

# Digital Pink Card Analysis Model

Submitted to:

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## **Revision Control**

### **History Revision:**

<b>Revision Date</b>	<b>Person Responsible</b>	<b>Version Number</b>	<b>Modification</b>
10/25/17	Jann Willem Cai	1.0	Initial Document
10/26/17	Jann Willem Cai	1.1	Inputted created class diagram from scratch made by group beforehand & filled out some blanks
10/26/17	Pauline Ocampo	1.2	Minor formatting changes
10/27/17	Pauline Ocampo	1.3	Added system description, made minor changes to class descriptions

### **Purpose:**

To lay out the necessary foundations for the program: entity class for data, boundary class for interface, control class for programming logic.

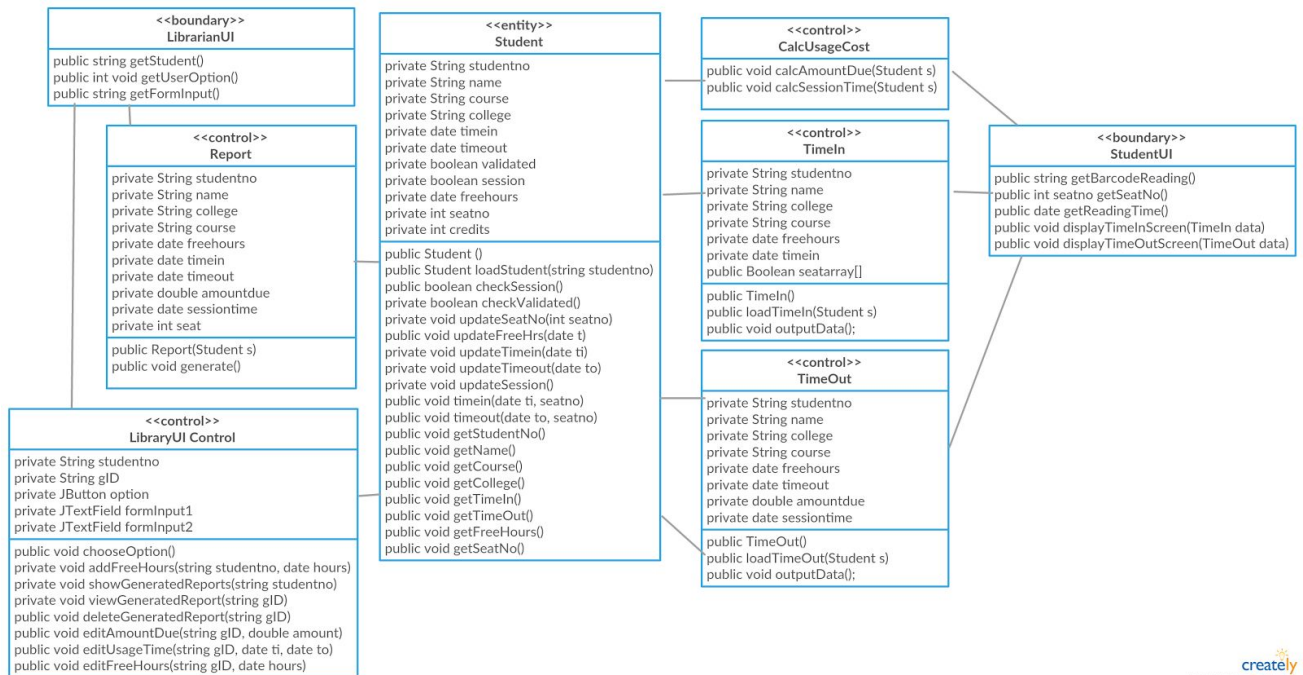
### **Audience:**

People who wants to know the entity, boundary, and control classes of Digital Pink Card project to get a deeper understanding of it.

**System Name:** Digital Pink Card

**Description:** The Digital Pink Card system serves as a digitization of the library internet usage pink card. Students time in and time out by scanning the barcode on their UP ID. The system tracks these time ins and time outs, along with the number of free internet hours they still have remaining for the semester. The system also provides an interface for the librarian-in-charge, which allows librarians to see and manage student records.

**Class Diagram:**



*Boundary Classes:*

Class Name	Description
StudentUI	The general user interface for students. It is responsible for getting the student's barcode information, his seat number, and time ins and outs. It is also responsible for displaying the information shown upon time in and time out.
LibrarianUI	The general user interface for librarians. User access should be limited to librarians only, as this interface allows modification of the database. It is responsible for allowing the librarian a way to enter a student number, and subsequently manage that student's reports.

### *Control Classes:*

<b>Class Name</b>	<b>Description</b>
CalcUsageCost	The control class containing the logic behind calculating how much a student should pay. It is responsible for calculating the amount of time used and the amount the student needs to pay.
Report	The control class containing the logic behind things when a librarian wants a report from the database.
TimeIn	The control class containing the logic behind things when a student times in.
TimeOut	The control class containing the logic behind things when a student times out.
LibraryUI Control	The control class containing the logic behind things only accessible to librarians, like changing incorrect report information and looking at generated reports.

### *Entity Classes:*

<b>Class Name</b>	<b>Description</b>
Student	Class that stores the data about a student relevant to the program. It is mainly responsible for retrieving and storing the time ins and time outs of a student to a database. It also calculates additional information such as the number of free hours remaining.