

# THE STATE UNIVERSITY OF ZANZIBAR

# **Department of Computer Science and Information Technology**

# REQUIREMENTS SPECIFICATION DOCUMENT HOSTEL MANAGEMENT SYSTEM

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# Introduction

#### 1.1 Purpose

The purpose of this SRS document is to provide a detailed overview of our software product, its parameters and goals. This document describes the project's target stakeholders. It defines how those stakeholders what is included in requirement specification document.

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#### 1.2 Scope of the Development Project.

The proposed system for "HOSTEL MANAGEMENT SYSTEM" is computerized. Today is the era of computers. This software project solves all the problems discussed above in the present system. The main objective of developing this project is to save time and money. The goal is to design a robust software for the management of hostel in The State University of Zanzibar. In the project, we will fully focus the entire working of the hostels needs. Whenever a student tenant in the campus hostel makes a request to get a room, a notification will be sent to the house keeping staff and the student will be allocated at the room in the time mentioned in the request. In case a student faces any problem concerning about hostel, a notification will be sent to the hostel house keeper department and the so that the problem will be solved in the mutually accepted time. The students will be asked to give the feedback after the work is completed.

The software must be able to perform the following operations:

- **Take requests:** It must be able to take requests from the students.
- Notify Staff: It must be able to notify the respective staff about the request i.e. if a student has requested for room or wants his room to be repaired, the staff should get the request and an action must be made according to the request made.
- Take feedback: It must be able to take the feedback from the students once the task has been completed and terminate the request.
- The same application could be used by both the account section and the hostel management for their specific needs and purposes.
- Notify House Keeping staff: It must be able to take students feedback about the evaluation via form which will include questions related to taste etc.

- Take Suggestion: It should also be able to take suggestions from the students on how to improve the hostel facilities and send this data to the House Keeping manager.
- All the details related to a hosteller could be find in one place like the admission details, fees details, room details, etc.

#### 1.2 Intended Audience and Document Overview

This Software Requirements Specification is primarily intended for all project developers associated with this project. Users, testers, and other parties that have an interest in this project can also use this document to gain a better understanding of the software. This Specification is organized into several sections that can be read and referenced as needed.

The project is being designed for the students of State University of Zanzibar. The students face a lot of problems while finding hostels and while they are staying in their hostels. Thus, we want to design a hostel management system so that they can enjoy staying at hostels. This document also serves as a requirement specification document that describe the entire overview of the intended system.

#### 1.5 References and Acknowledgments

- I. IEEE SRS Format Std 830-1998
- II. Software Engineering by Ian Sommerville
- III. http://freestudentprojects.com/
- IV. http://www.bzupages.net/

# **2 Overall Description**

#### **4.1 Project Overview**

The proposed system will be a computerized that will help students and administrative in managing hostel activities. It will be an online system that can be easily accessible by users.

The product will run as a website wherein when the concerned person opens the home page of the website, the person will be asked to sign up if it's the first time he or she is using the portal. If they have been using the site, they will be asked to log in. Once they log in, a prompt will appear in which they will have to select the option which include Apply for Hostel, Room repair, Electrical repair and others.

Once a student approves that there is free room to book, he/she will be directed to the payment page. This payment will depend on the quality of the room and how far is the hostel and the University is.

# 2.2 Project Functions

The various functions covered by the 'REQUIREMENT SPECIFICATION', which follows, are to be provided to meet the requirements of database manager, students and administrator with role-based updating and viewing rights.

The product should be able to perform the following operations:

- I. It must be able to register a student for the first time.
- II. It must allow registered users to login in to the system.
- III. Every project stakeholder will have their account and their system privileges.
- IV. The system will enable students to book available rooms.
- V. The system will direct a student to the payment category.
- VI. It must be able to notify the requests made by the user to the respective departments correctly.
- VII. It must be able to take the feedback from the students once the task is completed.

### 2.3 Design and Implementation Constraints

The development of the system will be designed by the availability of required software such as web servers, database and development tools.

