

Hall Management System

Structured Analysis (SA)
Structured Design (SD)
Document

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and

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Roll No.: *11CS30037*

Problem No.: *19*

1. Introduction

This Structured Analysis (SA) document provides a complete analysis of the internal functioning of the software via Sequence, Collaboration, Activity and Statechart Diagrams.

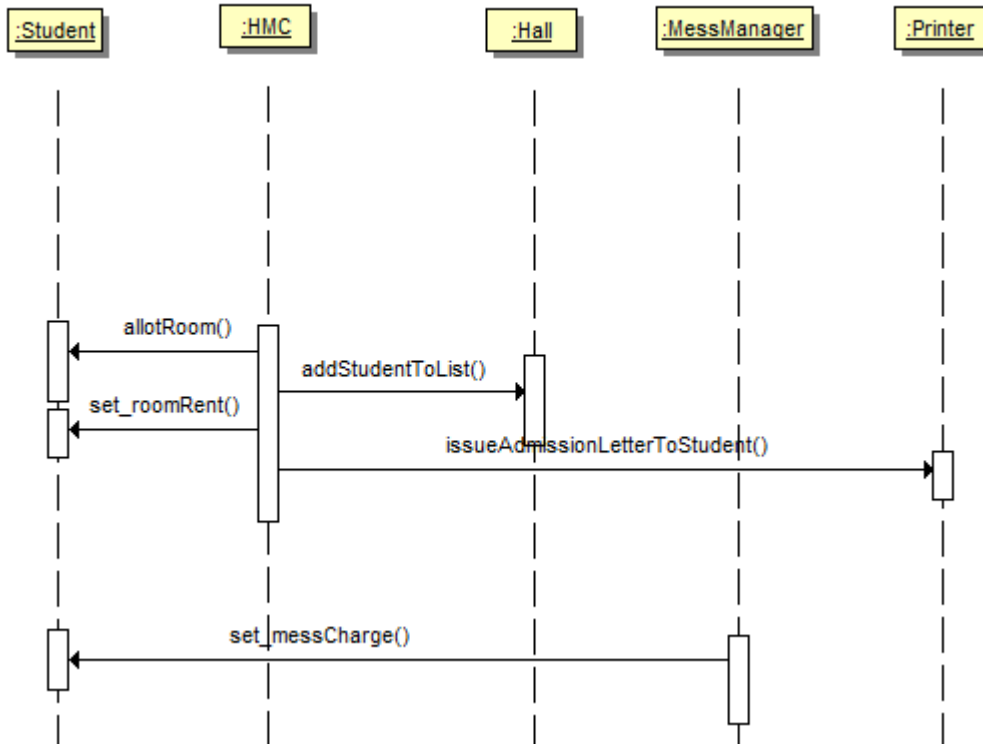
The Structured Design (SD) document provides all the design specifications in terms of the operating systems, programming languages, databases etc.

2. Data Dictionary

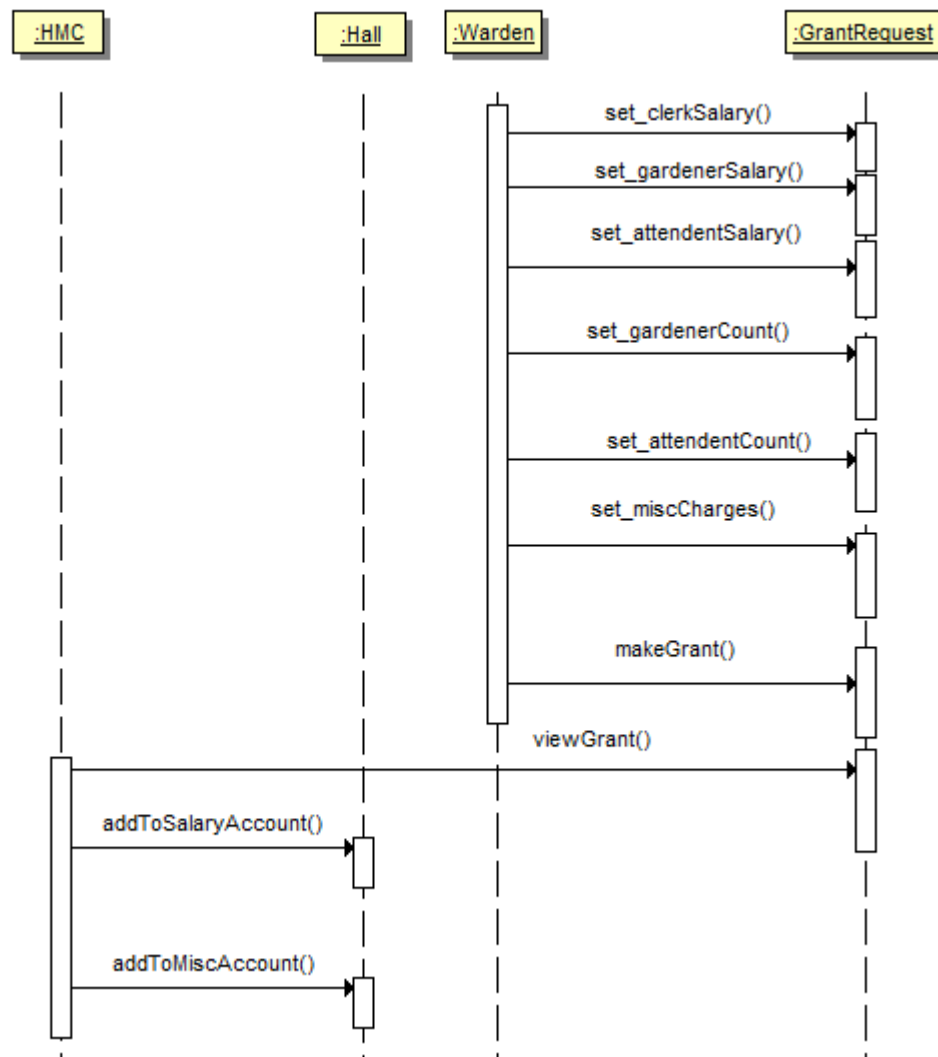
- $\text{Student Dues} = \text{Mess Charge} + \text{Amenity Charge} + \text{Room Rent}$
- $\text{Daily Worker Salary} = \text{Attendance} * \text{Daily Salary}$
- $\text{Total Salary Payable by Hall} = \text{Daily Worker Salary} + \text{Clerk Salary}$
- $\text{Grant given by HMC} = \text{Total Yearly Salary} + \text{Misc. charges}$

