# **Software Requirements Specification for**

# Class Management System of IICT

Date	Version	Remarks
21-3-2023	1.0	Initial Release for
		the first
		deliverables

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# 1. Introduction

# 1.1 Purpose

The purpose of this project is to manage the classes of IICT with higher automation and the purpose of this document is to specify the requirements and design the system of the project.

# 1.2 Project Scope

Class Management System is a software that will help to manage the class properly, it will help the teachers and students to maintain their class properly and will increase the actual class time. Teachers can share the topic resource, links, and class records through the software. Updated class schedules will automatically notify by this software. Student can submit their assignment through this. This can create an annual progress analysis report for the individual student.

# 1.3 Why Class management:

Top reasons for using Class Management

- 1. To make the online based class management system more interactive.
- 2. To give students better access to the class resources given by the class teacher.
- 3. To be able to text(message) your specific class network based on the courses you are taking.
- 4. To get notified before your virtual class as well as physical class starts.
- 5. To be able to take(teacher)/ attend(student) your online classes virtually.
- 6. To be able to see class attendance and report the teacher in case of any attendance issues.

# 2. Overview

#### 2.1 Product Editions

There will be only two versions of the product:

### 1. Android Edition

The instance of the software will be hosted in the play store to run in an android environment.

### 2. Web Edition

The instance of the software will be hosted in several cloud-based web hosting sites. All information will keep in with good inscription to the server. All instances will get a dedicated Class Management subdomain for them.

### 2.2 Product Features:

# 1. Registration/Login

- a. Registration with email
- b. Registration Step Basic info, Entity related info, mentoring information.
- c. Email verification
- d. Forget & reset password.

## 2. User profiles (Student):

- a. Profile view
- b. Profile edits.
- c. Privacy settings
- d. Update password
- e. Attendance
- f. Class schedule

# 3. User profiles (Teacher):

- a. Profile view
- b. Profile edits.
- c. Privacy settings
- d. Update password
- e. Attendance
- f. Class schedule
- g. Contacts

# 3. User profiles (Admin):

- a. Log in.
- b. Profile view
- c. Profile edits.
- d. Privacy settings
- e. Update password
- f. Contact Student
- g. Contact Teacher
- h. Contacts

### 4. Resources:

- a. Class records
- b. Class documents
- c. Important links
- d. Other websites

### 4. Chat room:

- a. SWE
  - i. Major Classes
  - ii. Minor Classes
- b. CSE
  - i. Major Classes
  - ii. Minor Classes
- c. EEE
  - i. Major Classes
  - ii. Minor Classes

### 5. Members:

- a. Admins
- b. Teachers
- c. Students
- 6. About

# 3. Functional Requirements

All major functional features for version 1.0 are covered below:

# 3.1 User management

# 1. Registration:

Students can register themselves using their registration number, and student mail and teachers and admin can register using their given academic mail.

A profile picture, a strong password, and a mobile number are a must.

- a. After registration verification is required.
- b. Settings
  - i. Email preference
  - ii. Class notification
  - iii. Text the teacher

# 2. Login:

If a user has an account, the user can log in to and log out from the system using their Email-password. The user can also recover their password if he has forgotten it.

### 3. Profile

a. Update password:

In case of security issues or if forgotten, the user can recover or update his password.

b. Privacy

### 3.2 Admin

The admin has the authority to block and directly communicate with the user (student/teacher).

### 3.3 Emails and SMS

- a. Emails- Teacher and admin can send emails to students about:
  - i. Events: Students will be informed about events arranged by the academic teacher.
  - ii. Extra-curricular activities: Activities arranged out of the academic syllabus are also to be informed through email.
- b. SMS All students will get a specific notification through SMS.

### 3.4 Profile

#### a. General information

- i. First name, last name: Name taken while registering for the first time.
- ii. Semester(student): The current semester that the student is studying.

#### **b.** Contact Information

- i. Email: The email address user used for registration.
- ii. Phone: User's email address.
- iii. Address: The permanent residence of the user.

### 3.5 Statistics

- a. Attendance: For a student, his regular attendance was noted by the teacher and for a teacher his regular attendance in the scheduled class.
- b. Assignments: Assignments given by the teacher and submitted by students will be recorded.
- c. Exam results: Students will be able to see all their results according to their courses on the semester.

### 4. Non-functional Requirements

### 1. Security:

The system must be secure, with appropriate measures in place to protect sensitive information such as student records, grades, and personal details.

### 2. Performance:

The system will be able to handle large volumes of data and user traffic without experiencing significant delays or downtime.

# 3. Scalability:

The system should be able to handle an increasing number of users, classes, and features without requiring significant changes to the underlying architecture.

## 4. Usability:

The system must be user-friendly and intuitive, with clear instructions and a straightforward interface that minimizes the need for training.

**5. Compatibility:** The system should be compatible with different devices, browsers, and operating systems, to ensure that users can access it from a variety of platforms.

### 6. Reliability:

The system must be always reliable and available, with minimal downtime or errors.

### 7. Maintainability:

The system should be easy to maintain and update, with clear documentation and a modular design that allows for easy troubleshooting and bug fixing.

### 8. Compliance:

The system should comply with relevant laws and regulations, such as data protection laws and accessibility standards.

### 9. Performance standards:

The system should meet certain performance standards such as response times, throughput, and resource utilization to meet the expectations of users.

The software will be updated regularly to serve the members. More features and functionalities will be added based on the customers' requirements and research done by the project executives.

# 5. Support

The software will provide online support via email and phone during office hours. The email, phone number, and support hours are displayed on the website's contact page.

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