Software Requirement Specification

Functional Requirement

CS345-346

Software Engineering

Project: Sports Equipment Management

Group 01

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1 Introduction

1.1 Purpose

The purpose of the document is to capture the description and functional requirements of **Sports Equipment Management**, focused mainly on residents of the Institution.The document lists all the features of the platform and detailed description for the every functionality needed.

1.2 Document Conventions

The format specified by **IEEE** was followed while creating this document.
Font Family used was **Computer Modern** and the font size was 12pt. The headings of each topic are in bold. Bullet points are used wherever required. All the titles, inputs and outputs of the **functional requirements** are written in Camel Case.

1.3 Intended Audience and Reading Suggestions

This SRS document is a part of a project under the **CS345** and **CS346** courses - Software Engineering. The intended audience is our course instructor, **Dr. Samit Bhattacharya**, and teaching assistants tasked with evaluating this project. The document acts as a guide to check the project progress at various stages and inspect if the objectives of the project are being met or not. The document also provides a summary of the project features for evaluators.

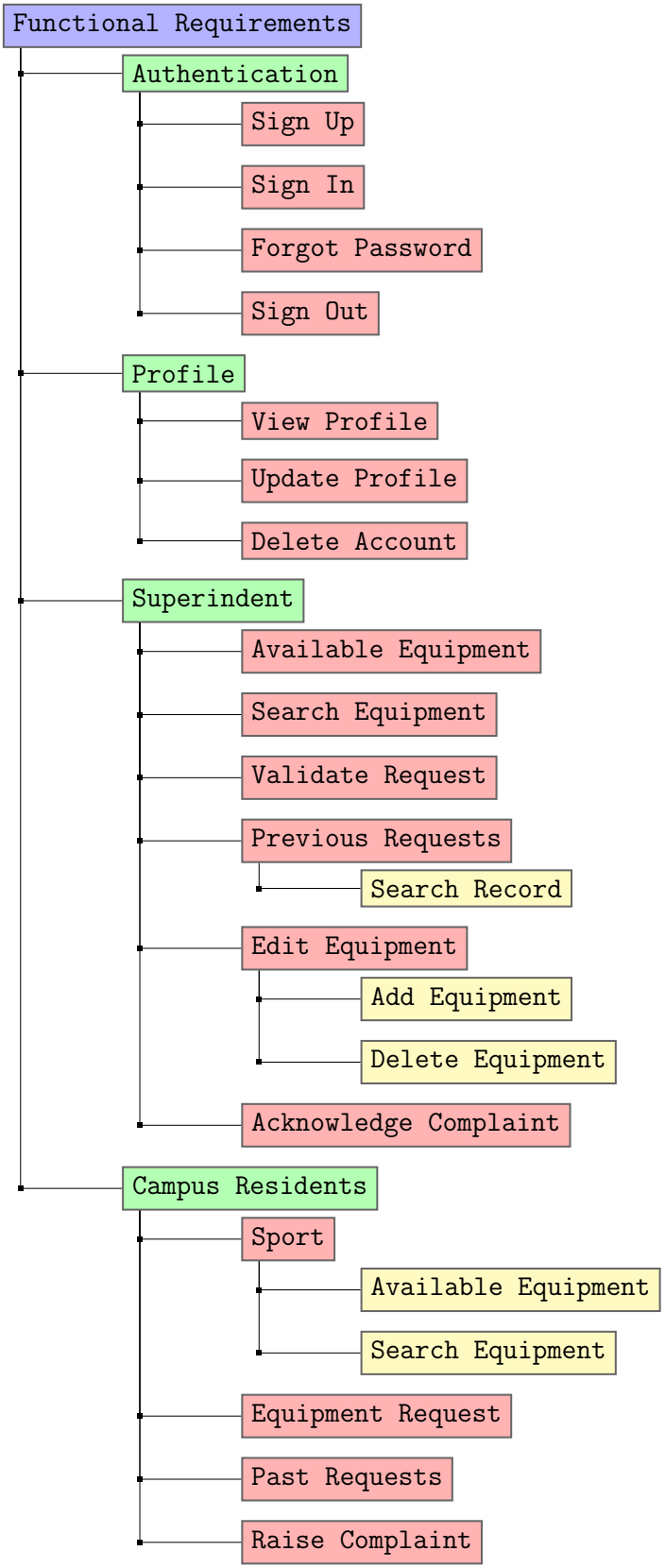
1.4 Product Scope

The process of managing sports equipment in our campus is manual with records. we can not know before hand if the equipment availible or not. Students have to go to gymkhana and security personnel need to check in the inventory if the equipment is availible. This takes a lot of time and effort. If equipment is not there then all of the effort goes in vain.
So we intend to develop a website which would simplify this task and save lot of time and effort for students. The idea is to manage the equipment at gymkhana and make the process easier for both students and management.

1.5 References

1. IEEE SRS Template
2. CS345 and CS356 course slides by Dr. Samit Bhattacharya. (Winter Semester 2021)

2 Functional Requirements Hierarchy



3 Functional Requirements

3.1 Authentication

3.1.1 Sign Up

- **Input :** User Information
- **Output :** Validation Prompt Message
- **Description :** Create a new account using user details or sign up with outlook and display account creation message.

3.1.2 Sign In

- **Input :** User Credentials
- **Output :** Login Status
- **Description :** Verify user credentials.