3. Sequence Diagrams

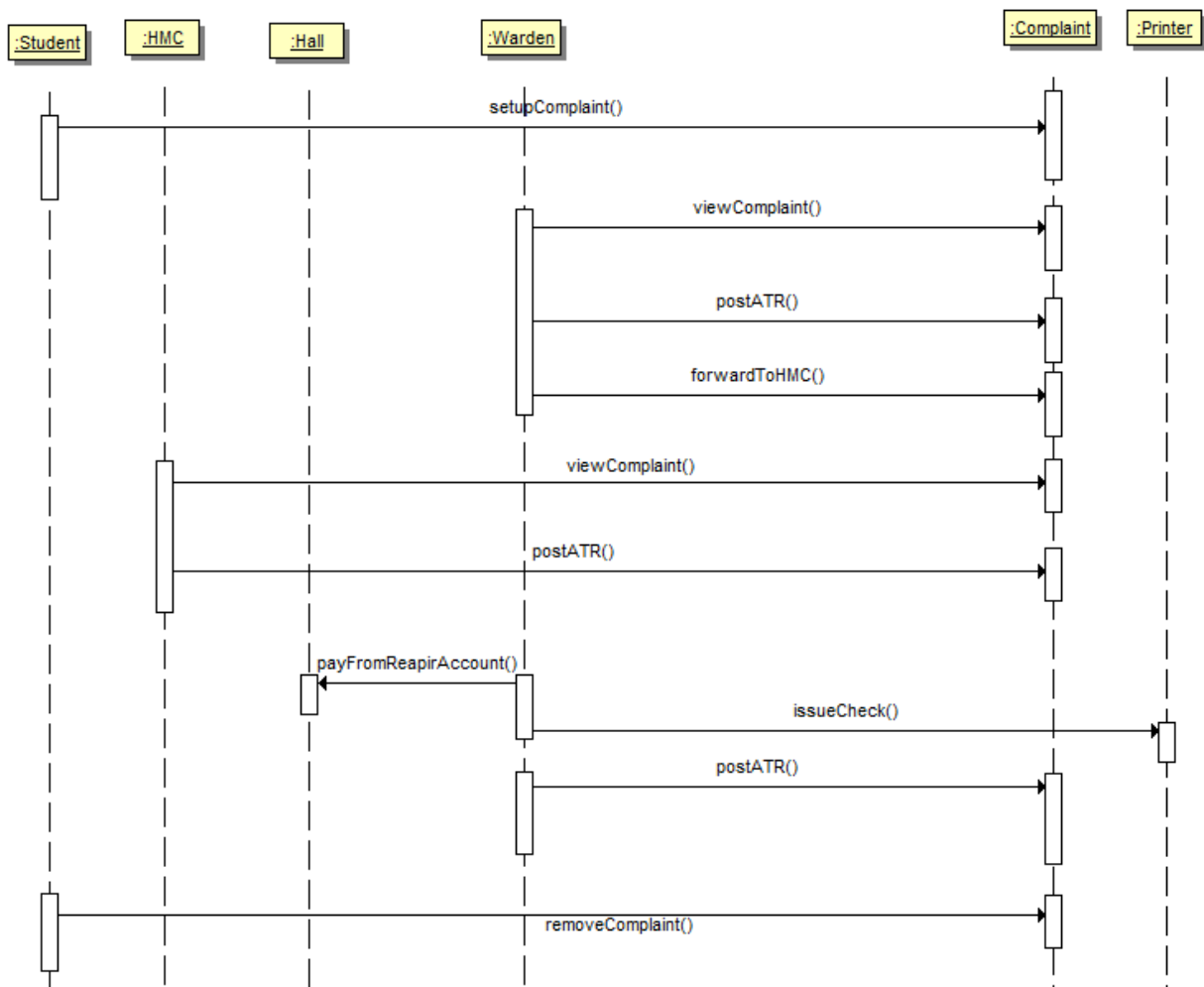
3.1. Admission



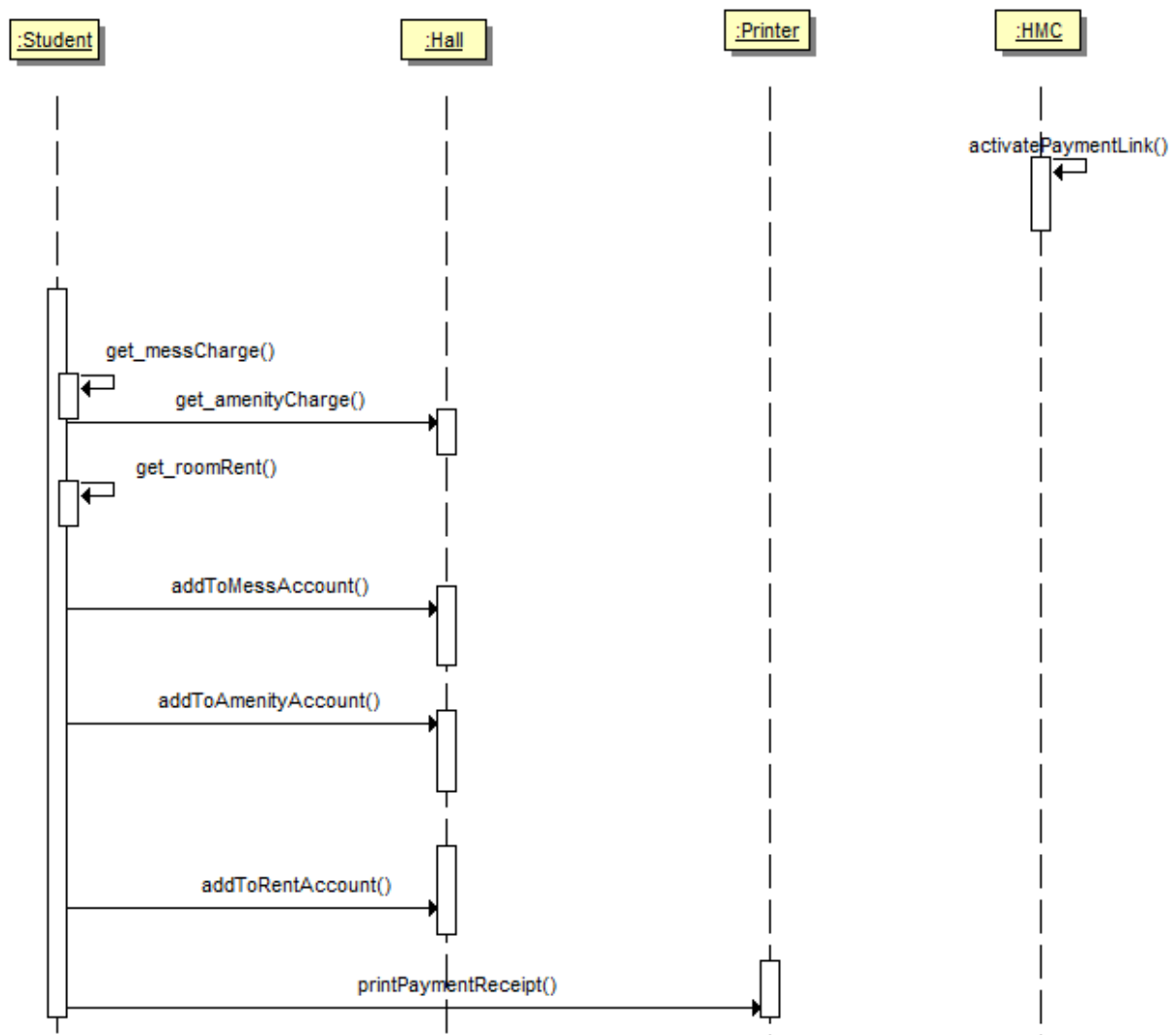
3.2. Fund Grant and Request



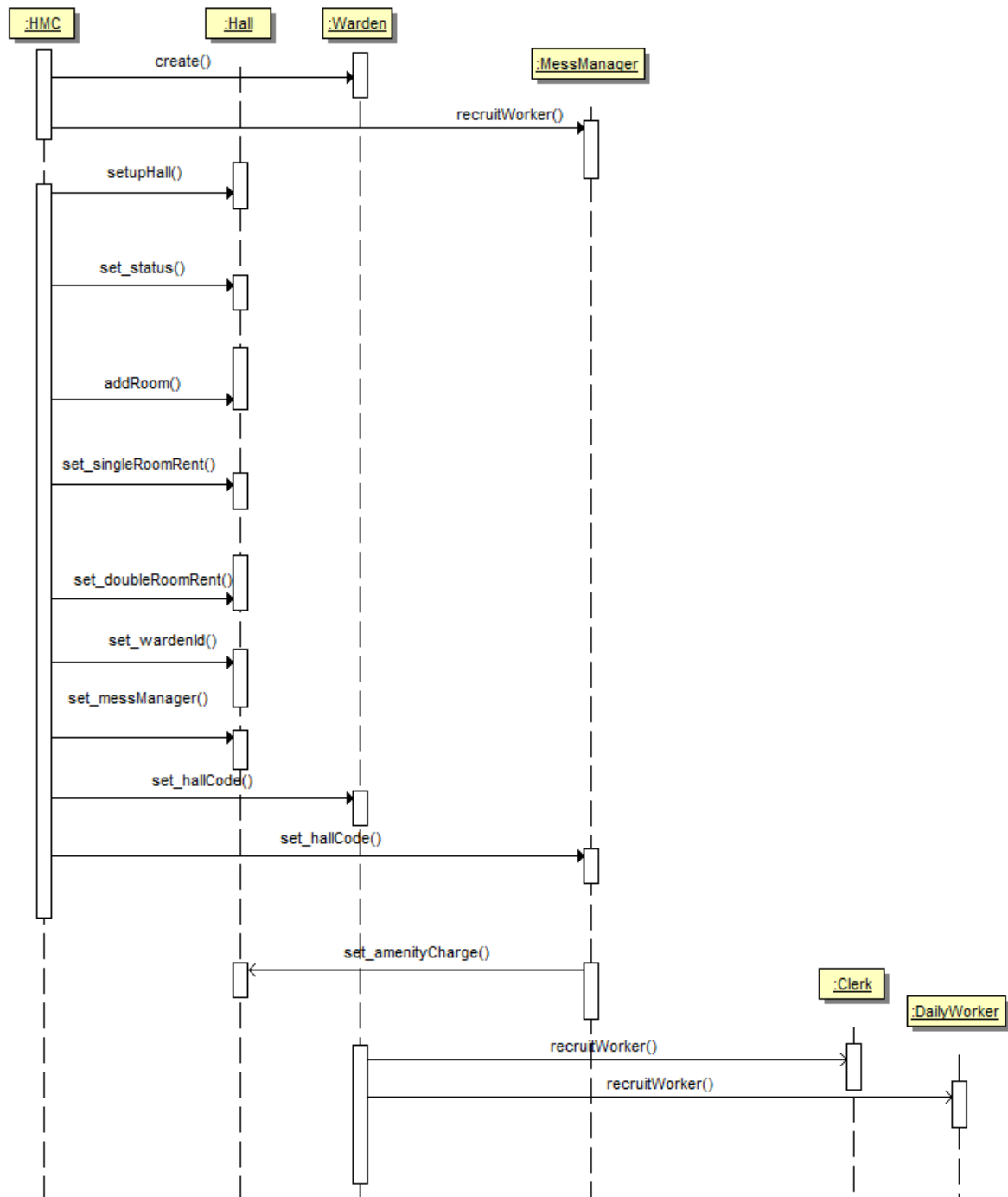
3.3. Complaints



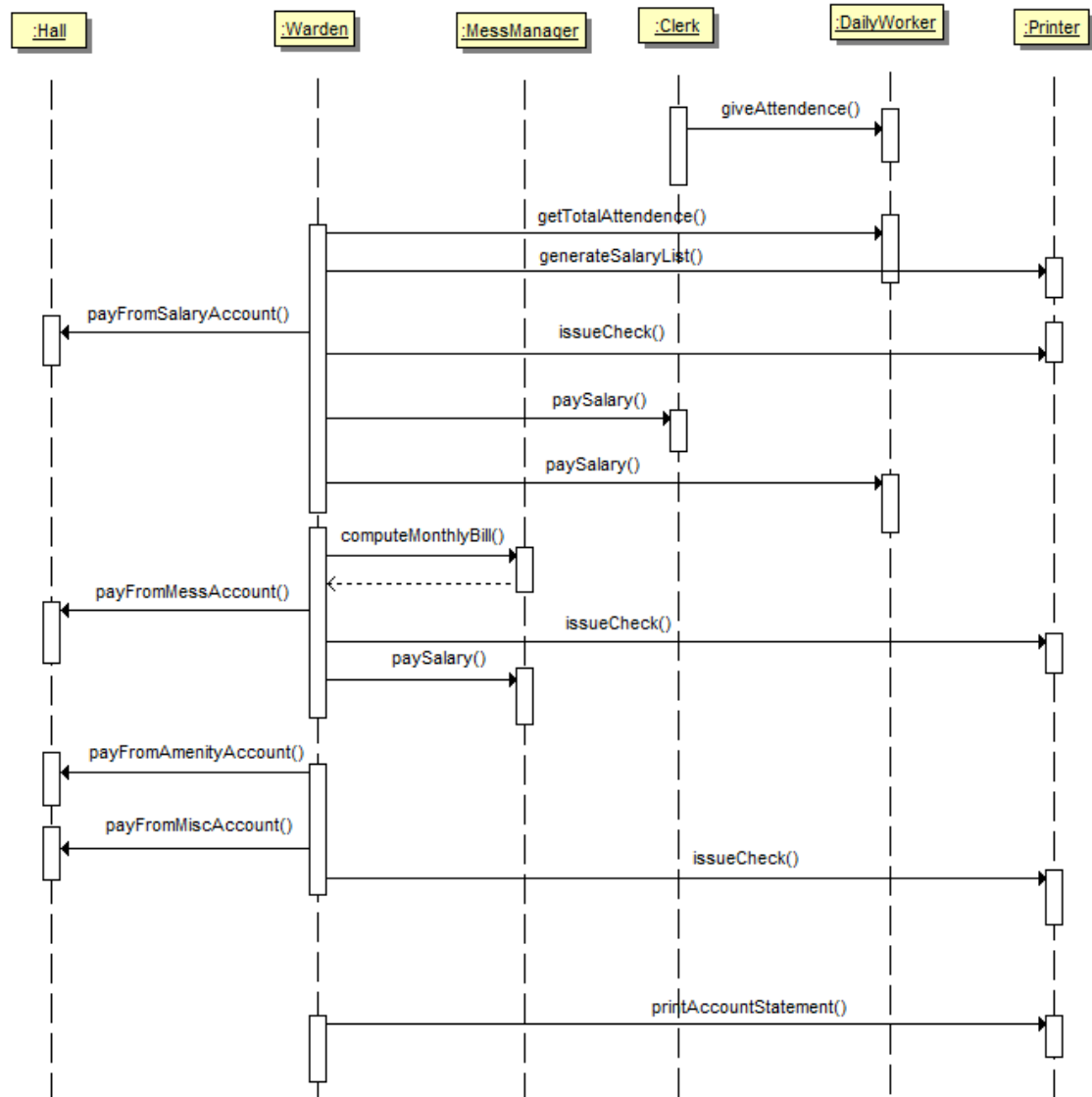
3.4. Paying Dues



