

# Homework - 3

## Group - 13

### Boundary (Forms / Interfaces)

- **Service Interface** - UI or system interface through which the service manager interacts.
- **Service Staff Interface** - Actors like Magy, Angelina, who interact with the system to view tasks and add comments.
- **FinanceDashboard** : Main screen for financial manager.
- **BudgetReviewForm** : Used when reviewing/adjusting budgets.
- **Start**: Interface through which the CSO actor initiates interaction with the system. A 'request entry' UI screen.
- **ReportEmergencyForm**: Form/UI where the CSO enters the details of the emergency request. Captures input before creating the emergencyReport entity.
- **FeedbackField**:Interface for the Finance Manager to provide feedback on the budget review.
- **Scheduleform**: UI for scheduling meetings after the request is approved.
- **ClientRecordView** : View client history.
- **EmployeeRecordView** → View employee assignments.
- **DiscountForm** → Apply discounts for loyal clients.
- **AdjustmentRequestForm** → To receive requests from production/services.
- **HRPortal** → HR team's main dashboard.
- **StaffRequestForm** → Filled by PM/SM to request staff.
- **JobAdvertForm** → Create/post adverts for new roles.
- **ApplicationForm** → Candidate applies through this.
- **InterviewScheduleForm** → For managing interview slots.
- **VendorRequestForm** → To contact outsourcing vendors.

### Entity (Data Sources)

- **EventRequest** - Represents the client's request for an event, stores details of requirements.
- **StaffDB** - Database that stores staff schedules, availability, assignments.
- **SubTeam** - Represents teams like chefs/waiters, with their tasks and plans.

- **ApplicationStatus** - Tracks event request states as Open, In Progress, Archived.
- **ClientRecord** : Stores client info, history, events, discounts.
- **EmergencyReport**: Represents the core emergency report data submitted by the client. Stores details like request type, description, timestamps, and client info.
- **Feedback**: Hold feedback or comments from the Finance Manager after budget review.Can include approval status, notes, or recommendations.
- **Scheduled**: Represents the scheduled meeting data after the request is fully approved.Contains date, time, participants, and location for the meeting.
- **EventApplication** : Request object with type, date, requirements, status.
- **Budget** : Financial details, estimated vs final values.
- **BudgetAdjustmentRequest** : Proposed changes to budget.
- **EmployeeRecord** : Salaries, assignments, history.
- **StaffRequest** : Role, quantity, status of request.
- **EmployeeRecord** : Internal and external staff data, skills, assignments.
- **JobAdvert** : Advert details for open positions.
- **Application** : Candidate CV, status, interview outcome.
- **Contract** : Outsourcing agreements, duration, terms.
- **OutsourcingVendor** → Vendor profile, rating, staff pool.

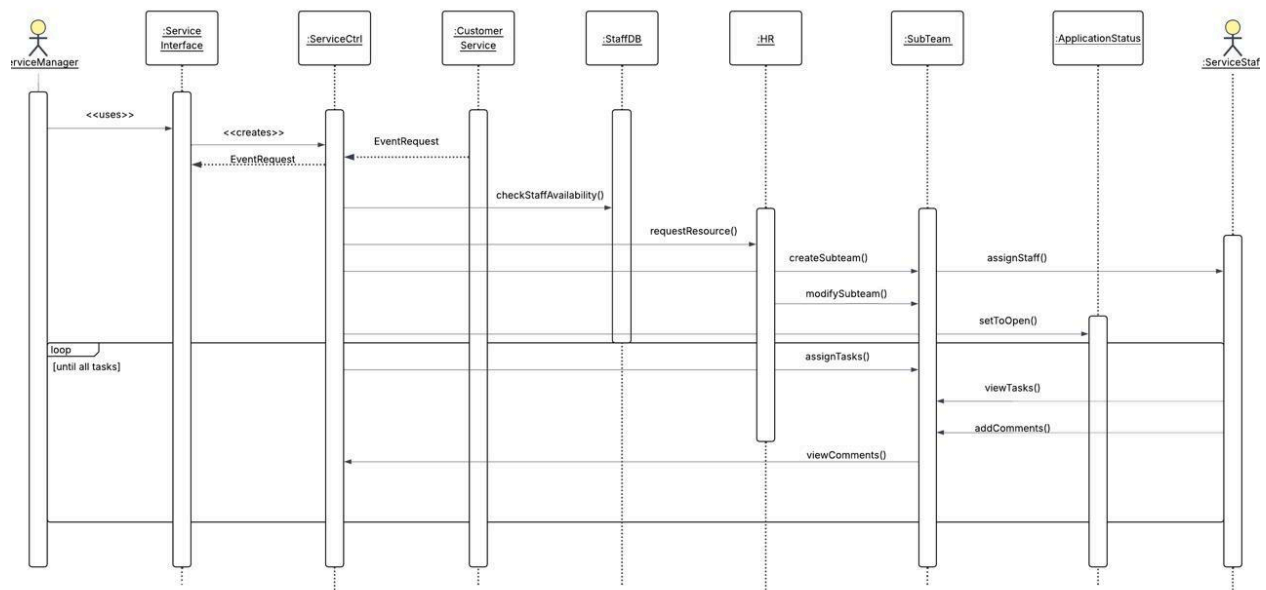
### Control (Coordinators)

