Sport Center Management Software

System-Wide Requirements Specification

# Introduction

This document suggested for specifying requirements and constraints in accordance with the FURPS+ classification.

# System-Wide Functional Requirements

## Download mobile application

User can access android apk in website. The application should be free to download.

## User registration - Mobile/Web application

Given that a user has downloaded the mobile application, then the user should be able to register through the mobile application. System needs user information(name-surname), username, e-mail, password, branch info for registration.

## User log-in – Mobile/Web application

System takes and verifies the login information which are username and password with help of these fields filled by the user.

## Store user profile - Mobile/Web application

System holds all the data from users in the registration step and store them in database. Users can see that information from database on both of web and android application.

## Store training/nutrition information - Mobile/Web application

System open an activity division for all members and users can add their sport and nutrition activities to that division.

## Store member activities - Mobile/Web application

In the system’s database some entities such that reference, percent of attendance stores data with respect to user activities. These entities will be a reference for special offers or access right for other branches.

## Store employee and owner information - Mobile/Web application

System needs user information(name-surname), username, e-mail, password, branch info for registration. Like users, owner’s and employees’ must be registered to system too. Owners and managers can access the management panel via this information.

## Store information of all centers – Web application

In the system database, center’s information stored and with this information, system allows make changes in the management panel and shows visualization of the center.

## Management of branches – Web application

System create control mechanism with information of branches and managers can control the branch with management panel.

# System Qualities

## Usability

Android and web application has simple and compact design. Mostly used parts will appear on the more visible sides in design. Applications will have feedback system for processes user made. The visuality should stay remain in different screen sizes as well. Processes will be categorized with respect to user’s perspective.

## Reliability

Application should be avoided from crashes. The application should be reachable all the time. The information provided in the application, should be updated and correct. As like in the case of payment, the information transfer between the bank and the application should be safe and right. The users of the system will have secure access to applications.

## Performance

Effective usage of the system resources. Application should have short response time for any user processes. Applications provide multiple users to operate on the system. Applications can work concurrently. Data processes will take short time.

## Supportability

User can reach application from web and android platform. The visuality should be supported in a variety of screen sizes. Implementation will be understandable and readable for future improvements.

# System Interfaces (5 kişi)

[Interface Requirements are part of the + in the FURPS+ classification of supporting requirements. Define the interfaces that must be supported by the application. It should contain adequate specificity, protocols, ports and logical addresses, and so forth, so that the software can be developed and verified against the interface requirements.]

## User Interfaces

[Describe the user interfaces that are to be implemented by the software. The intention of this section is to state requirements relating to the interface. Interface design may overlap the requirements gathering process.]

### Look & Feel

[Provide a description of the spirit of the interface. Your client may have given you particular demands such as style, colors to be used, and degree of interaction and so on. This section captures the requirements for the interface rather than the design for the interface.]

### Layout and Navigation Requirements

[Capture requirements on major screen areas and how they should be grouped together.]

### Consistency

[Consistency in the user interface enables users to predict what will happen. This section states requirements on the use of mechanisms to be employed in the user interface. This applies both within the system and with other systems and can be applied at different levels: navigation controls, screen areas sizes and shapes, placements for entering / presenting data, terminology.]

### User Personalization & Customization Requirements

[Requirements on content that should automatically displayed to users or available based on user attributes. Sometimes users allowed to customize the content displayed or to personalize displayed content.]

## Interfaces to External Systems or Devices

[Are there any external systems with which this system must interface? Are there any constraints on the nature of the interface between this system and any external system, such as the format of data passed between these systems, and any particular protocol used? Consider both provided and required interfaces.]

### Software Interfaces

[This section describes software interfaces to other components of the software system. These may be purchased components, components reused from another application or components being developed for subsystems outside of the scope of this SRS, but with which this software application must interact.]

### Hardware Interfaces

[This section defines any hardware interfaces that are to be supported by the software, including logical structure, physical addresses, expected behavior, and so on.]

### Communications Interfaces

[Describe any communications interfaces to other systems or devices such as local area networks, remote serial devices, and so on.]

# Business Rules

**5.1 User Related Action Rules**

### Enter Another Branches Rule

Every member of the sports center can enter five times to other branches which user is not registered.

## Reward Rules

### Special Offer Rights Rule

Every member’s attendance stored in database for courses. With respect to the attendance percentage user may have rewards like discounts or one-month platinum membership. Branch’s manager will decide for special offer attendance percentage.

### Reference Rules

Every member’s reference number stored in database. If a member comes with his/her friend and take membership, reference number increases. With respect to this reference number member may have rewards.

## Manipulation Rules

### Add User

If there is a bug or unexpected situation happens in the system’s registration page, manager can add a user manually to the system. This feature is an advantage for if this software bought another company later, this company can add own users.

### Update User

Mail information of a user do not change by the user, manager can change user’s mail information.

### Ban User

If a member acts in inappropriate way, manager can ban user of that branch forever.

### Create Special Offer

Manager can create individual special offers for his/her branch. These special offers’ criteria will be attendance and reference number.

### Create a Course

Manager can create a course in his/her branch. Twenty-five percentage of the quota always keeping for platinum members. They can register a course above normal quota.

### Create New Branch

Owner of the company can open a new branch. Manager is assigned to a branch by the owner.

### Update Manager

Owner of the company has access for adding, deleting and updating manager management.

# System Constraints

* We will develop our application as both mobile and web application. Our mobile application will work on the android operating system.
* We will use the java spring framework for backend side and the Angular5 framework for the frontend side of the web application. Java programming language will be used for android application of the project.
* With help of primefaces interface library, we will choose design for web application.
* In the database management system of the project, we will use MySQL.

# System Compliance

## Licensing Requirements

The license requirements of the programs used during the development of the application, should be provided by client company. There is no license requirement that we apply to companies that purchase our application. Our application does not have any user restrictions. SportSupport don't provide the distribution of the application.

## Legal, Copyright, and Other Notices

SportSupport has no responsibility or guaranteed feature for this project. This project is for only educational purposes. Maintaining, licence and copyright belongs to the company which has bought to this project.

## Applicable Standards

In the development of the application will be used in English language. this increase the generalization and global availability of this application. So that, it will be easier to understand and develop the application in the future according to the company's request. The language of the application can be written as simple as possible, which will make the application easier to use.

# System Documentation

In project’s final release, there will be a manual to guide users. It gives some information of project’s running principles. Users can access this document in web and android application. Manual embedded in the web-application, users can download it to their computers or smartphone.