#### 2.4 Assumptions and Dependencies

The following list prevents the assumptions, dependencies or guidelines that are imposed upon implementation of System:

- I. In order the system to run, the access of internet connection is required during use.
- II. The details related to the student, rooms.
- III. Administrator is created in the database already.
- IV. Roles and tasks are predefined.
- V. To use this system, a one must have digital computing devices like computers, smartphones and tablets.
- VI. The system will be able to fetch student's information from SUZA API such as registration number to check if the student has been enrolled in a university.

# 3 Specific Requirements

## **3.1 External Interface Requirements**

#### 3.1.1 Hardware Interfaces

Hardware interfaces exist in computing systems between many of the components such as the various storage devices, other I/O devices, etc. The system will still work fine without depending hardware interfaces.

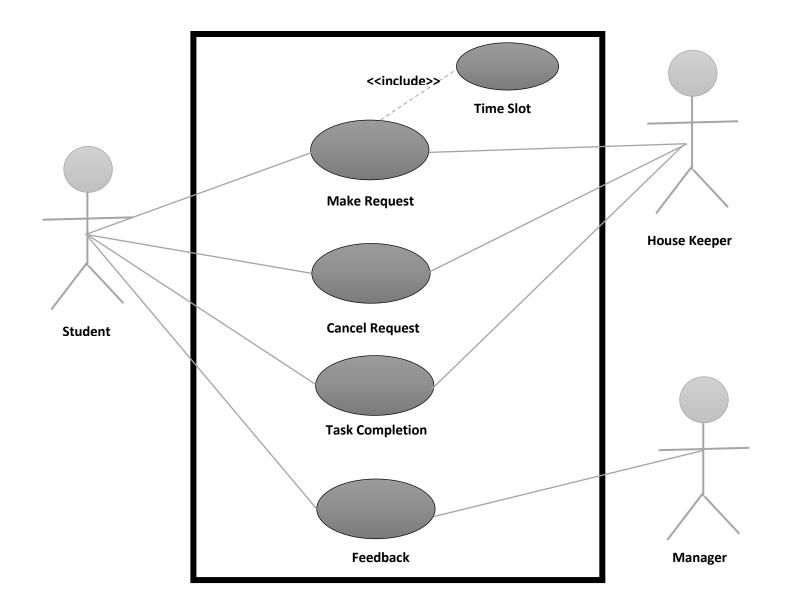
#### 3.1.2 Software Interfaces

The system will integrate with SUZA system to obtain some of useful information.

#### 3.2 Functional Requirements

- 1. The system should be able to allow the student to register.
- 2. The system allows the student to login.
- 3. The system will enable the user to logout.
- 4. it will enable students to book available rooms.
- 5. A student will be able to make a payment.
- 6. The system will notify students that they have been accepted to avail hostel services.
- 7. The system must allow an administrator to update the student Account Profile.

# 3.3 UML Use Case Diagram



## 4. Non-Functional Requirements

Non-functional requirements are the constraints that must be adhered during development. The various non-functional requirements are:

- 1. Password should contain at least 8 characters.
- 2. Maintainability of the system will be done at short period of time.
- 3. The system will be user friendly.
- 4. The system will be available for 24/7
- **5.** The system will respond to the requested action immediately to the user.

## 4.1 Other Non-Functional Requirements

#### 1. Performance

The application shall take initial load time depending on performance of Operating System.

The performance shall depend upon hardware & software components of the computer.

### 2. Security

This project provide a genuine security to all those individuals who are having there account on the database as they are password protected. This is very important aspect of the design and should cover areas of hardware reliability, fall back procedures, security of data and prevention of an unauthorized access.

#### 3. Maintainability

Hostel Management System will be maintainable as long as there are no Hardware & software problems. Also databases should be updated.

#### 5. CONCLUSION

Hostel Management System is a Customize and user-friendly software for Hostel. It has been designed to manage and look after the over-all processing of a hostel. It is capable of managing Enquiry details, Student Details, Payment Details etc. Hostel Management System is a Customize and user-friendly software for Hostel which provide hostel information, hostel room information, hostel accounts information.

Hostel Management Software System is offering a maximum of stability, costeffectiveness and usability. It provides the most flexible and adaptable standards management system software solutions for hostel.