Software Requirements Specification

for

Hall Management System

Version 1.0

Prepared by

Tanishq Prasad Sourodeep Datta Krish Khimasia

Sorrow, Indian Institute of Technology Kharagpur

21/03/2023

Table of Contents

1	Introduction	iii
	1.1 Purpose	iii
	1.2 Product Scope	iii
	1.3 References	iii
	1.4 Overview of Document	iii
2	Overall Description	iv
	2.1 Use Cases	iv
	2.1.1 Student Use Cases	iv
	2.1.2 Hall Clerk Use Cases	V
	2.1.3 HMC Chairman Use Cases	V
	2.1.4 Hall Warden Use Cases	vi
	2.1.5 Mess Manager Use Cases	vi
	 2.2 Product Functions 2.3 User Classes and Characteristics 	vi
	2.3 User Classes and Characteristics	vii
	2.4 Operating Environment	vii
	2.5 System Environment	

1. Introduction

1.1. Purpose

The purpose of this document is to present a detailed description of the Hall Management System. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system and will be proposed to the Management Centre (HMC) for its approval.

1.2. Product Scope

This software system will be a Hall Management System for our institute. This system will be designed to streamline the process of everything related to the working of halls in our institute. It will serve as a portal for the students, wardens, hall clerks and the HMC Chairman to access information relevant to the respective parties.

More specifically, this system is designed to facilitate communication between the different entities such as students and wardens, which would ensure smoother running of the halls and provide an organised way to handle expenses and allocations.

1.3. References

IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

1.4. Overview of Document

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

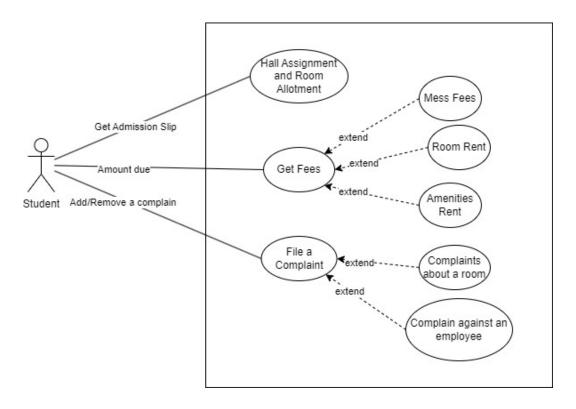
The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

2. Overall Description

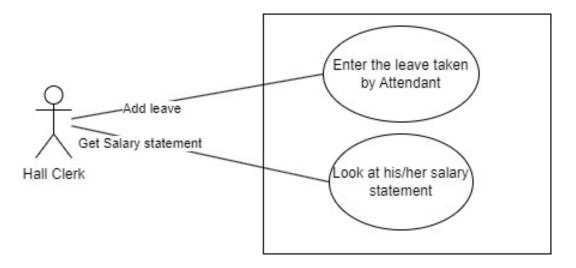
2.1. Use Cases

2.1.1. Student Use Cases



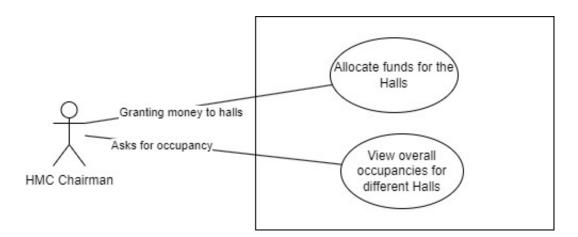
- Hall Assignment Room Allotment
- Get Fees
- File a complaint

2.1.2. Hall Clerk Use Cases



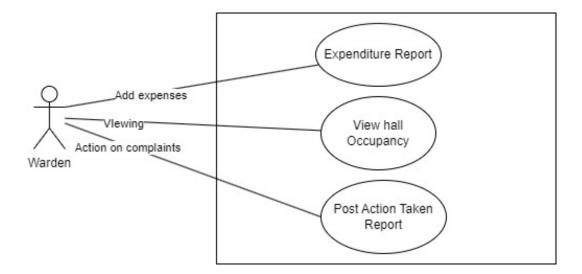
- Enter the leave taken by attendant
- Look at salary statement

2.1.3. HMC Chairman Use Cases



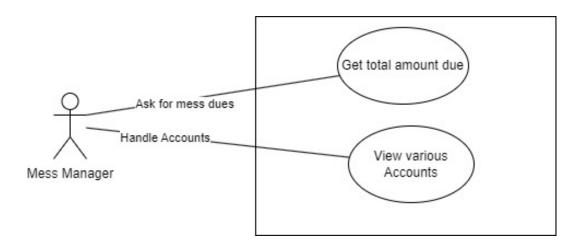
- Allocate Funds
- View Overall Occupancy

2.1.4. Hall Warden Use Cases



- Expenditure Report
- View Hall Occupancy
- Post ATR

2.1.5. Mess Manager Use Cases



- Get total amount due
- View various mess accounts

2.2. Product Functions

- Students can get a breakdown of their fees and pay them.
- Students can raise various types of complaints to the Wardens.

- Hall Clerks can enter any leave taken by attendants or gardeners as well add petty charges to the hall budget.
- Mess Managers can generate can generate a report of mess dues.
- Wardens can generate of report of the hall finances.
- HMC Chairman can distribute the annual grant among different halls and view overall room occupancy.
- Hall Wardens can view their respective hall's room occupancy, enter expenditure details and view and act on complaints raised by the students.
- Mess Managers will handle the mess accounts of each student of the hall.

2.3. User Classes and Characteristics

- The Student is expected to be Internet literate
- The Hall Clerk is expected to be Internet literate and have basic knowledge of mathematics
- The HMC Chairman is expected to be Internet literate and have basic knowledge of finance and mathematics
- The Hall Warden is expected to be Internet literate and have basic knowledge of finance and mathematics
- The Mess Manager is expected to be Internet literate and have basic knowledge mathematics

2.4. Operating Environment

The software will operate on a Linux system, mainly consisting of a python program, running Django with an SQLite database. It will host a website, which will be accessible to the users.

2.5. System Environment

The Hall Management System has five active actors and one cooperating system. Every user can access this system directly via the website

