Digital Pink Card
User Interface Design

Submitted to:

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In partial fulfillment of Academic Requirements
for the course
CS 191 Software Engineering I
of the
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Unique Reference:

The documents are stored at: https://github.com/cadaroya/forgee

https://github.com/cadaroya/forgee/blob/master/03-Design%20Engineering/Digital%20Pink%20Card%20-%20User%20Interface%20Design.pdf

Document Purpose:

The purpose of this document is to document the improvements users suggested after they used the initial prototype made with Invision.

Target Audience:

The target audience is software engineers in charge of the user interface. This is in order to provide insight into what the program has and what needs to be changed based on the suggestion of the users or clients.

Revision Control:

| Revision Date	Person Responsible	Version Number	Modification
11/23/17	Jann Willem Cai	1.0	Initial Document
11/24/17	Pauline Ocampo	1.1	Filled out accountability report section
11/24/17	Jann Willem Cai	1.2	Filled out suggestions section excluding the section for Michelle Alandy
11/24/17	Pauline Ocampo	1.3	Added suggestions section for Michelle Alandy, minor flow changes to text

Project Title: Digital Pink Card

Use Case Specification:
The Digital Pink Card is a system that serves as a digitization of the UP Pink Card. Students who wish to use UP library computers scan the barcode on the back of their IDs upon start of their computer use time, and scan it again when done. The application tracks the student's total computer use, and starts charging the student once he has used more than the 20 free allotted computer hours. A report of each time-in and time-out is sent to the librarian in charge of tracking computer use.

Sample Screens:
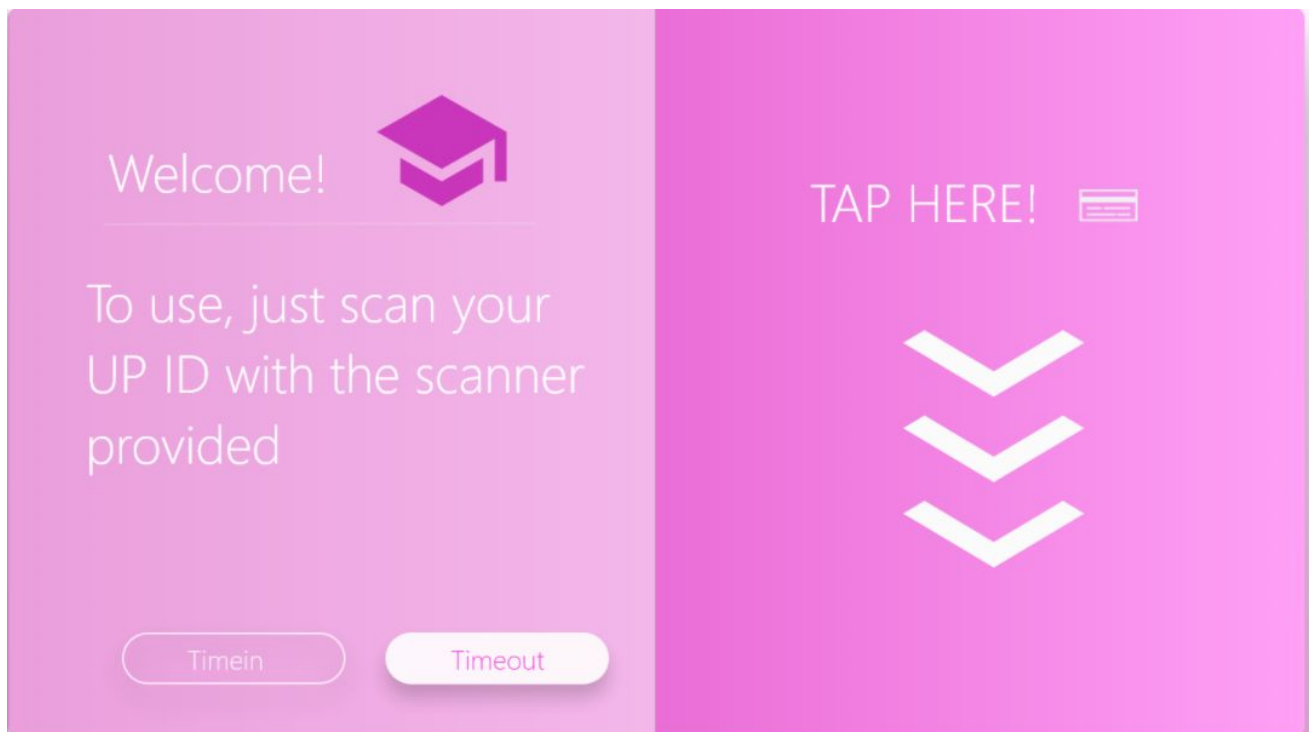
STUDENT NUMBER   201507397

