|  |  |
| --- | --- |
| JU : Smart hostel | Version 1.0 |
| Software Requirements Specification | 01-01-2018 |
| The Winning Team |  |

The Winning Team

JU : Smart Hostel

**Software Requirements Specification**

**Version 1.0**

**Team Guide:** Mr. Aditya Upadhyay

**Members:** Vishal Saini, Hemant Soni, Anant Vindal, Verma Adityaraj, Brahmansh Kaushal, Ananya Rathi

**College Name:** JECRC University

**Department:** Computer Science Engineering

**State:** Rajasthan

The Winning Team / JU Page 1

|  |  |
| --- | --- |
| JU : Smart Hostel | Version 1.0 |
| Software Requirements Specification | 01-01-2018 |
| The Winning Team |  |

**Table of Contents**

**Description** **Page No.**

**1.0 Introduction**

* + 1. Purpose
    2. Scope
    3. Definition, Acronyms, and Abbreviations
    4. References
    5. Technologies to be used
    6. Overview

1. **Overall Description** 
   1. Product Perspective
   2. Software Interface
   3. Hardware Interface
   4. Product Function
   5. User Characteristics
   6. Constraints
   7. Architecture Design
   8. Use Case Model Description

The Winning Team / JU Page 3

|  |  |
| --- | --- |
| Smart hostel JU | Version 1.0 |
| Software Requirements Specification | 01-01-2018 |
| The winning team |  |

* + 1. Class Diagram ........................................................................

Sequence Diagram s ...............................................................

* + 1. Database Design ....................................................................
       1. ER Diagram...............................................................
       2. Schema ......................................................................
  1. Assumptions and Dependencies

1. **Specific Requirements** 
   * 1. Use Case Reports
     2. Supplementary Requirements

The winning team/ JU Page 4

**Software Requirements Specification**

1. Introduction: Our objective is to digitalize the working and protocols of the JU Hostel and Mess. To make the general day-to-day processes like food streamlining, leave application, etc., easy, digital and hassle free, for both, the students and the authorities.
2. Purpose: Our strategy is to develop a digital platform through an android application and a website in order to to bring all the included parties onto one page where they can communicate and interact about the common and generic topics. The purpose of this project is to provide the residents and the authorities of JECRC University with an interface to track their activities and make day-to-day tasks easier.
3. Scope: The scope of the Smart hostel JU includes the activities associated with students residing in hostels of JU and their authorities.
4. Definitions, Acronyms, and Abbreviations:

|  |  |
| --- | --- |
| Smart hostel JU | Version 1.0 |
| Software Requirements Specification | 01-01-2018 |
| The Winning Team |  |

* + HTML (Hyper Text Markup Language): It is used to create static web pages.
  + JSP (Java Server Pages): It is used to create dynamic web content.
  + HTTP (Hyper Text Transfer Protocol): It is a transaction oriented client/ server protocol between a web browser and a web server.
* PHP : It is a server-side scripting language designed for web development but also used as a general-purpose programming language.
* jQuery : It is a cross-platform JavaScript library designed to simplify the client-side scripting of HTML.

|  |  |
| --- | --- |
| Smart hostel JU | Version 1.0 |
| Software Requirements Specification | 01-01-2018 |
| The winning team |  |

1. References:

None. This project is a prototype.

|  |  |
| --- | --- |
| Smart hostel JU | Version 1.0 |
| Software Requirements Specification | 01-01-2018 |
| The Winning Team |  |

**1.5** Technologies to be used:

* **HTML:** Body structure of the pages of the website.
* **CSS:** Webpage styling.
* **JAVA Script :** Functional webpage styling.
* **jQuery:** JavaScript library
* **PHP:** For database creation and management.
* **Ajax:** Asynchronous Java Script and XML.
* **Android Studio:** Creating and Designing the App.
* **Localization:** 1 Language - English

|  |  |
| --- | --- |
| Smart hostel JU | Version 1.0 |
| Software Requirements Specification | 01-01-2018 |
| The winning team |  |

1. Overview: The SRS will include two sections, namely:

-I- **Overall Description:** This section will describe major components of the system, interconnections, and external interfaces.

-I- **Specific Requirements:** This section will describe the

functions of actors, their roles in the system and the constraints faced by the system.

1. **Overall Description:**
2. Product Perspective: We will develop an app with all the categories and topics to be cared about, having different tabs, where the students can file queries and get desired information. The authorities on the other hand can keep a record of the students' statuses like leaves, meals attending, night attendance, etc. The android application will be easier to be operated by the students and the authorities and will surely reduce the need for physical efforts.
3. Product Functions: The app will have a provision for getting the total no. of hostelers attending every particular meal in advance and hence the mess staff would be able to prepare adequate amount of food without any wastage or shortfall.The app will also have provision for the students filing the leave applications and the complaints online and they will be directly directed to the concerned person and will be adhered without the involvement of the Warden. Moreover they'll be able to mark their night attendance on the app itself at a given time with a secured and authentic procedure. The warden will also able to respond to the leave applications on the app and will have a record of the leaves there. He will be able to securely take the night attendance on the app without the need to personally go to each room.
4. User Characteristics:
   * + Students: The hostellers which are the most central users of our app and the website. They’ll be included in all three components of the app and the website and are our main users around which and for whose benefit and betterment our platforms mainly functions.
     + Hostel Warden: He’ll be included in the Leave Application & Sanctioning and Housekeeping & Maintenance sections of the platform, looking through the requests and applications and will do the needful.
     + Mess In-charge: He’ll be using the Food Streamlining section of the platforms to enter the MENU of the meals of the Mess and will be able to view the no. of students attending particular meals.
     + Hostel Supervisor: He’ll be using the Housekeeping and Maintenance section of the platforms and will be required to respond to the complaints in a given amount of time.