- **ServiceCtrl** : The central coordinator it handles workflows, sends requests, manages sequences like checking availability, assigning sub-teams, updating status.
- **ManageFinanceCtrl** : Orchestrates the whole UC (review, feedback, approval/rejection, negotiation, summary).
- **CreateRequestController** : Handles the process of creating a new emergency request.Validates input from ReportEmergencyForm and triggers the creation of emergencyReport entity.
- **ReviewController** : Manages the review workflow after a request is submitted.Decides, based on conditions, whether the request goes to budget review or requires further action.
- **BudgetReviewController** : Handles the budget review process performed by the Finance Manager.Stores feedback in the feedback entity via feedbackField.

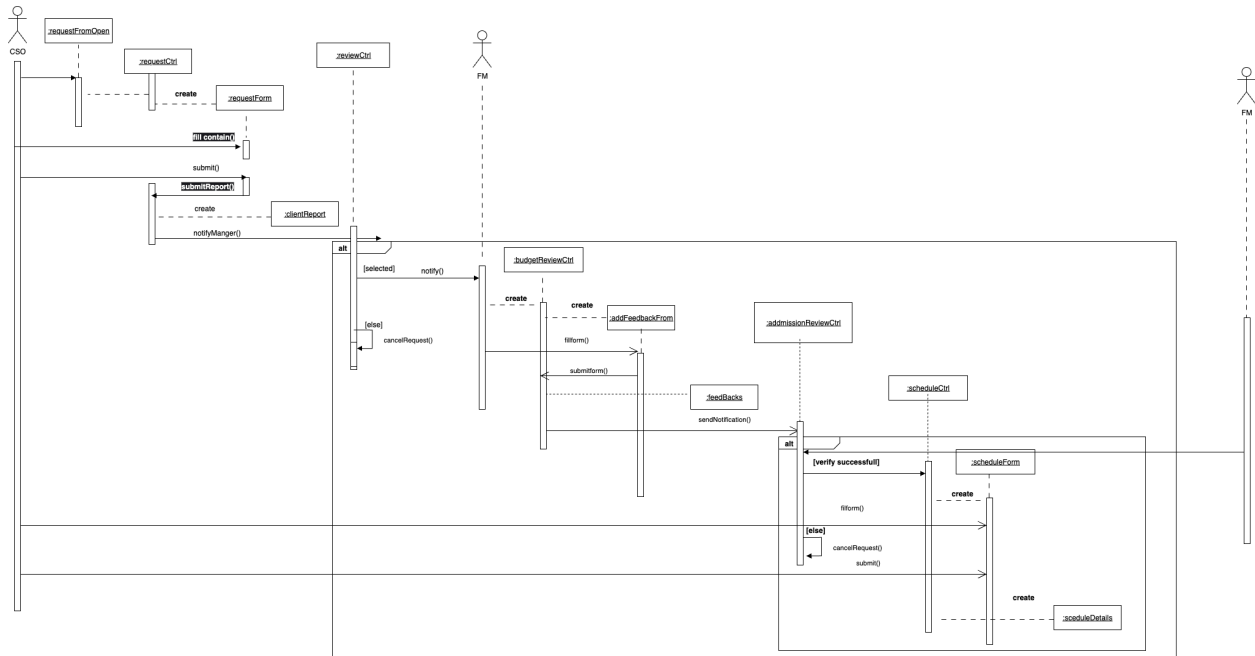
- **EvaluateRequestController** : Responsible for evaluating the request and feedback, usually by the Administrator Manager. Determines whether the request is OK or not possible to do.
- **SetMeetingController** : Manages scheduling meetings for approved requests. Creates the scheduled entity and triggers notifications to managers and clients.
- **HandleBudgetAdjustmentCtrl** : Processes adjustment requests from PM/SM.
- **ProvideFinancialFeedbackCtrl** : Sends financial opinion back to Admin/CS.
- **DiscountCtrl** : Validates and applies client discounts.

