

# Software Requirements Specification

ARGOUML 0.34  
ECLIPSE-SDK-4.2.2

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Mess Management System

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## **1.0. Introduction**

### ***1.1. Purpose***

The purpose of this document is to present a detailed description of the Mess Management System. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, and the constraints under which this system must operate.

### **1.2. Scope of Project**

This project replicates the existing system of mess management of BITS Pilani Goa campus. This system intends to improve existing mess management system by eliminating some problems faced by mess.

This system will help the mess manager to be more efficient and will enhance the productivity. However, we are not considering financial aspects here which is the biggest limitation of this system.

### ***1.3. Glossary***

| <b>Term</b>         | <b>Definition</b>   |
|---------------------|---|
| Mess Convener       | Representative of the CSA in mess committee who looks after the functioning of mess management system |
| Mess Manager        | Person appointed by mess owner to oversee day to day activities of mess                               |
| Faculty coordinator | Usually chief warden, whose job is to guide mess convener and ensure smooth functioning of mess       |
| Student             | Students of BITS Pilani Goa campus.   |
| SWD                 | Database managed by student welfare department.   |

#### ***1.4. Overview of Document***

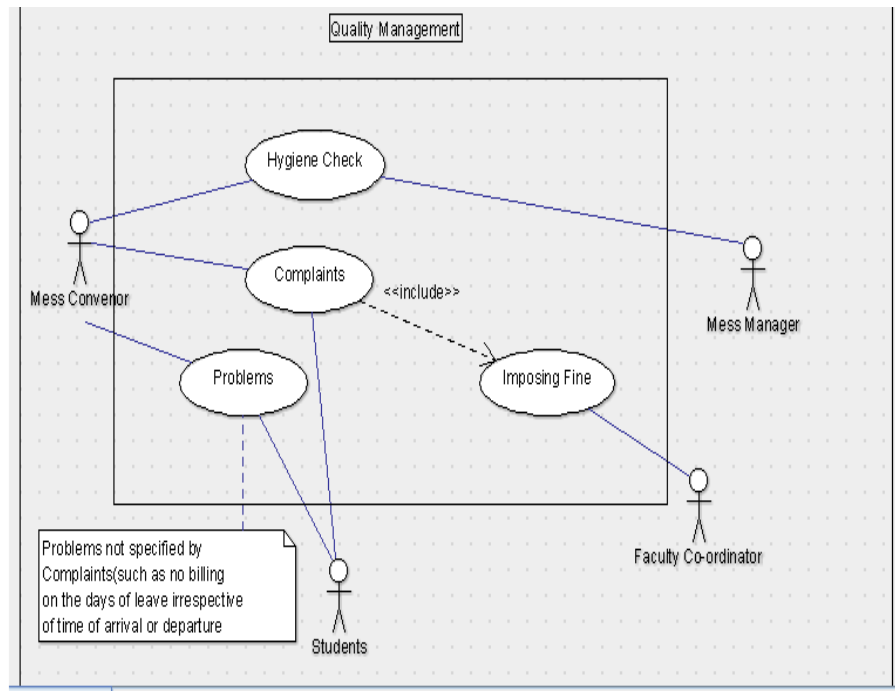
The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and the procedure that an actor follows before performing every action.

The 2<sup>nd</sup> chapter gives us a brief idea about how this Mess Management system works and how actors coordinate with each other.

