Class Attendance Mobile App
Analysis Model

Submitted to:

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Revision Control

History Revision:

Revision Date	Person Responsible	Version Number	Modification
10/26/17	Ronnel Austria	1.0	Initial Document. Added some of the boundary, control, and entity classes.
10/27/17	John Oliver	1.1	Added some class descriptions.
10/27/17	Arielle Gabriel	2.0	Added some control classes and diagram

Purpose:

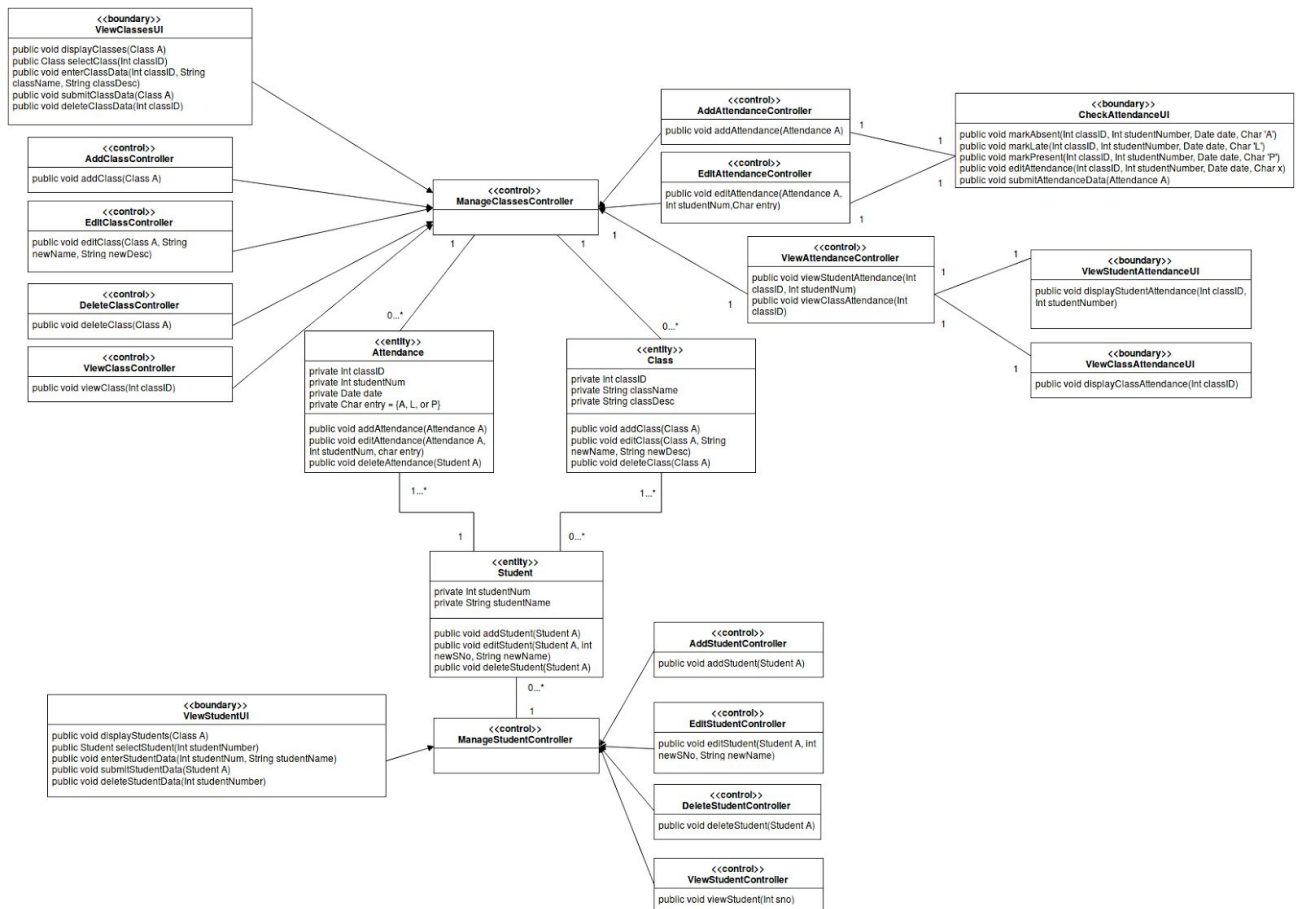The document provides the Analysis Model of the software, Class Attendance Mobile App.