LAST NAME   Dela Cruz

FIRST NAME   Juan

COLLEGE   Engineering

STATUS   Active

PICK A SEAT NUMBER

| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |

| 9 | 10 | | 13 | 14 | | 17 | 18 |
| 11 | 12 | | 15 | 16 | | 19 | 20 |

FREE HOURS

20:00

TIME IN

11:59 PM

HOME | REPORTS

Enter Student Number

STUDENT NUMBER	2015-00000
LAST NAME	Dela Cruz
FIRST NAME	Juan
COLLEGE	Engineering
VALIDATED	Yes

CREDITS

USAGE HISTORY
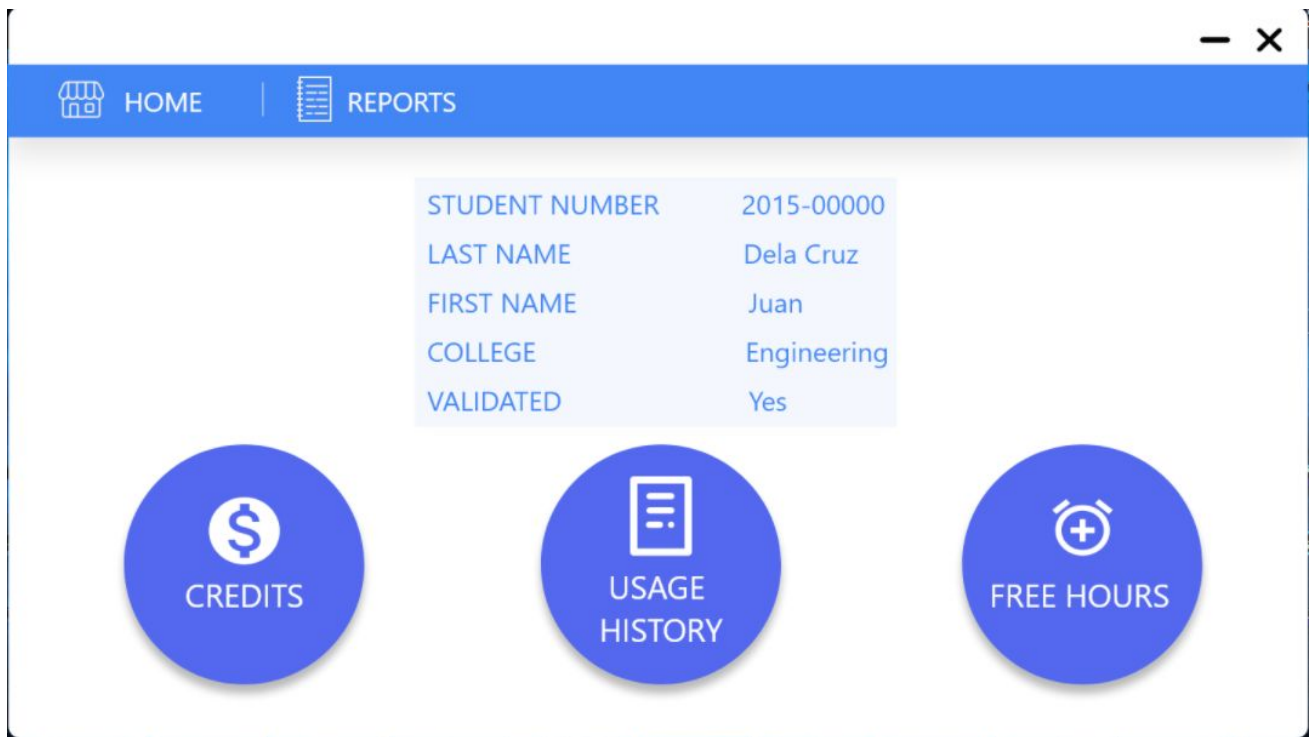
FREE HOURS

Date	Seat	Timein	Timeout	Free Hours
23/11/17	12	12:00	14:00	14:50
23/10/17	12	10:00	11:00	15:50
13/09/17	11	11:31	12:41	16:50
12/09/17	05	11:09	13:09	18:00

InVision Link(s):

https://projects.invisionapp.com/share/R5ELSAA7Z

Participatory Design:

The videos links are as follows:

1. Sir Juancho Coronel, professor in DCS, UP Diliman (video is divided in 2 unequal parts and face not seen due to request of Sir):
   a. Part 1: https://youtu.be/to2Z0i0QSLY
   b. Part 2: https://youtu.be/9diti02Virw

2. Miss Angela Zabala, student in DCS, UP Diliman
   https://www.youtube.com/watch?v=rpd2pWi_pLw

3. Miss Michelle Alandy, student in DCS, UP Diliman
   https://www.youtube.com/watch?v=TOBMOe5BsKE

Suggested Improvement(s):

Sir Juancho Coronel:

- In welcome / barcode scanning interface
  - Maybe do not use 2 frames

- In time in screen
  - There is too much emphasis on the free hrs and time in
  - Maybe put a pick random seat option
  - Make it clearer whether a seat is occupied or not
  - Put the current time somewhere
  - Maybe remove the college since it will just be used for college of engg anyways and it serves no purpose anyway

- In success screen
  - Put in the real recorded time in of student

- In timeout screen
  - Put a sign like "Pay to the librarian on <time> in <place>"
  - If it's still within free hrs, don't put up cost
  - Add a way to see the current debt of student

- In Librarian's UI
  - Instead of adding extra frames just clutter all necessary elements in one frame only