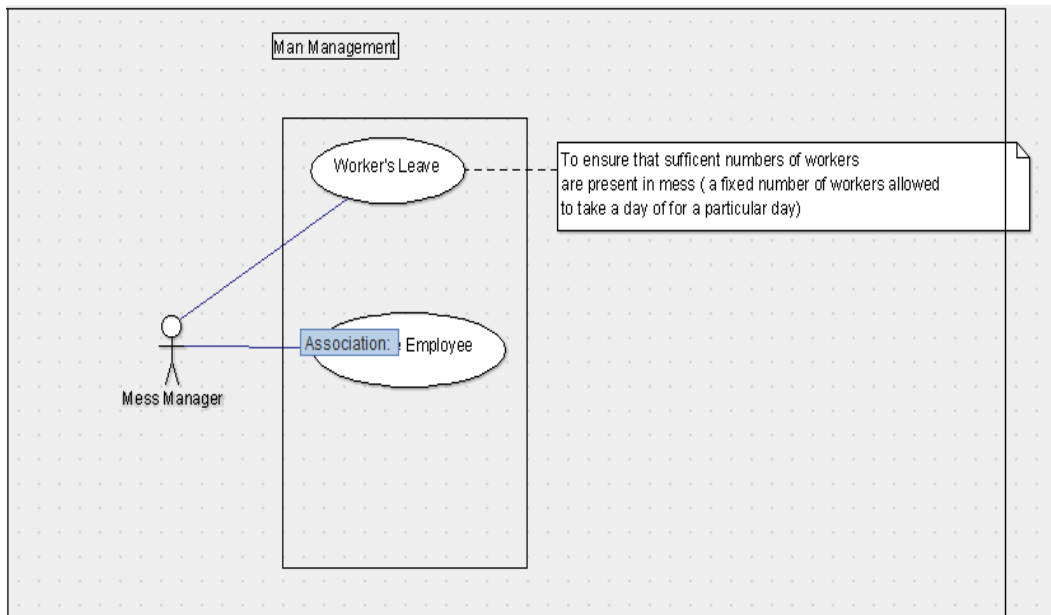
## 2.0.Overall Description

### 2.1 System Environment

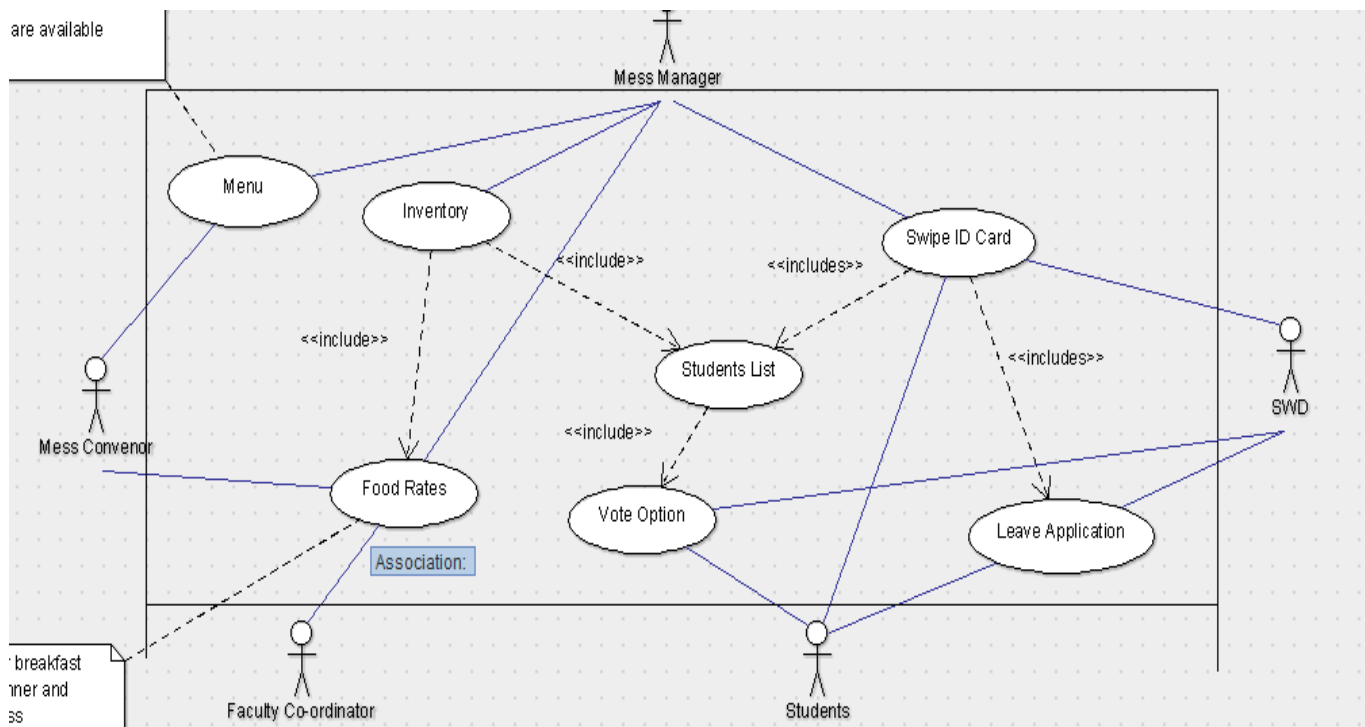
#### Quality Management



#### Man Management



## Resource Management



The Mess Management system has five active actors.

- Mess Convener
- Mess Manager
- Faculty Coordinator
- Students
- SWD

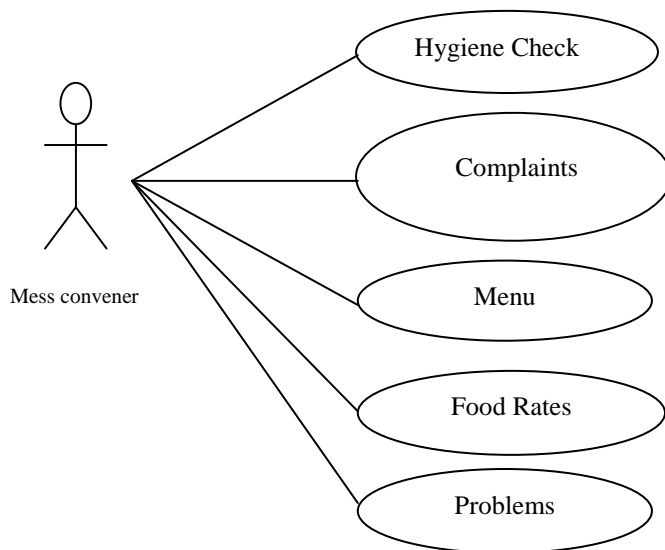
These actors have different activities which are described in the next section of this document.

## 2.2 *Functional Requirements Specification*

This section outlines the use cases for each of the active actors separately.

### 2.2.1 Mess Convener Use Case

The Mess Convener has following set of use cases:



Use case: Hygiene Check

#### **Brief Description**

The Mess convener checks the kitchen hygiene of mess and submits the report to system.

#### **Initial Step-By-Step Description.**

1. The Mess Convener goes to mess kitchen
2. He checks whether veg and non-veg are being prepared separately
3. He checks whether prescribed brand is being used



Use case: Complaints

**Brief Description**

The Mess convener looks into complaint book and tries to resolve the issue by contacting mess manager or faculty coordinator

**Initial Step-By-Step Description.**

1. The Mess Convener looks into complaint book
2. He contacts the mess manager and tries to get the issue resolved within 2-3 days.
3. If the issue is not resolved he sends an email to the faculty coordinator to resolve the issue

Use case: Menu

**Brief Description**

The Mess convener along with mess manager decides the menu.

**Initial Step-By-Step Description.**

1. The Mess Convener consults mess representatives of different hostels to know the demands of students
2. He then contacts the mess manager to know which items are available in market
3. Finally he along with mess manager decide the menu based on aforesaid criteria.

Use case: Food Rates

**Brief Description**

The Mess convener along with mess manager and faculty coordinator decides the most appropriate rates for each meal provided in mess.

**Initial Step-By-Step Description.**

1. The Mess Convener provides the list of students expected to eat in each mess.
2. Then food rates are decided in consultation with faculty coordinator based on the budget provided to the mess manager.

