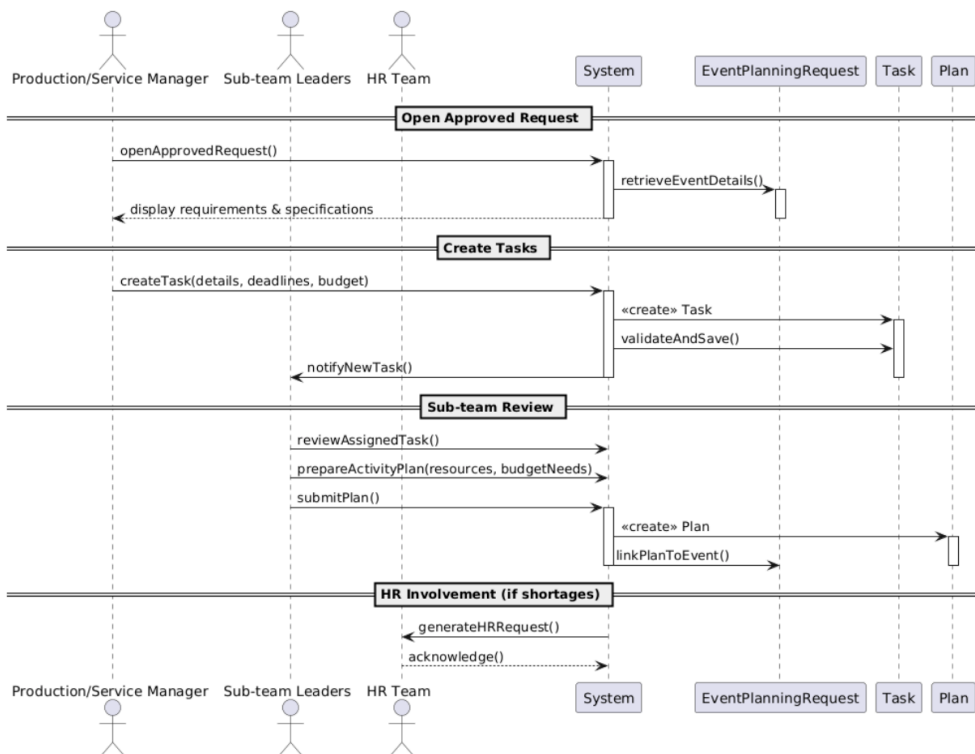


Figure 3: Sequence Diagram of Assign Tasks to Sub-teams Use Case

4.4 Process Staffing Request

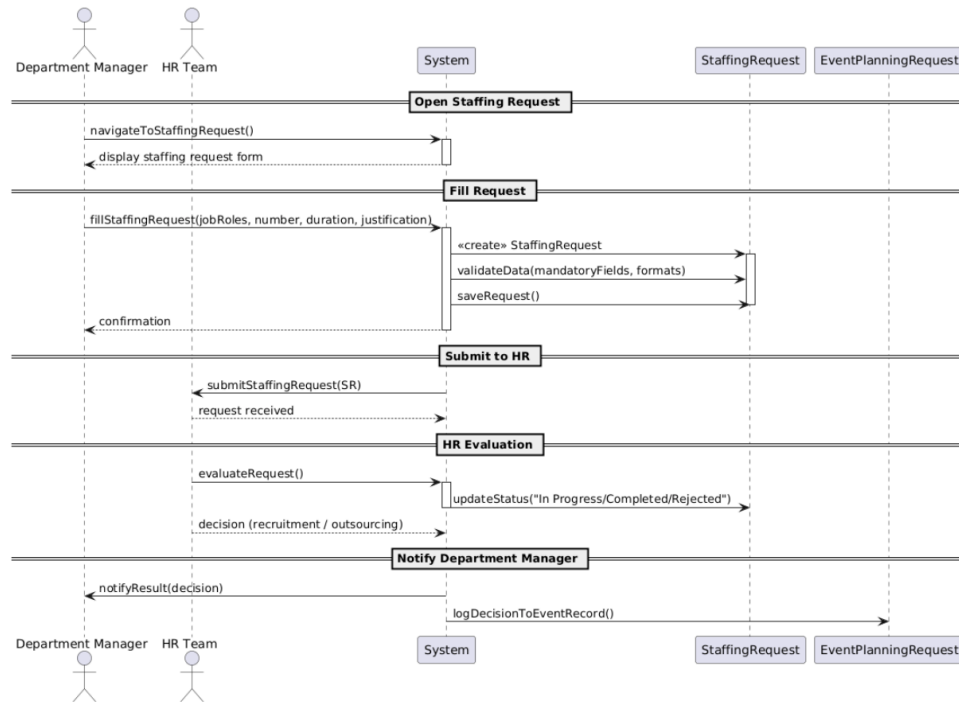


Figure 4: Sequence Diagram of Process Staffing Request Use Case