3.5. Setup Hall

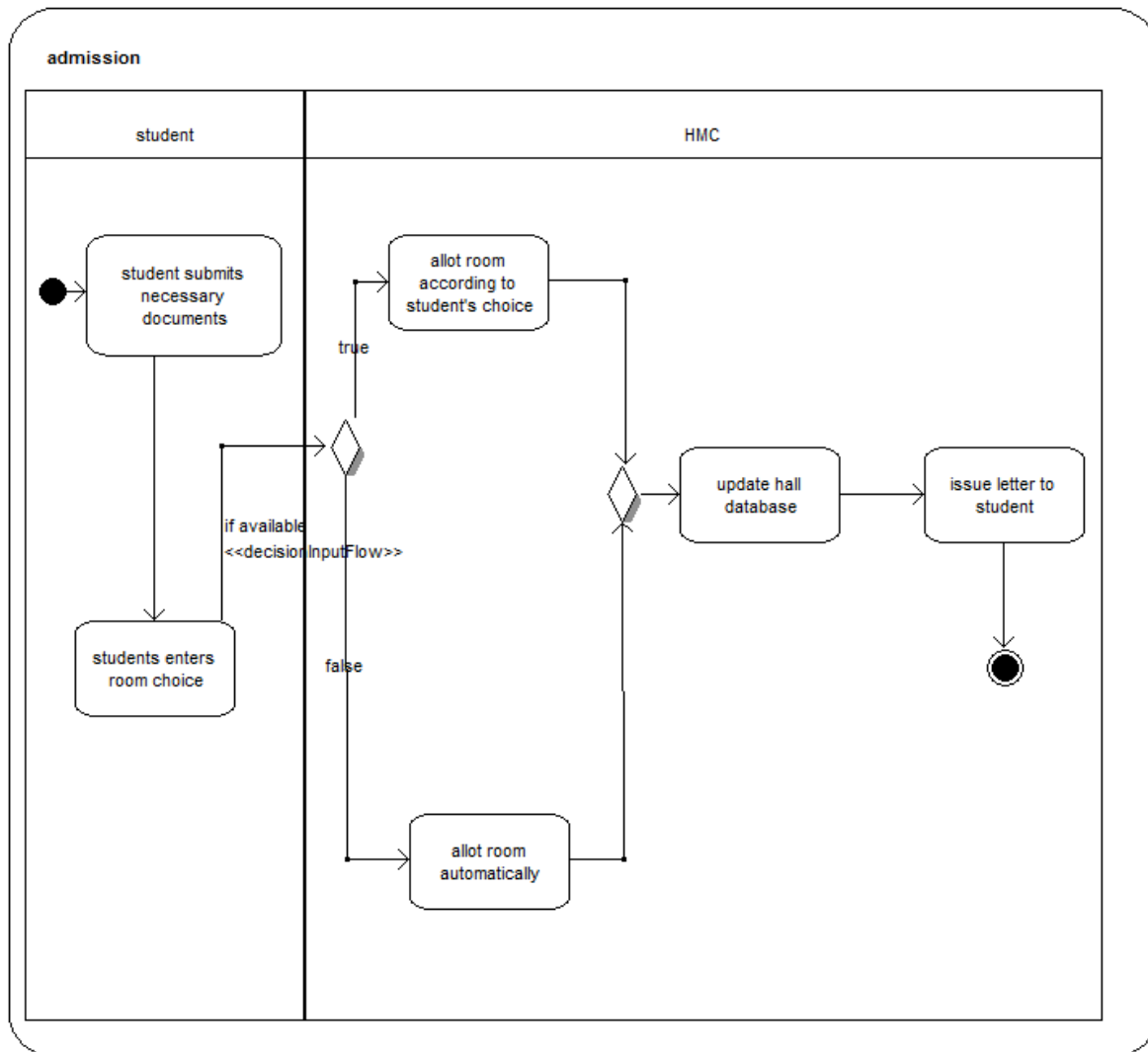


3.6. Salary Payment

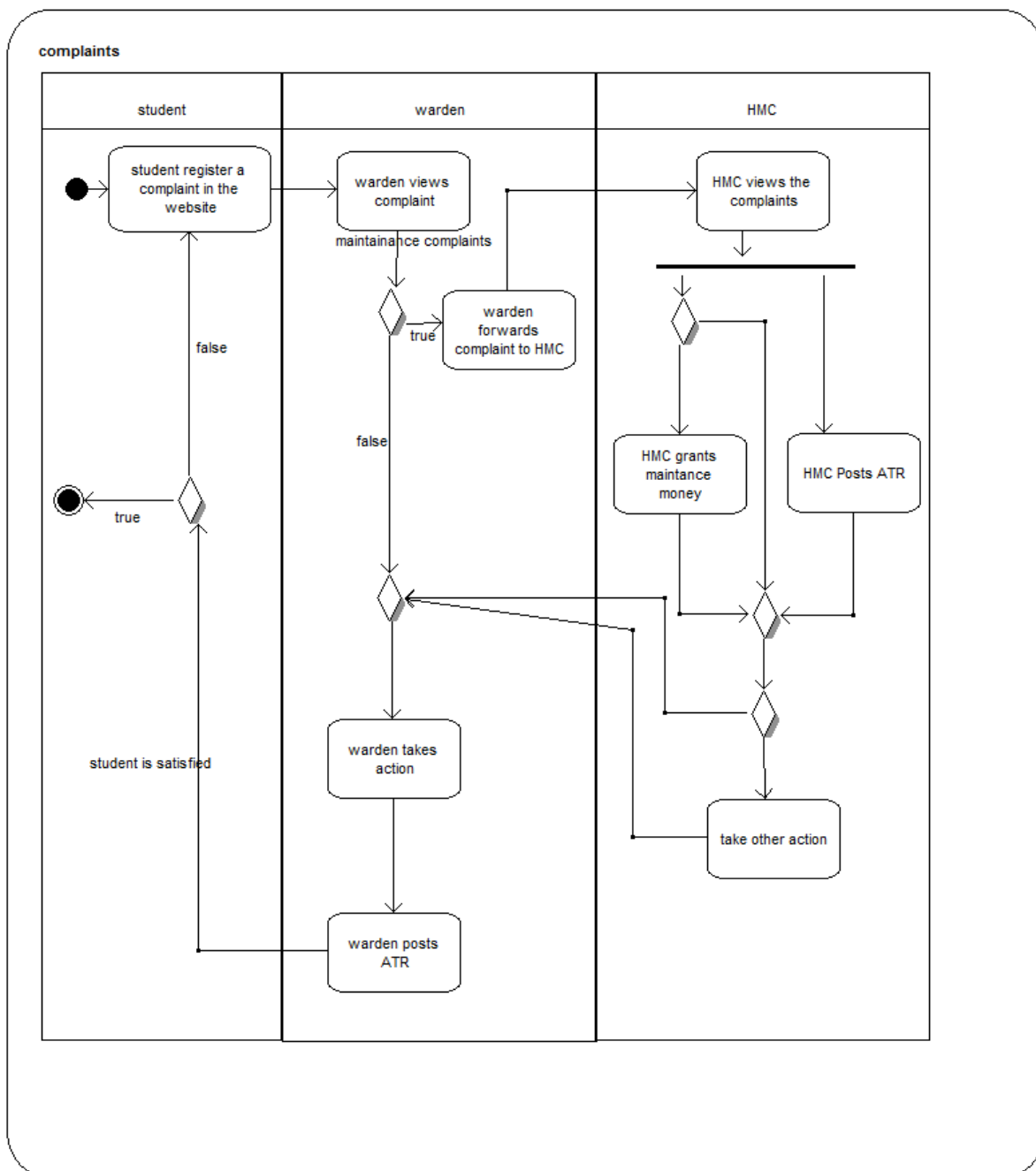


4. Activity Diagrams

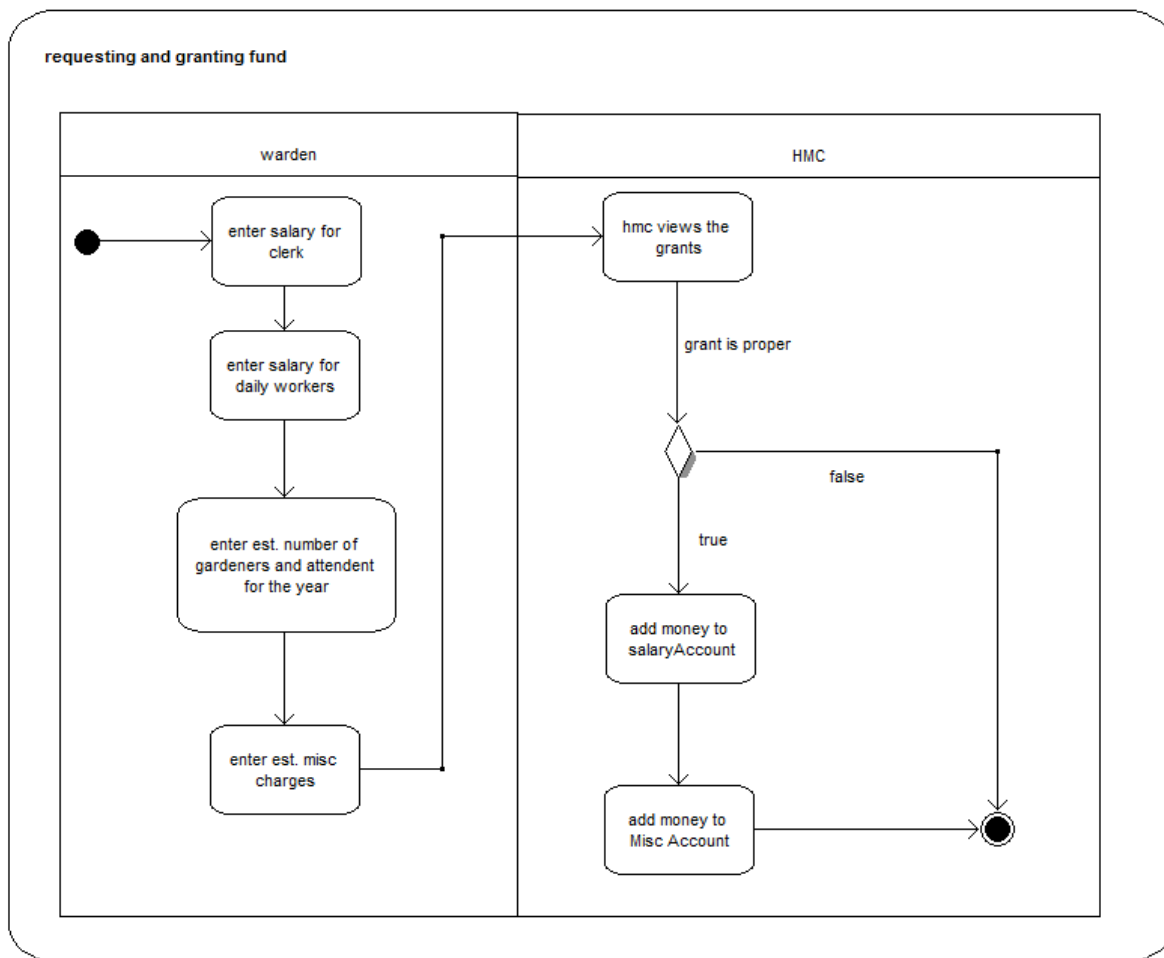
4.1. Admission



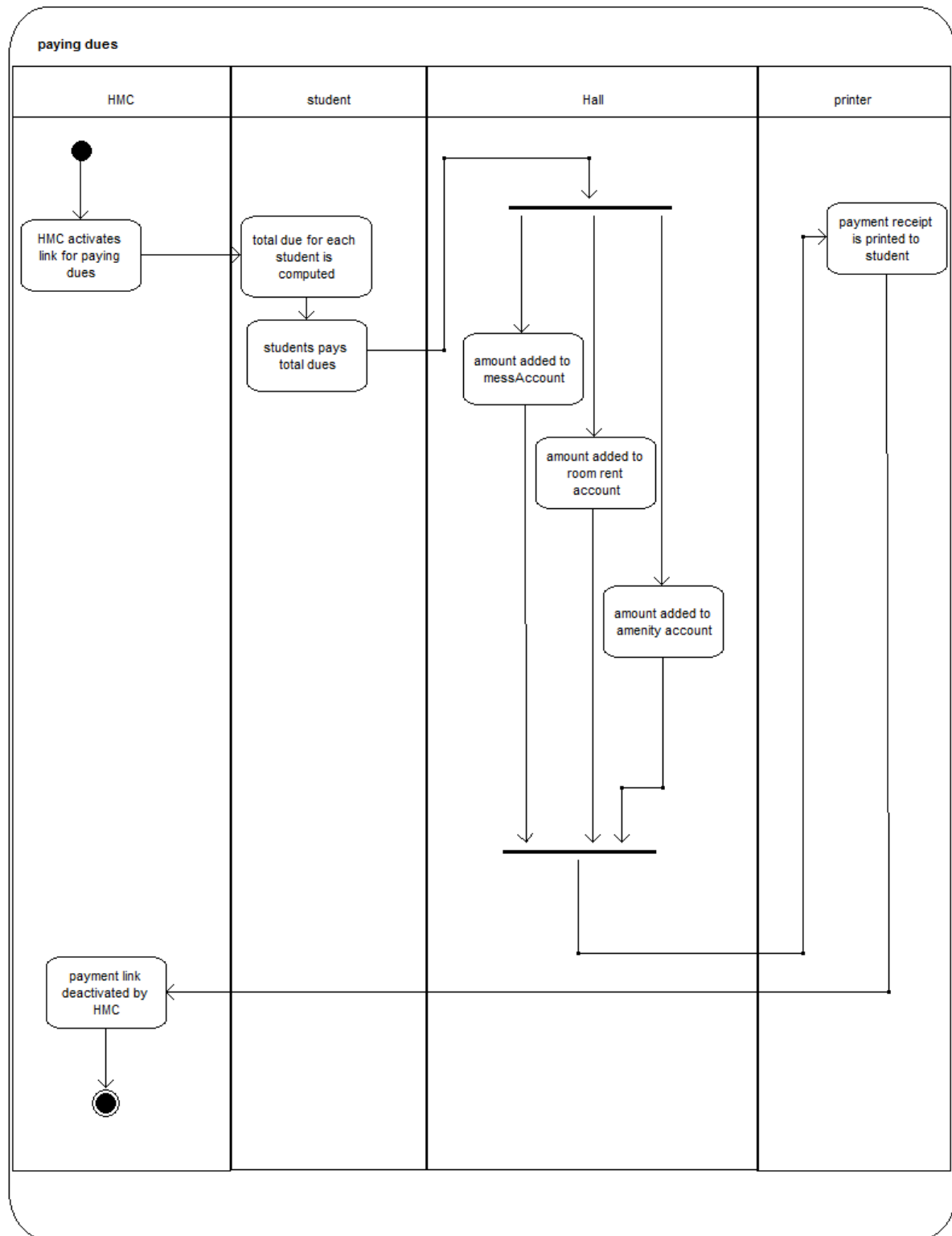
4.2. Complaints