Use case: Problems

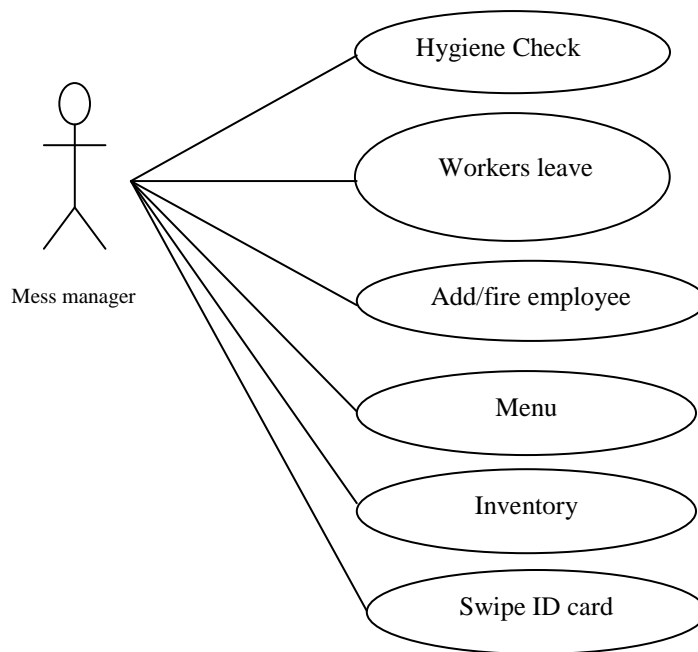
### **Brief Description**

The Mess convener tries to address problems that are not specified by Complaints(such as no billing on the days of leave irrespective of time of arrival or departure.)

### **Initial Step-By-Step Description.**

1. The Mess Convener looks into software and hardware problems faced by mess.
2. He then enlists the help of students into rectifying the software problems

## **2.2.2 Mess Manager Use Cases**



Use case: Hygiene Check

### **Brief Description**

The Mess manager checks the kitchens and ensures that the hygiene is maintained

### **Initial Step-By-Step Description.**

1. The Mess Manager does regular hygiene check to ensure hygiene is maintained in mess.
2. He has to take action on report filed by mess convener on hygiene.

Use case: workers leave

**Brief Description**

The Mess manager has to allot leave to workers in such a way that sufficient no. of workers are present at all times.

**Initial Step-By-Step Description.**

1. The Mess Manager approves the leave application of a certain no. of mess workers.
2. He gives priority to emergency cases or workers who have taken less no. of holidays.

Use case: Add/fire employee

**Brief Description**

The Mess manager adds or fire employee based on certain factors.

**Initial Step-By-Step Description.**

1. The Mess Manager fires employees on the basis of behavior/performance/budget.
2. He adds employees to meet the additional requirements.

Use case: Menu

**Brief Description**

Menu is decided on consultation with mess manager.

**Initial Step-By-Step Description.**

1. The Mess Manager decides menu with consultation with mess convener.
2. It is his duty to ensure that menu is followed in mess.

Use case: Inventory

**Brief Description**

Inventory is managed by mess manager

**Initial Step-By-Step Description.**

1. The Mess Manager has to decide the quantity of items to procure on basis of funds available, item's priced in market and no. of people eating in mess.

Use case: Swipe ID card

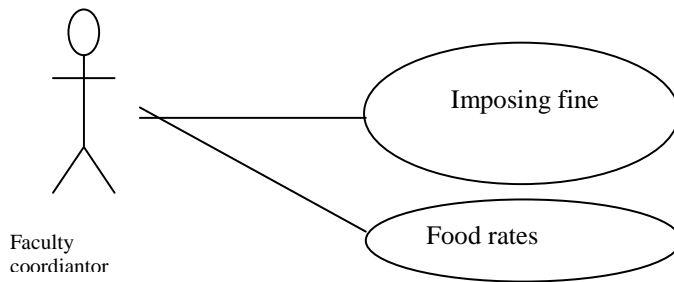
### **Brief Description**

Mess manager has to ensure that each and every student eating a meal has swiped his ID card.