5 Class Diagram

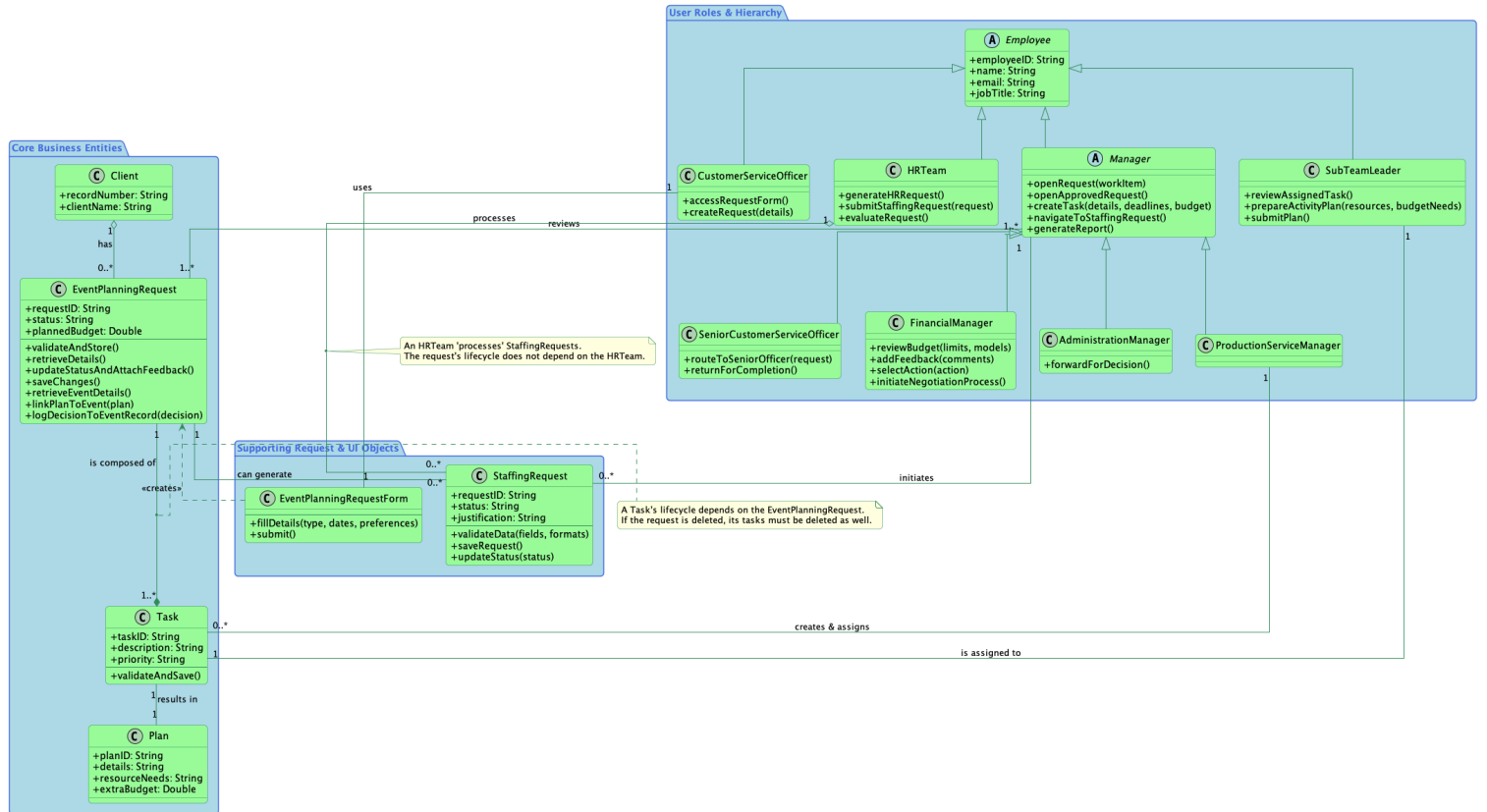


Figure 5: Class Diagram of SEP Internal System

6 State Chart Diagram

6.1 EventRequest State Diagram

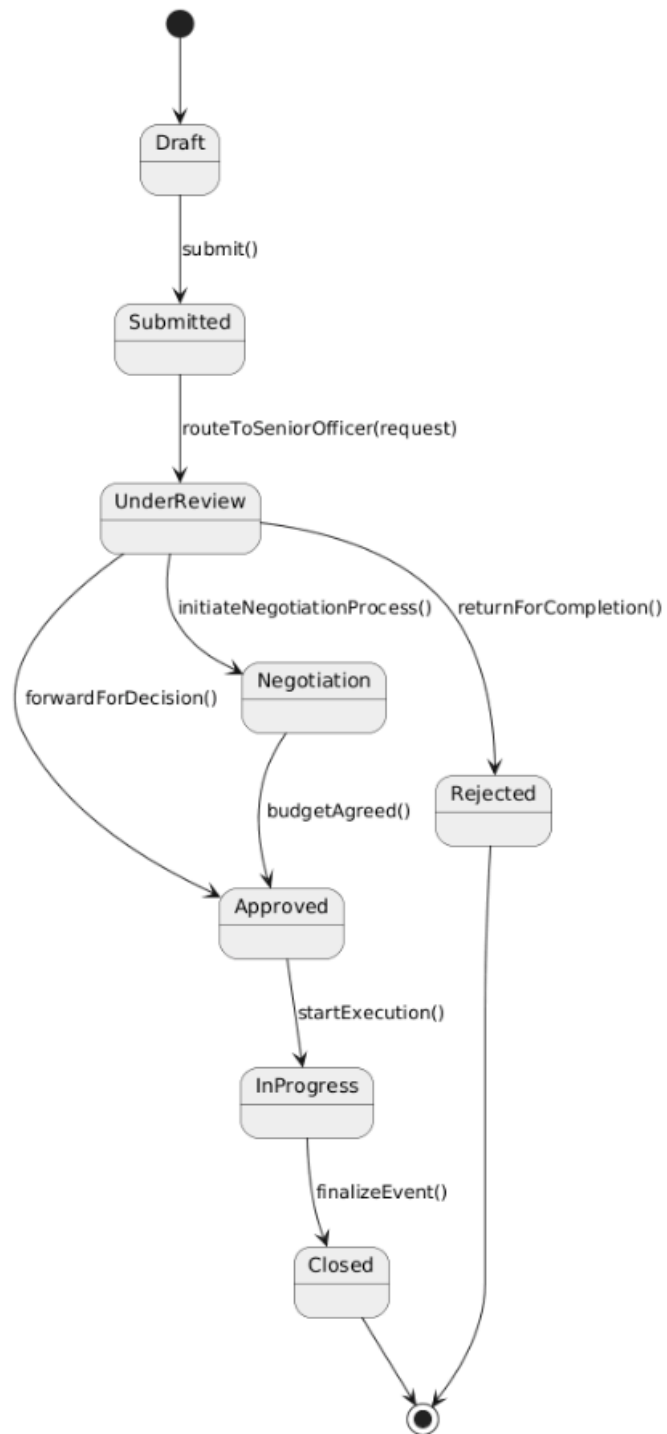


Figure 6: State Chart Diagram of EventRequest