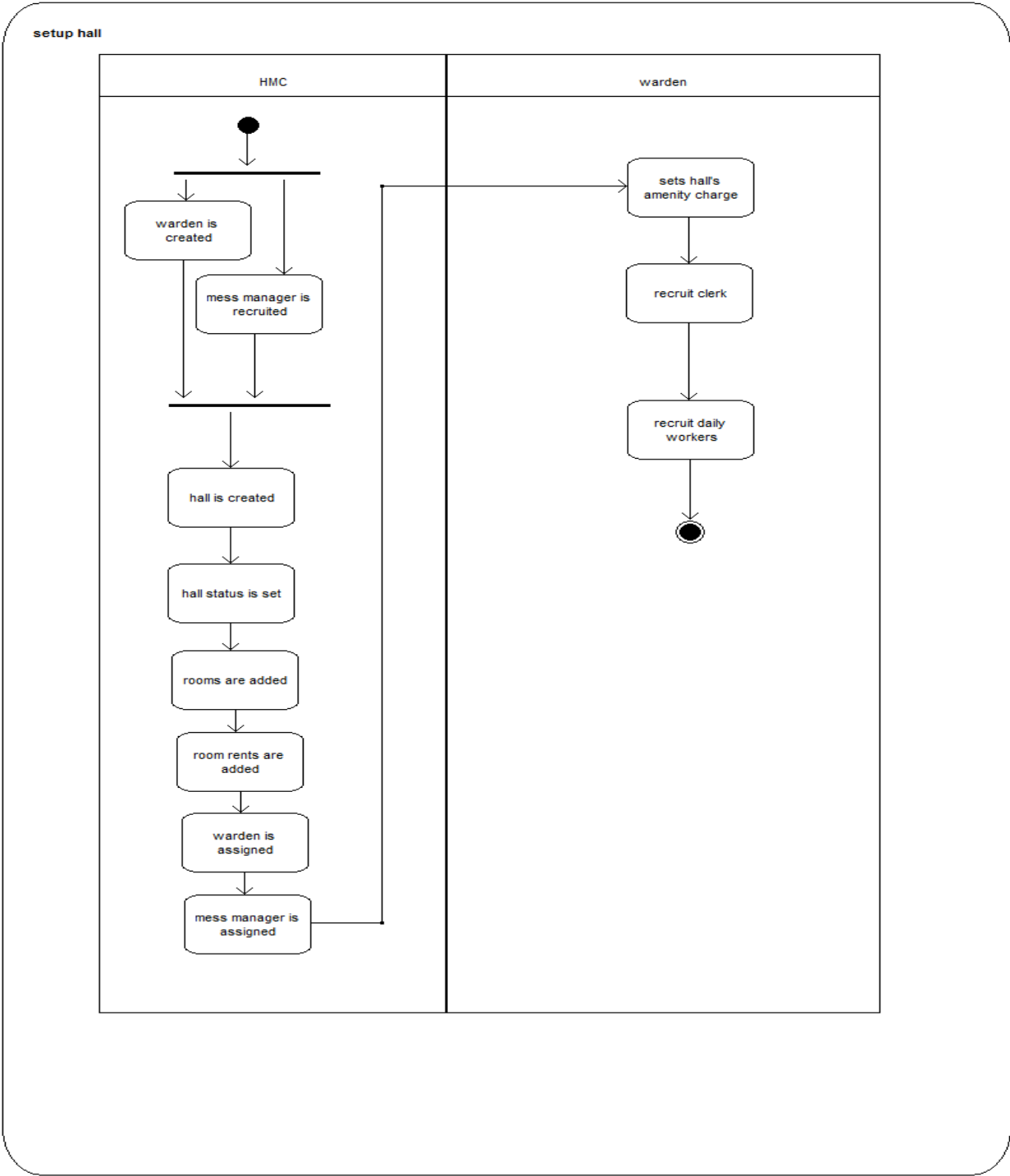
4.3. Request and Grant Funds



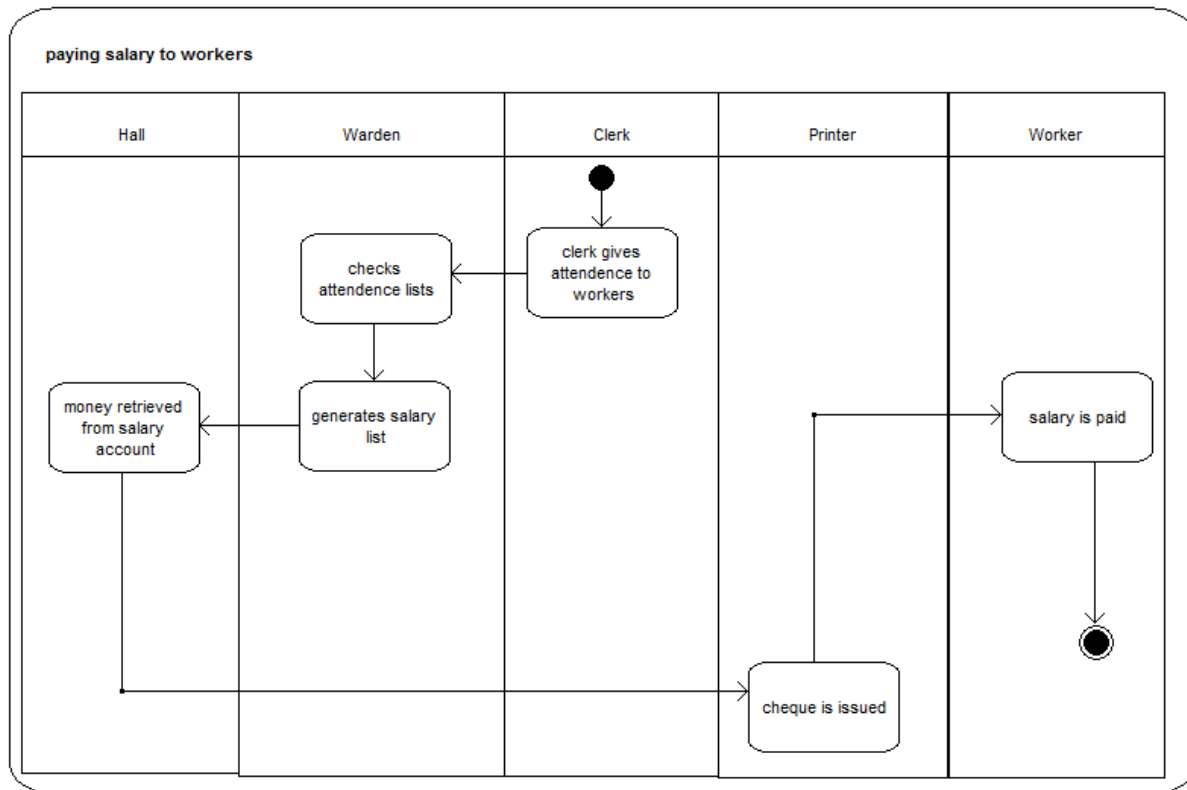
4.4. Paying Dues



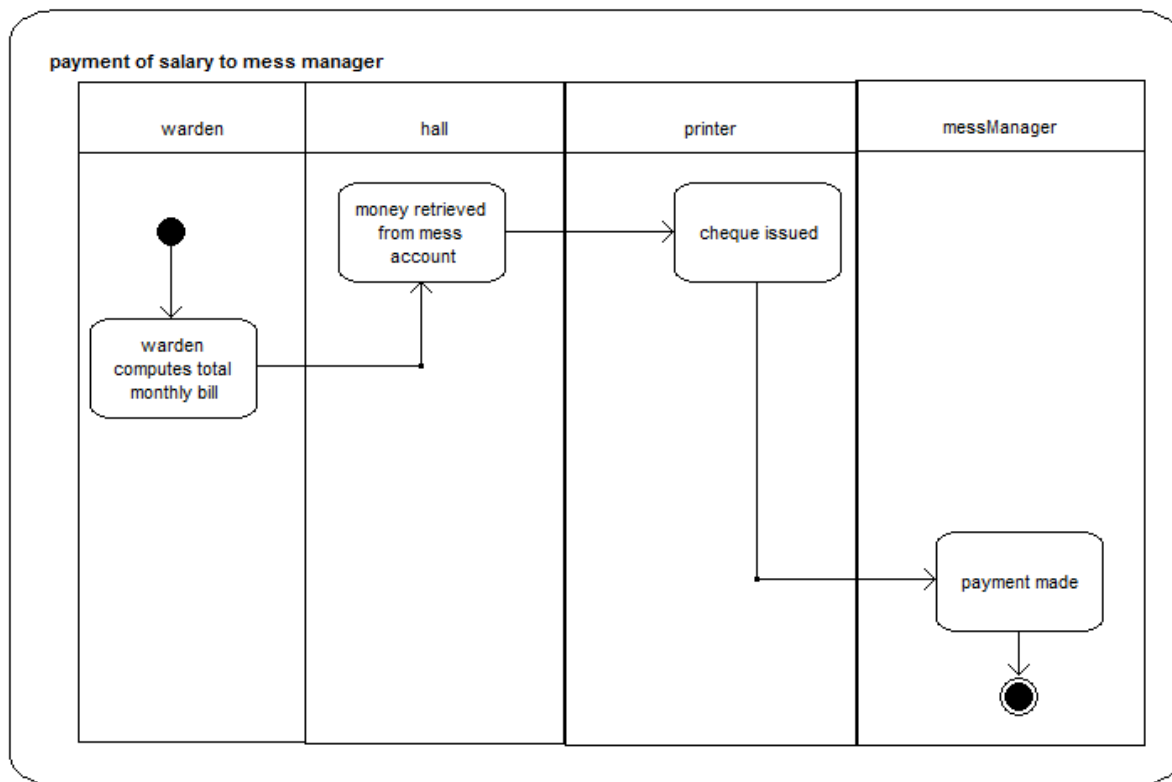
4.5. Setup Hall



4.6. Workers Salary Payment

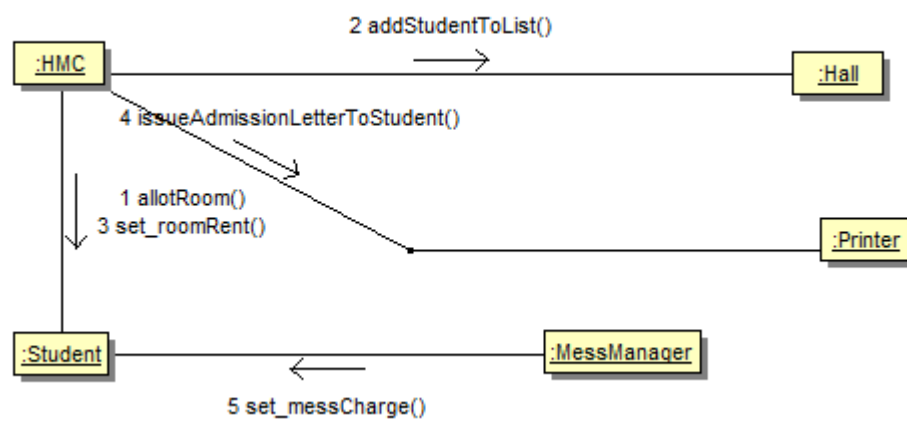