### **Initial Step-By-Step Description.**

1. The Mess Manager has to ensure that only registered people should eat in that mess.

### **2.2.3 Faculty coordinator**



Use case: imposing fine

### **Brief Description**

Faculty coordinator has to impose appropriate fine on mess so that particular incident is not repeated in future

### **Initial Step-By-Step Description.**

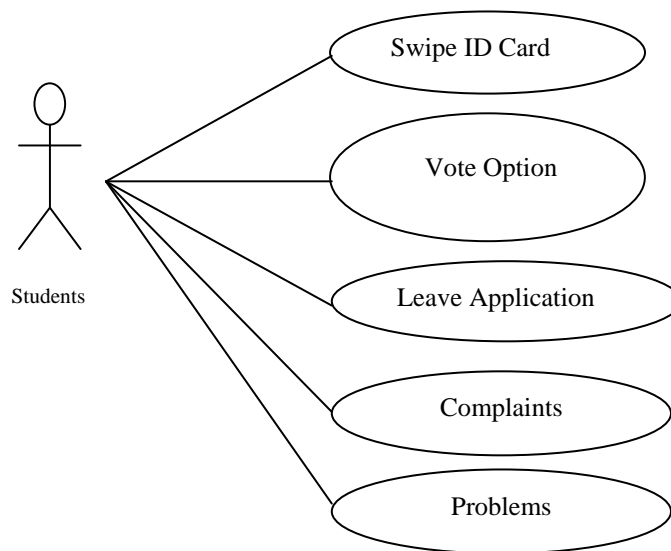
1. Based on the complaint received from mess convener the faculty coordinator provides fix no. of days to the mess to fix the problem.
2. If mess doesn't respond positively within the given time then faculty coordinator has to impose a fine.

Use case: Food rates

### **Brief Description**

Faculty coordinator has to see that the students are not being misled by mess manager. Since he/she buys ration on a regular basis the faculty is aware of the actual price of food items in market and can protect the mess convener against being misled.

### **2.2.4 Students**



Use case: Swipe ID Card

### **Brief Description:**

Students need to Swipe their ID Cards to eat a meal. This is done to prevent students from eating meals more than once using other's ID cards.

Use Case: Vote Option

### **Brief Description:**

Students have to choose a particular mess for every month. This provides information on number of students eating and money required to respective mess.

### Use Case: Leave Application

#### **Brief Description:**

The number of days a student applies leave for, are not billed by the mess. Currently the problem faced by the mess authority is that, irrespective of the time of arrival or departure of a student, the days of arrival and departure are not billed and the student has to pay extra to eat in mess.

### Use Case: Complaints

#### **Brief Description:**

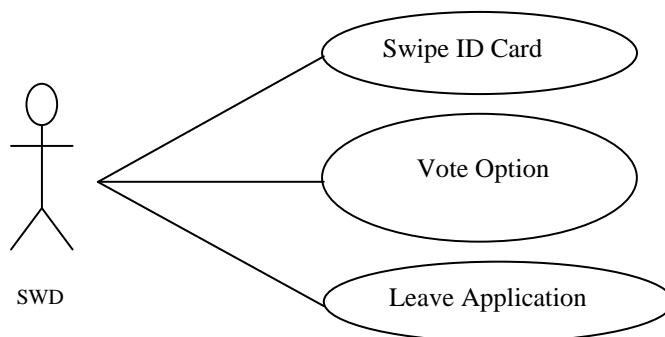
If a Student is dissatisfied by the service provided by the mess he/she can file a complaint in the complaint book.

### Use Case: Problems

#### **Brief Description:**

Students might help addressing a few of the problems faced by mess. For Example CS students can help addressing software problems.

## **2.2.5 SWD**



Use case: Swipe ID Card

**Brief Description:**

SWD provides the list of students opted for the particular mess to mess manager.

Use Case: Vote Option

**Brief Description:**

SWD conducts voting to choose mess and stores the number of students opted for each mess in its data base. SWD randomly allots mess to the people who failed to opt for a particular mess.

Use Case: Leave Application

**Brief Description:**

Information regarding the number of students that have taken leave for a particular day is provided to the server by SWD.