
Software Requirements Specification

for

< Smart Student Attendance System >

Version 1.0 approved

Prepared by < Yongqiang Zuo >

< Tufts University >

<10/12/2022>

Table of Contents

1. Introduction.....	1
1.1 Purpose.....	1
1.2 Document Conventions.....	错误!未定义书签。
1.3 Intended Audience and Reading Suggestions	1
1.4 Product Scope	1
1.5 References	1
2. Overall Description	1
2.1 Product Users	1
2.2 Operating Environment.....	1
2.3 Assumptions and Dependencies.....	1
3. Functional Requirements	2
4. Nonfunctional Requirements	2
5. Other Requirements	2

Revision History

Name	Date	Reason For Changes	Version
Yongqiang Zuo	11/10/22	First draft of the requirements	1.0
Yongqiang Zuo	12/10/22	Add some requirements	1.1

1. Introduction

1.1 Purpose

Build a mobile application (Smart Student Attendance System v1.0) for school faculty to keep record of student attendance on the mobile-phone.

1.2 Intended Audience and Reading Suggestions

The intended audience include developers, testers, project managers, users and marketing staff. The file has 2 main parts: an introduction for the app and the specific requirements. We highly suggested everyone read the entire contents in order since it contains the most basic functions of the software.

1.3 Product Scope

The software will allow professors to do class check-in on their mobile devices, saving a lot of time by eliminating the need to take roll call or sign in on paper. The software allows for a record of each student's performance for easy reference by the professor when grading. The software is totally free for users.

1.4 References

Software with similar functions as a reference:

[Attendance Taker](#)
[Blackboard](#)
[aplusattendance](#)

2. Overall Description

2.1 Product Users

School faculty who need to confirm student attendance.

2.2 Operating Environment

Android phone or tablets with Android 11.0 and above.

2.3 Assumptions and Dependencies

Assume that each student has a unique student id, and assume that the user device is running the app using Bluetooth or the network when performing the data transfer.

3. Functional Requirements

1. User can add course.
2. User can not add course without complete information (course number, course name).
3. User can remove course.
4. User can add student to the specific course
5. User can not add student without complete information (name, student ID).
6. User can remove student from specific course.
7. User can add date schedule of the course.
8. User can change the date schedule of the course.
9. For every class meeting, user can choose and change the status (absent or present) of students who are in that course.
10. User can search information using course number, course name, student name, student ID.
11. User can see graphical data for each student.
12. All the data can be stored in mobile device and user can check it anytime.
13. All the data can be transfer to other mobile device via Bluetooth.
14. All the data can be transfer to a server with Internet environment.

4. Nonfunctional Requirements

1. Ensure data security and prevent data or privacy breaches.
2. The app takes up as little space as possible.
3. The app should have good testability.
4. The app should have good maintainability.
5. The app should have good scalability.
6. The app should be easy to use without guide.

5. Other Requirements

The software should comply with legal requirements and university regulations.