  - In the usage timetable, add a column for cost and change 24-hour format for timein and timeout Columns to 12-hour format to avoid confusion with free hours column
  - Add a way to see the current state of TLC
  - Add a way to see the current debt of student (or maybe it's credit already)

Miss Angela Zabala:

- In general:
  - Change color palette because it's not easily readable (too neon-like)
  - Pink color choice is weird (whisper at 01:00 of video)

- In time in screen
  - Change placements of elements because it feels weird

- In Librarian's UI
  - Instead of adding extra frames just clutter all necessary elements in one frame only
  - It doesn't feel like the same app as the student's UI

Miss Michelle Alandy:
- In general:
  - Use a different shade of pink (current almost-neon pink is too bright)
  - [Said off-camera, after video ended] For student UI screens, add a second color to contrast with the color pink so users don't get tired of looking at the color pink (Michelle suggested the color scheme white, grey and pink)

- In time in screen
  - Make sure final app does not allow taking an already-taken seat
  - For second time in screen (with scan instructions on the left and arrow column on the right), add a downward gradient on the right column arrow (rather than a sideways gradient)

- In timeout screen
  - Show a short message that says "Timeout successful!" there before it goes back to the main screen

- Librarian's UI
  - Add a back button on the check usage screen
  - Add a header to the top of the application bar to indicate what the app is
  - If scanned ID is not available, make sure none of the options on the librarian's screen are available

Accountability Report:

Team Member	User Interface Design Task
Carlos Adrian Daroya	Created the prototypes for the use cases
Pauline Ocampo	Facilitated and videotaped participatory design for Michelle Alandy and Angela Zabala; suggestions section for Michelle Alandy
Jann Willem Cai	Documentation (excluding suggestions section for Miss Michelle Alandy); videotaped Sir Juancho Coronel's participatory design