## Extract Sequence diagrams from UseCase

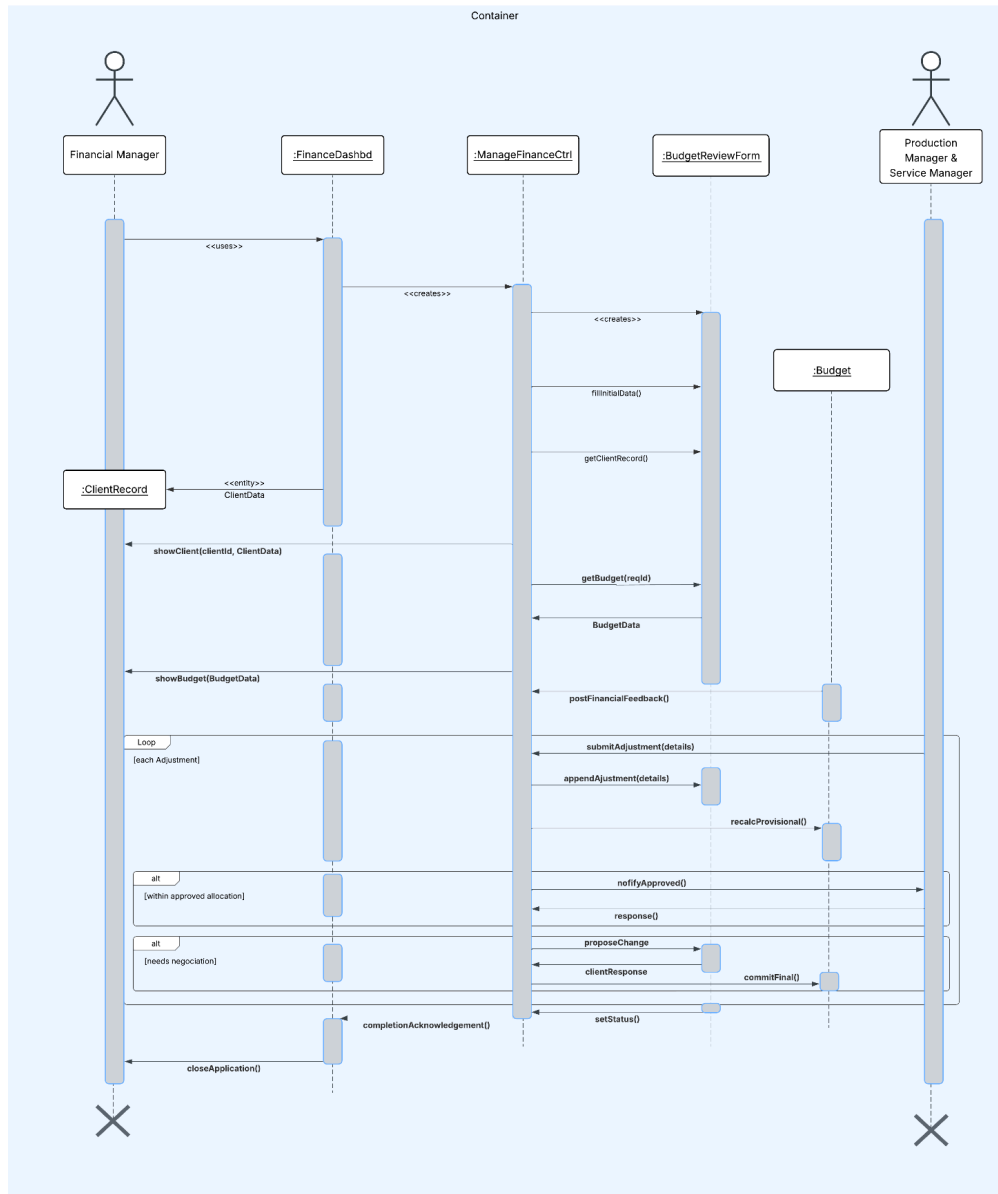
### Sequence Diagram - 1 : Use Case(Handle Service Request)