4.7. Mess Manager Salary Payment

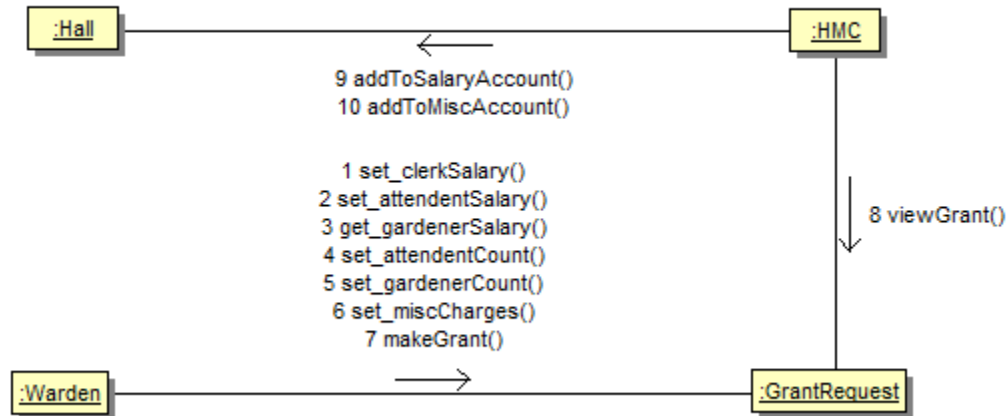


5. Collaboration Diagrams

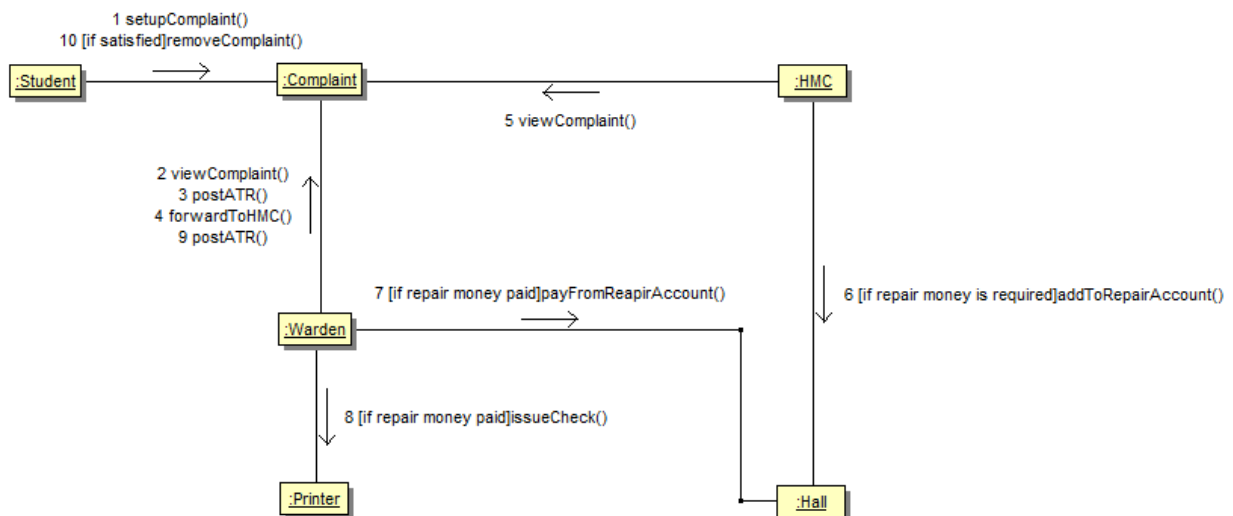
5.1. Admission



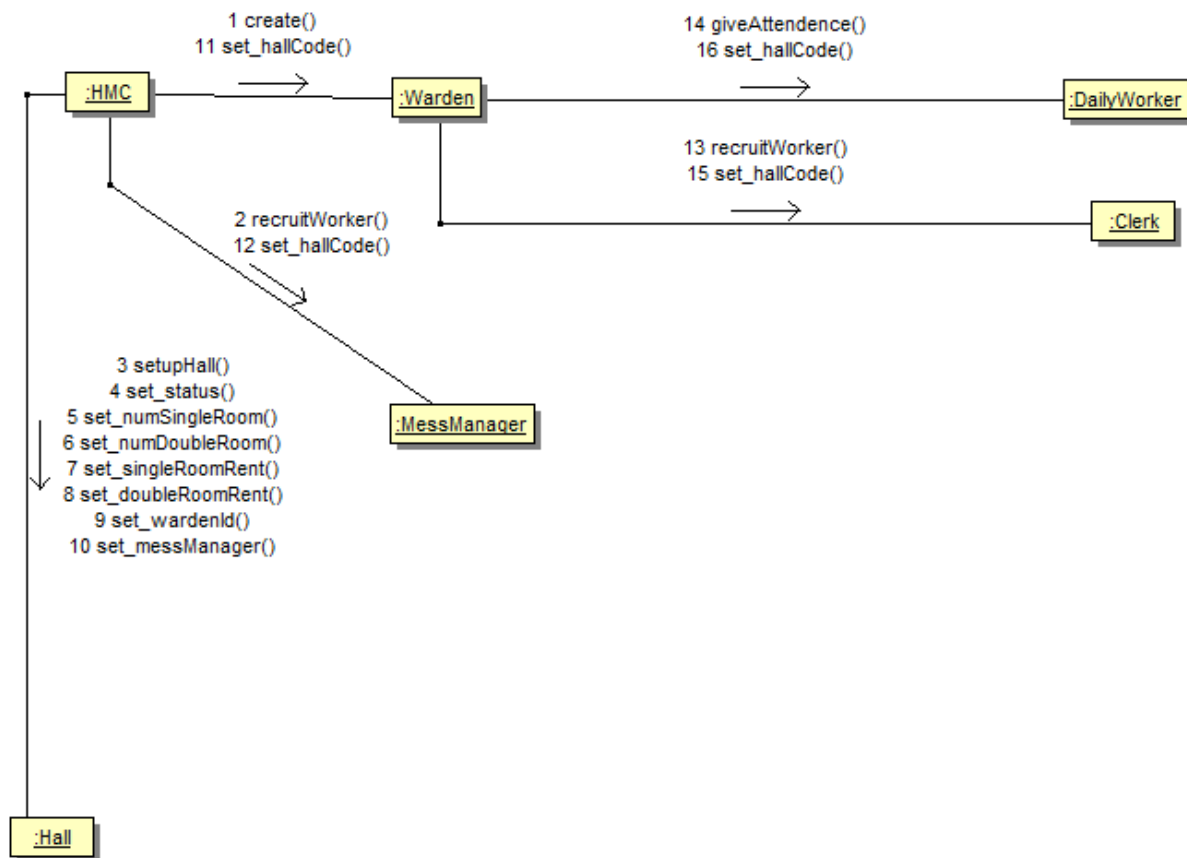
5.2. Fund Request and Grant



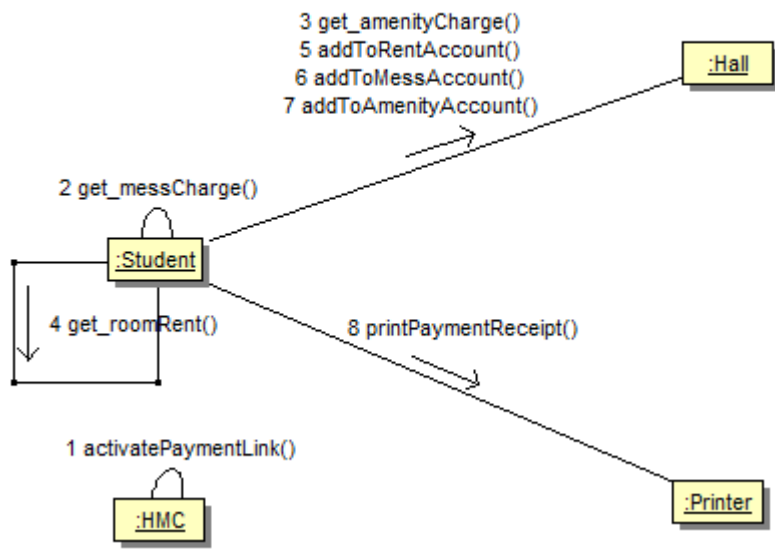
5.3. Complaints