Audience:

The target audience of the document are: the developers of the software, future developers who wish to extend it, and the professor.

System Name: Class Attendance Mobile App

Description: Class Attendance Mobile App is a mobile application that allows the teacher to record the attendance of the students digitally using a smartphone. The user will be able to see the attendance record of the class, the student, and be notified if a student is about to reach the maximum allowable absences. This project is an extension of the previous CS191-192 project Attendance Checker (https://github.com/CrowCakes/Attendance-Checker)

Class Diagram:

Boundary Classes:

Class Name	Description
ViewClassesUI	This interface allows the teacher to navigate through the class list and selects a class to view. Once a class is selected, it sends a signal to ViewClassController to retrieve details of the selected class.
ViewStudentsUI	This interface allows the teacher to navigate through the student list in a class. The teacher can select a student to view and this sends a signal to ViewStudentController to retrieve details of the selected student.
ViewClassAttendanceUI	This interface allows the teacher to navigate through the class list and select a class to view the attendance record of that class. Once a class is selected, it sends a signal to ViewAttendanceController to retrieve the details of the attendance record of the selected class.
ViewStudentAttendanceUI	This interface allows the teacher to navigate through the student list and select a student to view the attendance record of that student. Once a student is selected, it sends a signal to ViewAttendanceController to retrieve the details of the attendance record of the selected student.
CheckAttendanceUI	This interface allows the teacher to manage the attendance of the Students in a Class. The teacher can add new attendance and the entry should be "Present" by default. The teacher can choose to mark a Student "Late", "Absent", or retain the "Present" entry. This sends a signal to the AddAttendanceController. The teacher can also update and existing attendance record. This sends a signal to the EditAttendanceController which handles updating of Attendance records.

Control Classes:

Class Name	Description
ManageClassController	This controller consists of all the controllers that involves managing data of a Class. This includes adding, editing, and deleting a Class. Also adding and modifying attendance records of a given class.
AddClassController	This controller is handling the creation of new Classes given the class name and class description.
EditClassController	This controller is handling the edits of an existing Class entity.
DeleteClassController	This controller is handling deletes of existing classes.
ManageStudentController	This controller consists of all the controllers that involves managing data of a Student. This includes adding, editing, and deleting a Student.
AddStudentController	This controller is handling the creation of new Students from the imported spreadsheet file.
EditStudentController	This controller is handling the edits of an existing Student.
DeleteStudentController	This controller is handling the deletion of an existing Student from a Class.
ViewStudentController	This controller retrieves the data of a selected Student in a class. This includes the Student's name and student number.
ViewClassController	This controller retrieves the data of a selected Class in the class list.
AddAttendanceController	This controller adds a new entry of Attendance for a given Student in a given Class at a given date.
EditAttendanceController	This controller handles the updating of existing Attendance records. A selected Attendance record of a specific Student at a given date can be manipulated.
ViewAttendanceController	This controller retrieves the Attendance record.

Entity Classes:

Class Name	Description
Class	The Class represents a group of students. A class has a name, class ID, and class description. A class can be added, edited, or deleted.
Student	The Student represents a student enrolled in a class. A student has a name, student number, contact number, and email address. A student can be added, edited, or deleted from a class.
Attendance (Record)	The Attendance Record represents the attendance records saved. An attendance record has a class ID, student number, date, and entry. An attendance record can be added, edited, or deleted.