**TABLE OF CONTENTS**

**1. Introduction**

**i) Purpose**

**ii) Scope**

**iii) Overview**

**2. The overall description**

**i) Product perspective**

i)product function

ii)hardware interface

iii)software interface

iv)communication interface

**ii) User charactersticks**

**iii) Constraints**

**3. Specific requirements**

**i) Fuctional requirements**

**ii) Non-Functional Requirements**

i)availability

ii)security

iii)reliability

iv)portability

v)maintainability

**1. Introduction**

This document presents a detailed representation of the ATTENDANCE (cross platform application) which is to be used by the faculty staff and students to get their attendance details of corresponding subjects.

**1.i) Purpose**

The purpose of the Software requirements Specification (SRS) is to specify the functionality, performance and interface requirements of the software project. All the required features of the software project shall be expressed by the development team. For additional requirements development team will release the new version of project which will contain every left out requirements.

**1.ii) Scope**

The ATTENDANCE is a cross platform application. The application offers various operations like viewing attendance for each subject and red mark for low attendance for the students. For faculty, they can take attendance and also tell the percentage of their subject for each students. These services are conveniently grouped and developed specifically for use on your desktop and android device. All the operations can be performed when an internet connection is available. Admin of the application can register prospective IIIT Kottayam students & faculty to fully experience all services provided.

**1.iii) Overview**

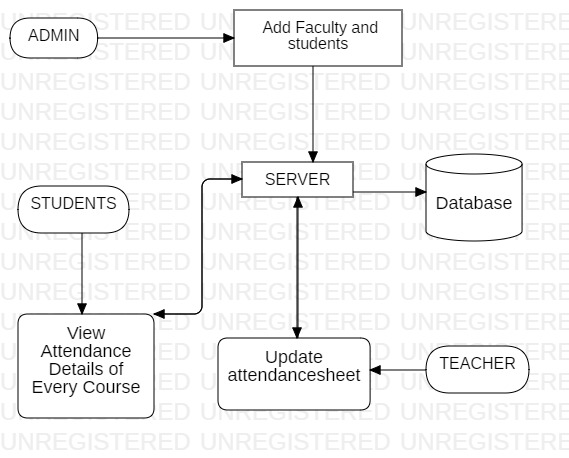
The next section, Overall description of the document gives an overview of the functionality of the product. It describe the informal requirements and is used to establish a context for the technical requirements specification in the second section. The third section, Specific Requirements, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product. Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

**2. The Overall Description**

This section describes the functions, aims and objectives of the projects. It also includes the constraints and requirements of the project.

**2.i) Product Perspective**

The ATTENDANCE is a cross platform application project which will be useful for college students and staffs. At present the attendance is taken by the faculty and kept in a register so if students need to check his attendance he has to go to the faculty to ask his attendance percentage. It is very difficult for student to refer to every faculty. To resolve this issue a desktop and android application is developed and this application is mainly for our college students to get the attendance. In this project the students, faculty & staff are registered by the admin. The faculty of the particular department will upload the attendance in this app by their own login id. By this app the student will automatically get the notification for low attendance of the particular department. This will be more helpful for the students as well as college also. Block Diagram to show various components of the system.



**BLOCK DIAGRAM TO SHOW VARIOUS COMPONENTS OF THE SYSTEM**

**2.i.i) Product Function** The application functions vary with the user using it.

Student:

On clicking the Academic android app, a sign-in screen is displayed. And the student will sign in with the specified details provided by the university at the time of admission.

 Now, user has signed in and a home screen is displayed with the seven buttons on it: All, Fees, HOD Message, Exam timetable, Syllabus, Events & Marks.

 All buttons will show all the details of the student.

 Fees button will display all the fee details

 HOD message will display the broadcast messages of the HOD of the particular department.  Exam timetable button will display the examination schedules.

 Syllabus will display the syllabus of the particular department.

 Events button will display every details of the departmental events.

 Marks button will display the marks scored by the student in various class tests, periodicals and internals.

 From, any screen user can switch to home screen and can log out.

HOD:

 On clicking the Academic android app, a sign-in screen is displayed. And the HOD will sign in with the specified details provided by the university at the Time of joining.

 Now, user has signed in and a home screen is displayed with the four buttons on it: Events, Message and View Student & View Staff.

 Events button will allow the user to create an event and send the notification regarding the event to all the students and staffs of the particular department.

 Message button will allow the user to broadcast a message and the message will be viewed by all the students and staffs of the particular department.

 View Student button will allow the user to display all the details of the specific student of the particular department.

 View Staff button will allow the user to display all the details of the specific staff of the particular department.

 From, any screen user can switch to home screen and can log out.

Admin:

Since, admin is a user too. He will sign-in like any other user.