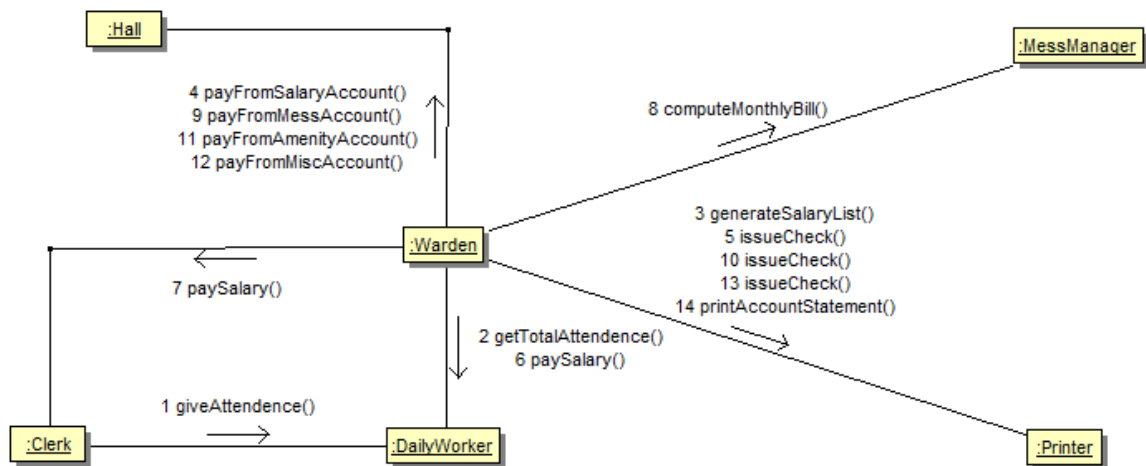
5.4. Setup Hall



5.5. Paying Dues

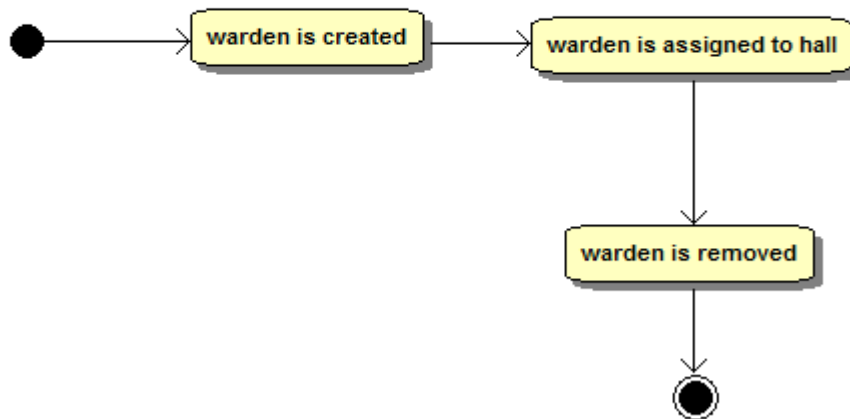


5.6. Salary Payment

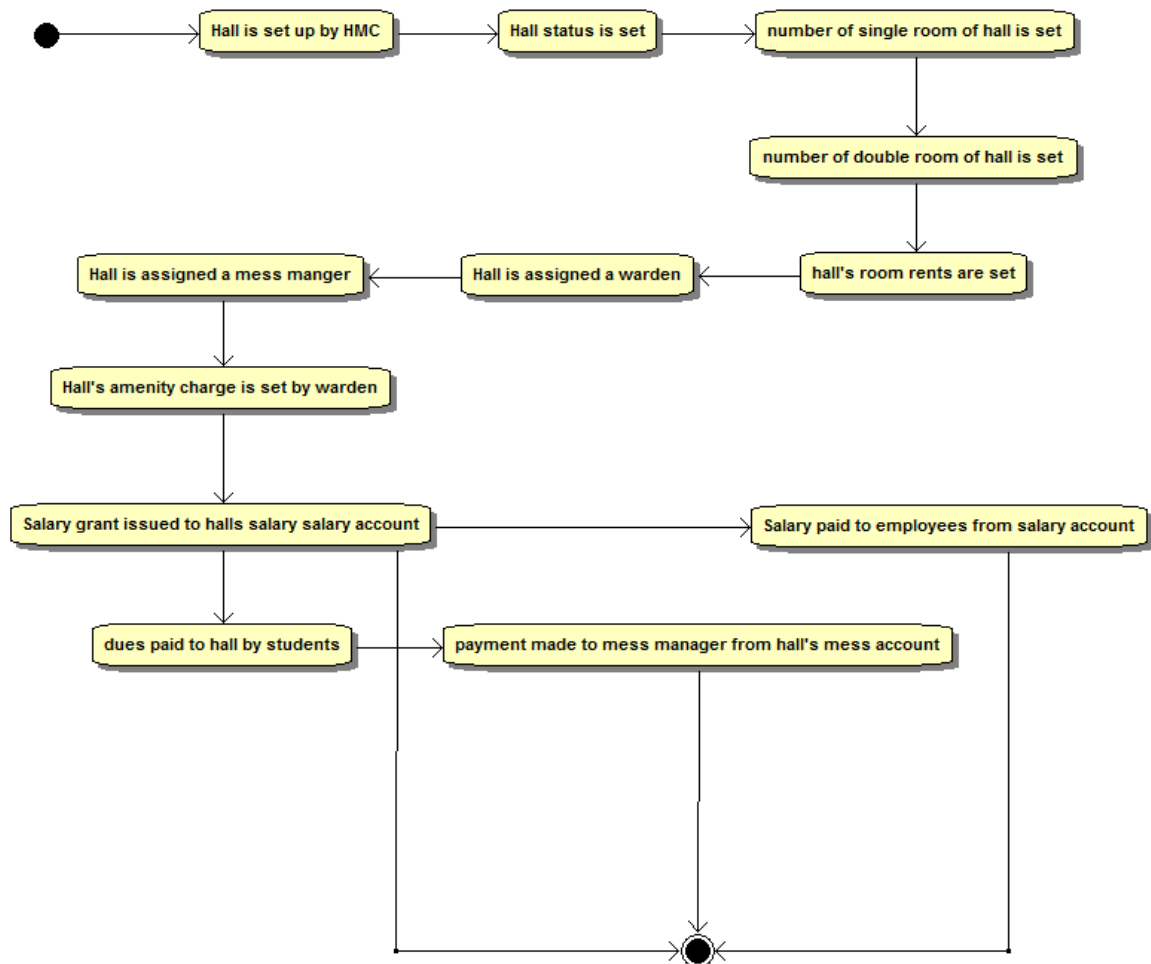


6. StateChart Diagrams

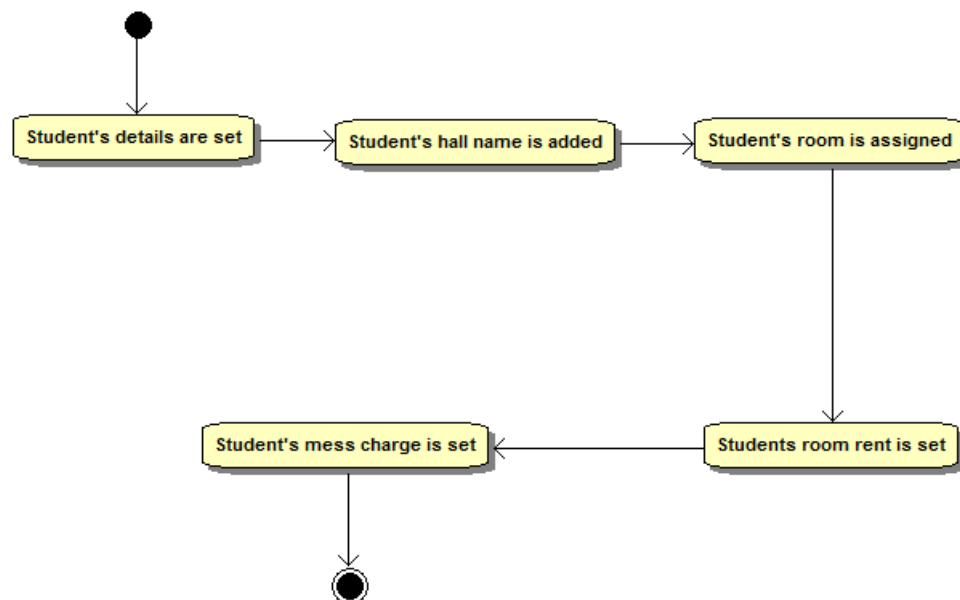
6.1. Warden



