Class Attendance Mobile App
Data Design Document

Submitted to:

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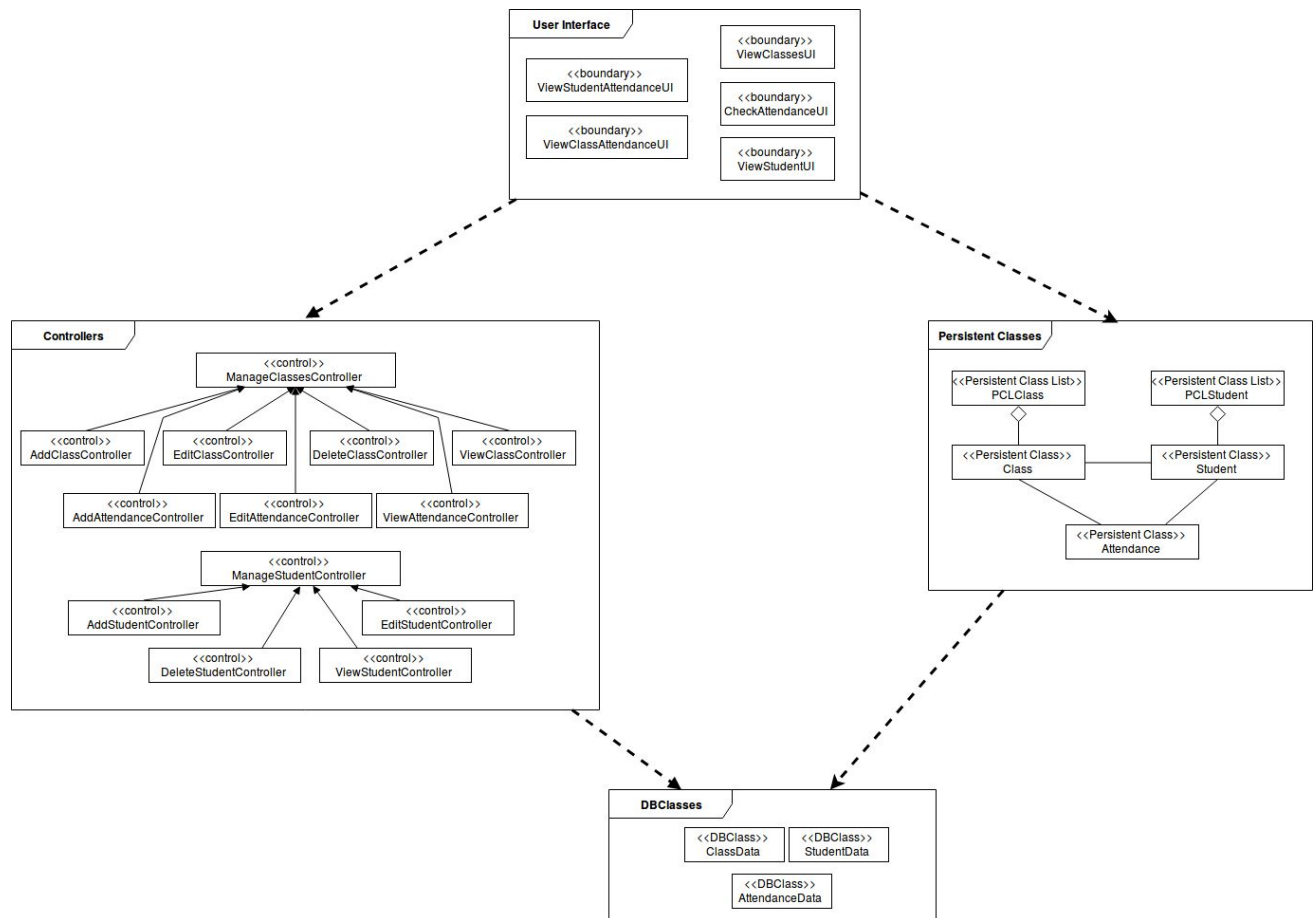Austria, Ronnel Roi
Gabriel, Kristianne Arielle