6.2 Task State Diagram

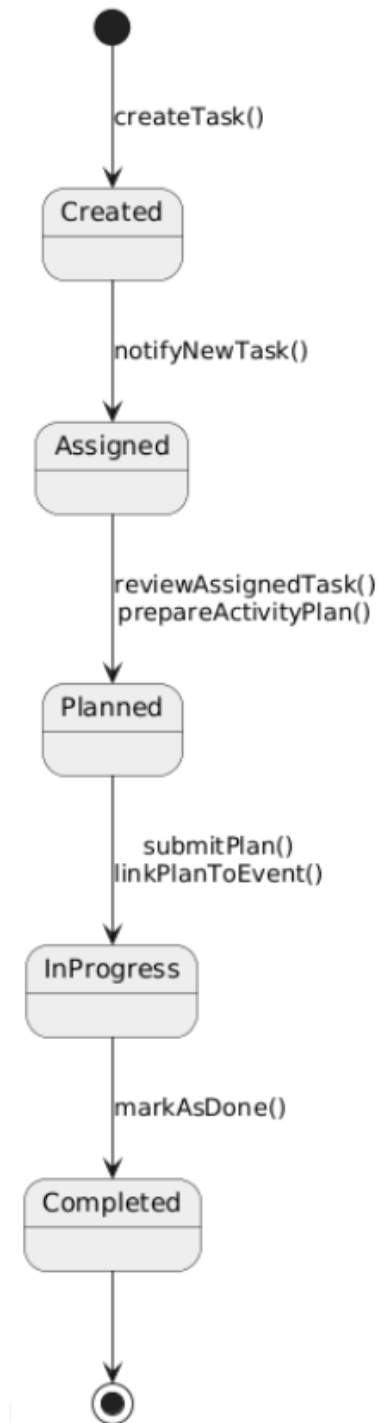


Figure 7: State Chart Diagram of Task

6.3 RecruitmentRequest State Diagram

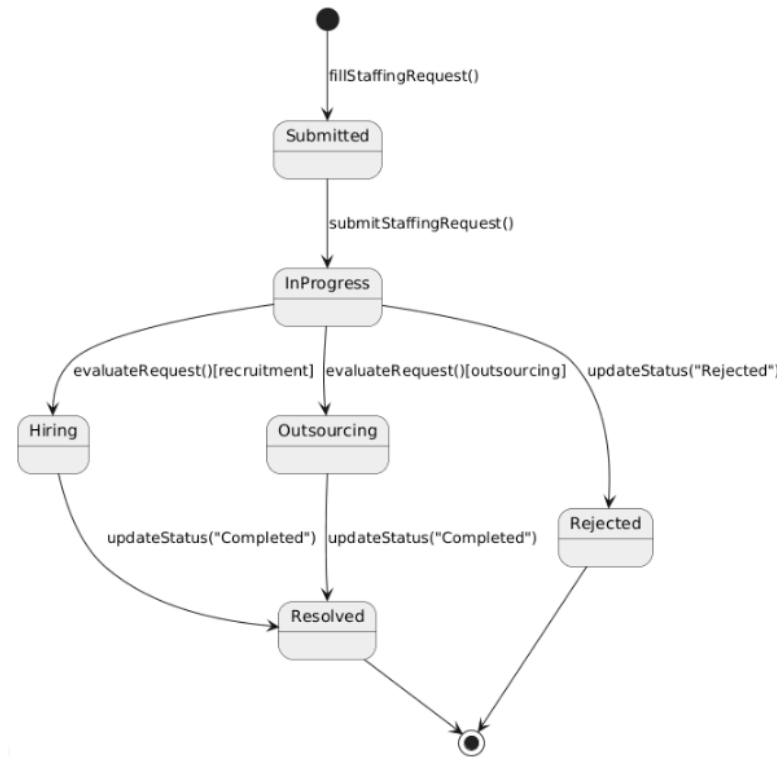


Figure 8: State Chart Diagram of RecruitmentRequest

Bibliography

- [1] ID2207 HT25 Modern Methods in Software Engineering Course Staff. (2025). *Business Case Description For Homework 2, 3 and 4* [Course material]. KTH Royal Institute of Technology, ID2207 HT25 Modern Methods in Software Engineering.