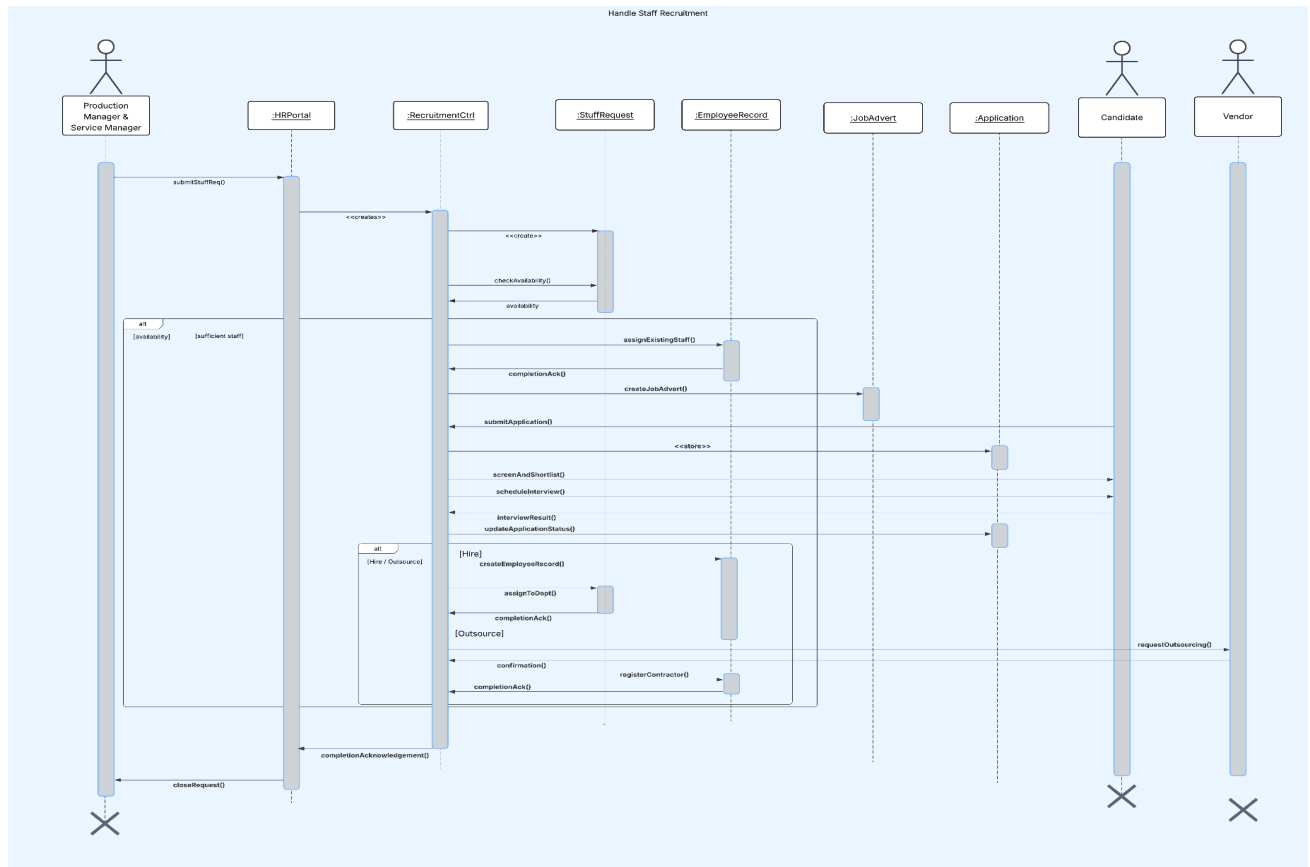
## Sequence Diagram - 2 : Use Case(HandleClientRequest)