In partial fulfillment of Academic Requirements
for the course
CS 191 Software Engineering I
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Revision Control

History Revision:

Revision Date	*Person Responsible*	*Version Number*	*Modification*
11/19/17	Arielle Gabriel	1.0	Initial Document

Data Design:

User Interface

<<boundary>>
ViewStudentAttendanceUI

<<boundary>>
ViewClassAttendanceUI

<<boundary>>
ViewClassesUI

<<boundary>>
CheckAttendanceUI

<<boundary>>
ViewStudentUI

Controllers

<<control>>
ManageClassesController

<<control>>
AddClassController

<<control>>
EditClassController

<<control>>
DeleteClassController

<<control>>
ViewClassController

<<control>>
AddAttendanceController

<<control>>
EditAttendanceController

<<control>>
ViewAttendanceController

<<control>>
ManageStudentController

<<control>>
AddStudentController

<<control>>
EditStudentController

<<control>>
DeleteStudentController

<<control>>
ViewStudentController

Persistent Classes

<<Persistent Class List>>
PCLClass

<<Persistent Class List>>
PCLStudent

<<Persistent Class>>
Class

<<Persistent Class>>
Student

<<Persistent Class>>
Attendance

DBClasses

<<DBClass>>
ClassData

<<DBClass>>
StudentData

<<DBClass>>
AttendanceData

Data Access Object (DAO) 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 handles the creation of new Classes given the class name and class description.
EditClassController	This controller handles the edits to be done on an existing Class entity.
DeleteClassController	This controller handles the deletion 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 handles the creation of new Students from the imported file.
EditStudentController	This controller handles the edits to be done on an existing Student entity.
DeleteStudentController	This controller handles 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 handles the creation of a new Attendance entry 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.

TransferObject Classes:

Class Name	Description
Class	This contains the classes added by the teacher. Each class entry has following attributes: ID that is auto incremented, name which usually the course name, and a text description about the course (whether it is the class schedule, room, etc).
Student	This contains students identified by their student number and the class that they are enrolled in. Each student entry has following attributes: class id that is the same as the ID from the Class class, student number without a hyphen, and the student's last name and first name.
Attendance	This contains the attendance record identified using the class id, the student number, and the date. Each attendance entry has following attributes: class id that is the same ID as it is in the Class class, student id from the Student class, date which is the day of the attendance record, and entry whether the student is late, absent or present represented by ``L'', ``A'', and ``P'' respectively.

List of Data Source:

Data Source Name: students.csv
Description: Each line of the file contains student details enrolled under a class using the format "<Student Number>", "<Last Name>", "<First Name>".

Sample Source File:

```
"201301234","DELA CRUZ","Juan"
"201412345","HABAGAT","Alunsina"
"201523456","MAKILING","Maria"
```

Sample Tables from the Database:

CLASS

classID	className	classDesc
SMALLINT	VARCHAR(32)	VARCHAR(256)
99	X(32)	X(256)
PK		
1	CS 191 WFV	WF 10-11:30 CL3
2	CS 165 HTUV	T 10-12:00 Th 10-1:00 TL2
3	CS 174 MRU	M 8:00-11:00 CL1 TL3

STUDENT

classID	studentID	lastName	firstName
SMALLINT	VARCHAR(9)	VARCHAR(128)	VARCHAR(128)
99	999999999	X(128)	X(128)
PK,FK	**PK**		
1	201301234	DELA CRUZ	Juan
2	201412345	HABAGAT	Alunsina
3	201523456	MAKILING	Maria

ATTENDANCE

classID	studentID	date	entry
SMALLINT	VARCHAR(9)	DATE	CHAR(1)
99	999999999	YYYYMMDD	A | L | P
PK,FK	**PK,FK**	**PK**	
1	201301234	20171027	P
1	201412345	20171027	L
1	201523456	20171027	A