3.1.3 Forgot Password

- **Input :** Email Address
- **Output :** Otp to email
- **Description :** This function allows user to change the password if they forget it

3.1.4 Sign Out

- **Input :** User Credentials
- **Output :** Message
- **Description :** This function signs out the user

3.2 Profile

3.2.1 View Profile

- **Input :** User Profile Id
- **Output :** User Details
- **Description :** Shows the user's details

3.2.2 Update Profile

- **Input :** User details
- **Output :** User Profile
- **Description :** Updates the user's details

3.2.3 Delete Account

- **Input :** User ID
- **Output :** Message indicating status
- **Description :** Deletes the user's account

3.3 Superindent

Every sport will have one superindent, who is responsible for managing the equipment of the sport

3.3.1 Available Equipment

- **Input :** Current user
- **Output :** Available Equipment and their quantity
- **Description :** This function returns the list of all the equipment available and their quantity for the sport of superindent.

3.3.2 Search Equipment

- **Input :** Name of the equipment
- **Output :** Equipment
- **Description :** This function allows superindent to search through the available equipment

3.3.3 Validate Request

- **Input :** Request for equipment from the campus residents
- **Output :** Accept or deny the request
- **Description :** This function allows superindent to validate the request

3.3.4 Previous Requests

List of all the previous requests and their status.

3.3.4.1 Search record

- **Input :** Name of the equipment
- **Output :** All the previous requests associated with that equipment
- **Description :** This function allows superindent to search through the list using equipment

3.3.5 Modify Equipment

3.3.5.1 Add Equipment

- **Input :** Name of the equipment and quantity

- **Output :** Equipment will be added to List
- **Description :** This function allows the superindent to add new equipment.

3.3.5.2 Edit Equipment

- **Input :** Name of the equipment and final quantity
- **Output :** Equipment quantity will be edited accordingly
- **Description :** This function allows the superindent to edit equipment quantity by adding if the equipment is bought or decreasing if some of them are faulty.

3.3.6 Acknowledge Complaint

- **Input :** Response to complaint
- **Output :** Complaint status
- **Description :** This function allows superindent to respond to user complaints

3.4 Campus Residents

This section includes functionalities provided for all campus residents (Students,Staff)

3.4.1 Sport

Equipment inventory of the sport

3.4.1.1 Available Equipment

- **Input :** Name of the sport
- **Output :** Available Equipment
- **Description :** This function shows the available equipment for the sport.

3.4.1.2 Search Equipment

- **Input :** Name of the equipment
- **Output :** Availability of equipment
- **Description :** This function allows user to search through the equipment of the sport.

3.4.2 Equipment Request

- **Input :** Name and quantity of the equipment required
- **Output :** Sends the request to the superindent
- **Description :** This function allows the user to send a request to superindent to acquire equipment

3.4.3 Past Requests

- **Input :** Current user
- **Output :** All the requests sent by the user in the past
- **Description :** This function shows all the requests sent by the user in past with the status of their approval.

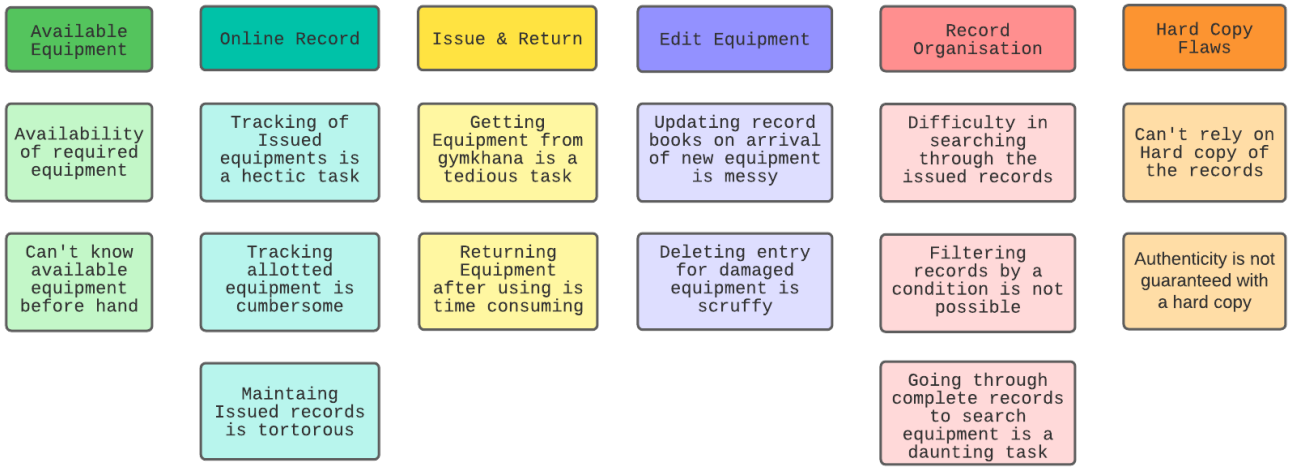
3.4.4 Raise Complaint

- **Input :** Complaint details description
- **Output :** Complaint Status
- **Description :** This function is used to raise a complaint

4 Usability Requirement Gathering

4.1 Goals

To Understand Issues and problems faced by Campus residents while acquiring sports Equipment from the gymkhana personnel and know their requirements via a contextual Inquiry in Active mode.

4.2 Contextual Inquiry Affinity Diagram

We performed a contextual Inquiry among ourselves and Sports Board general secy through G-meet. We thought of the issues we faced when we were in the colleges. We then discussed these issues with the general secy. We got a few more insights into the issues. From them we made the affinity diagram below and sorted them into different categories.