 On clickingthe Academic android app,a sign-in screen is displayed. And the Admin will sign in with the specified login details.

 Now,userhas signedinanda home screen is displayed with the three buttons on it: Add HOD, Add Student & Add Staff.

 Add HOD button will allow the admin to add a new HOD for a particular department.

 Add Student button will allow the admin to add a new Student for a particular department.

 Add Staff button will allow the admin to add a new Staff for a particular department.

 From, any screen user can switch to home screen and can log out.

**2.1.ii) Hardware Interfaces**

 An android phone or tablet

**2.1.iii) Software Interfaces**

OS – Windows 7 or above

TOOLS – Eclipse (Juno), NetBeans IDE 8.0.1, XAMPP Control Panel

PLATFORM: Android SDK Framework

IDE: Eclipse, NetBeans ANDROID

EMULATOR: SDK Version 2.2 or Higher

TECHNOLOGIES USED: Java, XML, PHP, HTML

BROWSER – IE 9.0 DATABASE- MySQL

**2.1.iv) Communications Interfaces**

Sip (Session Initiation Protocol) functionality is used to make and answer VOIP calls. This needs to import package android.net.sip.

i) User Characteristics

 The user (student/faculty/staff) should have basic knowledge of using android phones. 2.3 Constraints

 The phones having the application should either be connected over LAN or internet.

 Sign-in and password are used for the identification of user.

 Admin needs to update the database after every session.

**3). Specific Requirements**

External Interfaces The User Interface produced by the system are:

**3.1 Functions Requirements**

3.1.1 Module 1: Admin-login

AIM: Admin can login to get access to the product with the help of unique login-id & password.

INPUT: username &password

OUTPUT: Displays a message if username and password does not match otherwise enter into the home page.

PROCESS: Match username and password from the database.

3.1.2 Module 2: Add Student

AIM: To add a student(User).

INPUT: Student name, department, ID, Mobile No, password, email.

OUTPUT: Student(User) added successfully.

PROCESS: Save all the data in the database.

3.1.3 Module 3: Add HOD

AIM: To add a HOD (User).

INPUT: HOD name, department, ID, Mobile No, password, email.

OUTPUT: HOD (User) added successfully.

PROCESS: Save all the data in the database.

3.1.4 Module 4: Add Staff

AIM: To add a Staff (User).

INPUT: Staff name, department, ID, Mobile No, password, email.

OUTPUT: Staff (User) added successfully.

PROCESS: Save all the data in the database.

3.1.5 Module 5: Add Event

AIM: To add an event for a particular department by the HOD.

INPUT: Event name, event description.

OUTPUT: Event added successfully.

PROCESS: To save the entries of various events in the database.

3.1.6 Module 6: Add Message

AIM: To add a message fora particular department by the HOD. INPUT: Department, Date, subject, Message.

OUTPUT: Message added successfully.

PROCESS: To save the message of various events in the database.

3.1.7 Module 7: View Staff

AIM: To view staff details by their department.

INPUT: Department name.

OUTPUT: The detail of required staff.

PROCESS: To retrieve data from staff table In our database.

3.1.8 Module 8: View Student

AIM: To view student details by their department.

INPUT: Department name.

OUTPUT: The detail of required student.

PROCESS: To retrieve data from staff table in our database.

3.1.9 Module 9: Add Marks

AIM: To add marks of student.

INPUT: Marks, Student ID, Department Name.

OUTPUT: Marks updated successfully.

PROCESS: To save the marks of various exams in the database.

3.1.10 Module 10: Add Exam Timetable

AIM: To add Timetable of exam.

INPUT: Department Name, Date, Session, Subject code, Subject Name.

OUTPUT: Time Table updated successfully.

PROCESS: To save the Time Table of various exams in the database

3.1.11 Module 11: Add Fee

AIM: To add Fee detail.

INPUT: Department Name, Due Date, Amount, Description.

OUTPUT: Fee detail updated successfully.

PROCESS: To save the Fee details in the database.

**3.2) Non Functions Requirements** (Software System Attributes)

Reliability: The capability to maintain the specified level of performance is what meant by reliability. This application will run on any android phone.

Availability: The application will run 24 X 7 if internet connection is available.

Security: Security requirements placed restrictions on the use of this application by the student and the faculty of Wireless Lan communicator only, control access to the data, provide different kinds of requirements to different people, require the use of passwords. It requires proper programming techniques.

Maintainability: Maintenance is one form of change that typically is done after the software development has been completed. As the time change, so do the needs. It revolves around the understanding of the existing s/w and the effects of the change. This application needs a timely update of information table of the database by the admin. Any other feature as per the requirement can be added any time by the admin.

Portability: The capability adapted for different specified environments without applying actions or means other than those provided for this purpose in the product. Since, phones are portable, so do the application.