
SOFTWARE REQUIREMENTS SPECIFICATION

for

Hostel Routine Portal

Version 1.0

Prepared by : 1. Nirlepa Shinde 111903052
2. Prajakta Baad 112003012

Submitted to : Prof. Tanuja Pattanshetti

March 3, 2023

Contents

1	Introduction	4
1.1	Purpose	4
1.2	Document Conventions	4
1.3	Intended Audience and Reading Suggestions	4
1.4	Project Scope	4
1.5	References	4
2	Overall Description	5
2.1	Product Perspective	5
2.2	User Classes and Characteristics	5
2.3	Product Functions	5
2.4	Operating Environment	6
2.5	Design and Implementation Constraints	6
2.6	Assumptions and Dependencies	6
3	External Interface Requirements	7
3.1	User's interfaces	7
3.2	Software Interfaces:	7
3.3	Hardware interfaces:	7
4	System Features	8
4.1	Attendance marking	8
4.2	Login	8
4.3	Displaying details	8
4.4	Displaying daily attendance	8
4.5	Application and approval of night-out	8
4.6	Notification to guardian	8
5	Other Nonfunctional Requirements	9
5.1	Performance Requirements	9
5.2	Safety Requirements	9
5.3	Security Requirements	9

Revision History

Name	Date	Reason For Changes	Version
Hostel Routine Portal	28 Feb 2023	Original Draft	Version 1

1 Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of the web application Hostel Routine portal. It will explain the purpose and features of the application, the interfaces of the application, what the application will do and the constraints under which it must operate. This document is intended for users of the application and also potential developers.

1.2 Document Conventions

This Document was created based on the IEEE template for System Requirement Specification Documents.

1.3 Intended Audience and Reading Suggestions

This SRS is for developers, users and testers. Further the discussion will provide all the internal, external, functional and also non-functional information about "Hostel Routine Portal". The website is designed to be user-friendly and intuitive, with a simple and clean user interface that makes it easy for users.

1.4 Project Scope

Hostel Routine Portal is an application where wardens can simply maintain student information and monitor daily attendance. It also makes it simple for the warden to grant a night out. Student can conveniently mark their in-out entries easily and able to apply for night-out. By replacing the time-consuming previous attendance system, our website benefits both parties.

1.5 References

GitHub page: <https://github.com/prajaktabaad/SE2'Project>

2 Overall Description

2.1 Product Perspective

This application is created to simplify the lives of hostel wardens and students. Students can use a bio-metric device to record their attendance, and the information is immediately stored in a database. The primary objective of this project is to reduce the amount of effort and time needed to keep students' daily in-out logs.

2.2 User Classes and Characteristics

This project has basically 2 types of users.

- Warden
 - who maintain students information
 - grant night-out entries made by student
 - check daily attendance
- Students
 - able to quickly and efficiently mark in-out entries
 - able to submit application for night-out

2.3 Product Functions

- Marking attendance : By using bio-metric students able to mark in-out entries
- Users login : The application will allow users to login for their account.
- Apply for night-out : After login students able to apply for night-out if they want
- Check attendance : Wardens able to see daily attendance of students
- Permission for night-out : wardens are able to permit application for night-out for a particular and after permitting automatic email is going to his/her parents.
- Add new students : Warden able to make entries in database at time of allotment. If in middle of academic year, any new student taking hostel that entries also can be done by warden.
- View students information : Warden able to view information of any student.

2.4 Operating Environment

The website can be operate in -

- Windows 7
- Windows 8
- Windows 10
- Linux
- Mac Os X
- etc.

2.5 Design and Implementation Constraints

PHP and MySQL were used in the development of this portal, with HTML and CSS being used for the front end. To record attendance, this application also uses bio-metric authentication.

2.6 Assumptions and Dependencies

This website was created using PHP and utilises bio-metric authentication technologies. It is assumed that student bio-metric data is acquired during allotments.

3 External Interface Requirements

3.1 User's interfaces

We will add this images later

1. Homepage
2. Student login page
3. Warden login page
4. Night out application page
5. Student info and new entry page
6. Night out approval page
7. Attendance page

3.2 Software Interfaces:

- Operating system : Windows 10
- Front End : HTML, CSS
- Back End : php
- Database : MySQL
- IDE : VS code, Ardiuno IDE
- Others : Xampp-local web server

3.3 Hardware interfaces:

- Processor: Intel i5
- RAM : 4 GB (min)
- Hard Disk : 20 GB
- Others : Sensor(R305/R307), Arduino(uno), Breadboard, Connecting Wires, Potentiometer 10K (else we can use android as bio-metric device)

4 System Features

The majority of an application's features are shown in this area, along with instructions on how to use them and the outcomes they will provide for the user.

4.1 Attendance marking

4.2 Login

4.3 Displaying details

4.4 Displaying daily attendance

4.5 Application and approval of night-out

4.6 Notification to guardian

To be added later....

5 Other Nonfunctional Requirements

To be added later....

5.1 Performance Requirements

(Performance requirements means the operating capabilities, maintenance, and reliability characteristics of a system that are determined to be necessary for it to fulfill the requirement for which the system is designed.)

5.2 Safety Requirements

5.3 Security Requirements

Glossary

- in-out - only in regard to when students leave and enter the hostel campus
- Daily Routine - This routine is regarding students in-out
- Daily attendance - Record about students presence in hostel campus
- night-out - when student is not present in hostel premises during night time.