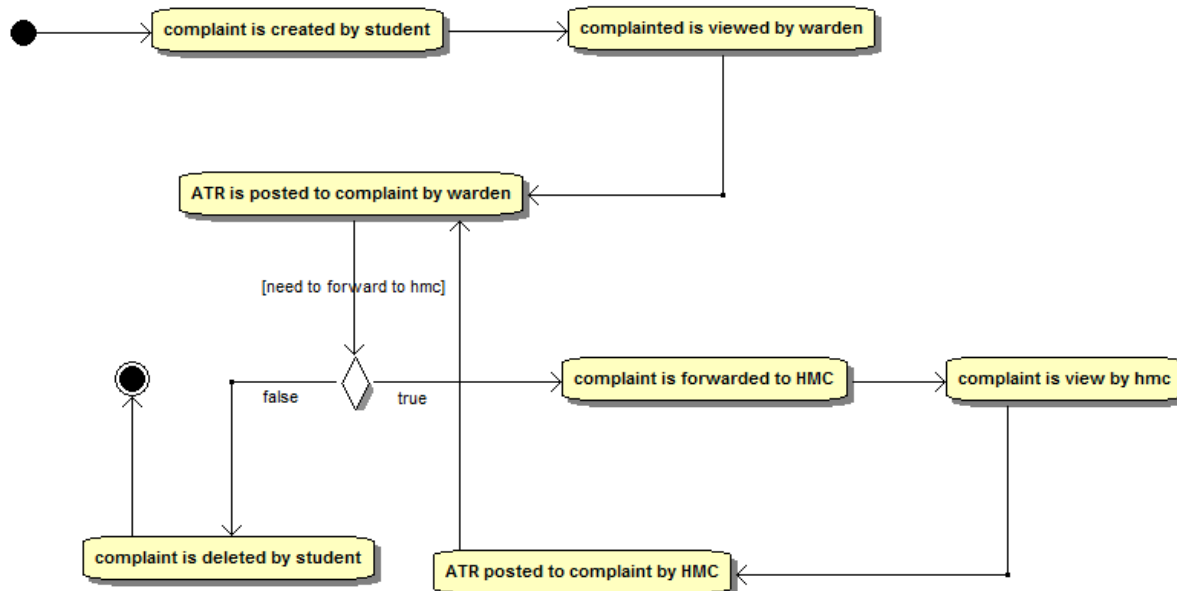
6.2. Hall



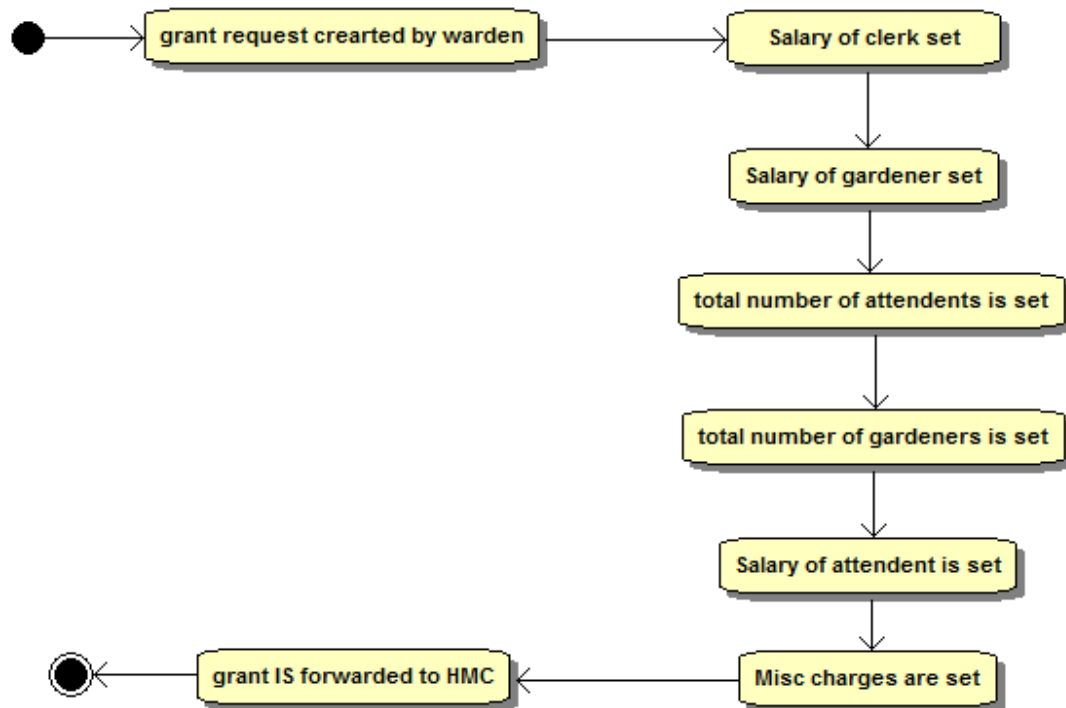
6.3. Student



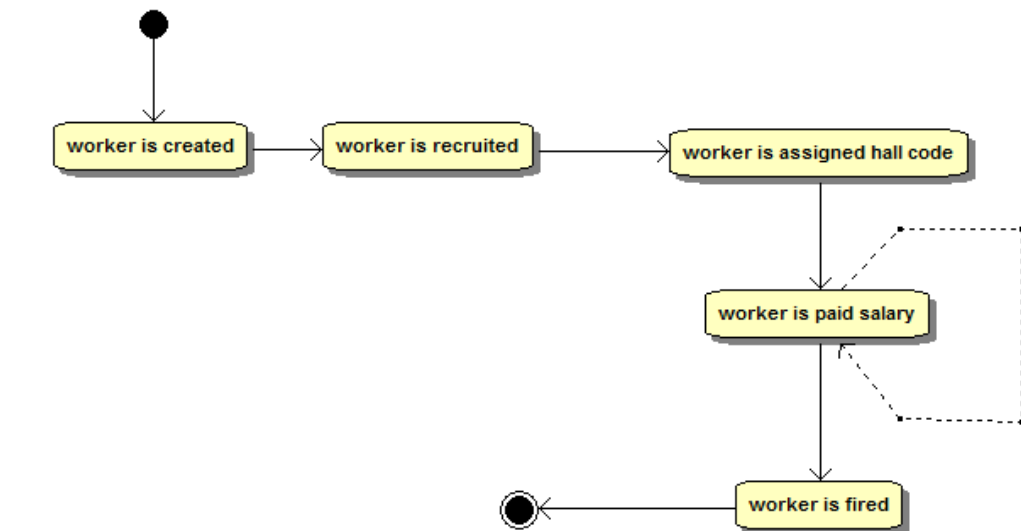
6.4. Complaint



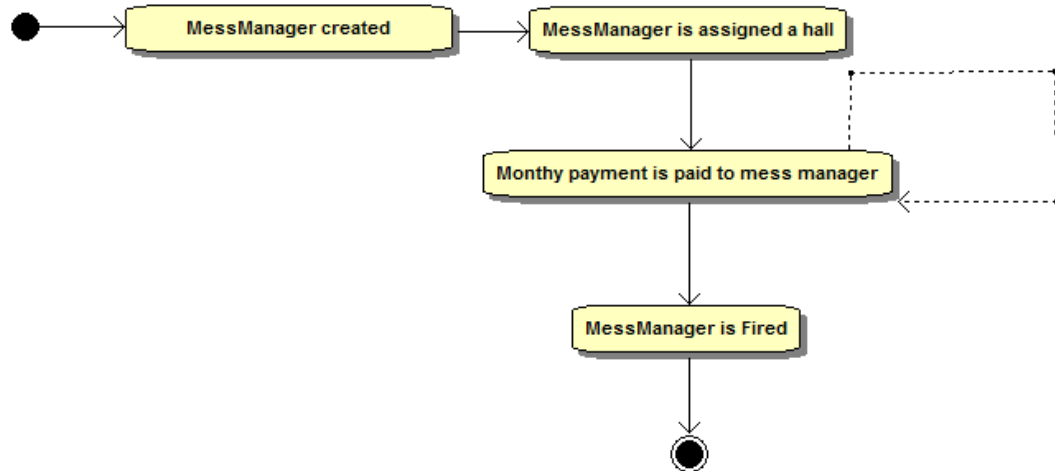
6.5. Grant Request



6.6. Worker



6.7. Mess Manager



7. Design / Requirements

- JAVA should be installed on all computers (preferably JDK 6)
- MySQL should be installed on computers
- JDBC connector is used to connect to the database
- The software uses iText to generate PDF files
- Students should have web browsers installed