## Sequence Diagram - 3 : Use Case(HandleFinance)



## Sequence Diagram - 4 : Use Case (HandleStaffRecruitment)



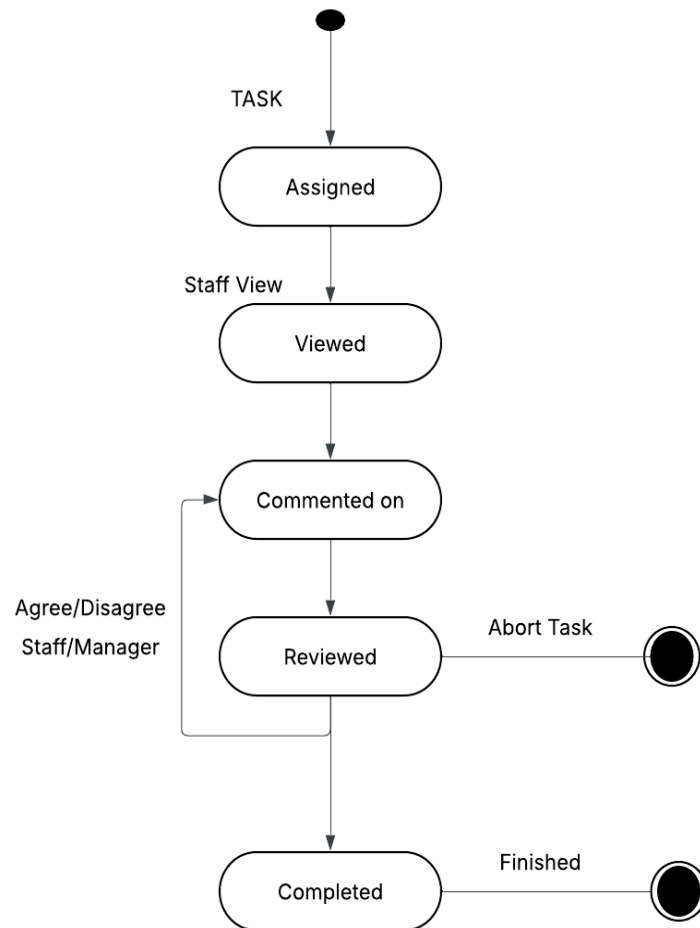
```

classDiagram
    class STATUS
    class Schedules
    class CustomerService
    class SeniorCustomerService
    class AdministrationManager
    class Feedback
    class EVENT
    class FinancialManager
    class FinancialDecision
    class ProductionManager
    class BUDGET
    class BudgetAdjustmentRequest
    class CONTRACTOR
    class RESOURCE_REQUEST
    class HR
    class EMPLOYEES
    class JOB_APPLICATION
    class APPLICANTS
    class SERVICE_MANAGER
    class TASK
    class SUB_TEAM
    class SERVICE_STAFF
    class COMMENTS

    STATUS "1" -- "0..*" EVENT
    Schedules "1" -- "0..*" EVENT
    CustomerService "1" -- "0..*" EVENT : creates
    SeniorCustomerService --> EVENT : forward
    AdministrationManager --> EVENT : forward
    Feedback "0..*" -- "0..*" EVENT
    EVENT "0..*" -- "0..*" BUDGET
    EVENT "1" -- "0..*" BUDGET : reviews
    BUDGET "1" -- "0..*" BudgetAdjustmentRequest
    FinancialManager "1" -- "0..*" BudgetAdjustmentRequest
    FinancialManager "1" -- "0..*" FinancialDecision : documents
    FinancialDecision "0..*" -- "0..*" BudgetAdjustmentRequest
    ProductionManager "1" -- "0..*" BudgetAdjustmentRequest : creates
    BudgetAdjustmentRequest "0..*" -- "1" SERVICE_MANAGER
    CONTRACTOR "N" -- "N" RESOURCE_REQUEST
    RESOURCE_REQUEST "N" -- "N" SERVICE_MANAGER
    HR --> EMPLOYEES : hire
    HR --> JOB_APPLICATION : 1
    HR --> APPLICANTS : interviews
    SERVICE_MANAGER "1" -- "N" TASK : creates
    TASK "N" -- "N" SUB_TEAM : assigns
    SUB_TEAM "N" -- "N" SERVICE_STAFF
    COMMENTS "N" -- "N" SERVICE_STAFF
  
```

## State Chart Diagrams

State Diagram - 1 :





State Diagram - 2

