# Asia Pacific College Online Pre-Registration System

Project Documentation Submitted

To the Faculty of School of

Computer Science and Information Technology

Of

Asia Pacific College

In Partial Fulfillment of the Requirements for the subject

Applied Projects 2

By

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Table of Contents

[Project Title 1](#_Toc454543889)

[Abstract 3](#_Toc454543890)

[List of Figures, List of Tables, List of Notations 4](#_Toc454543891)

[I. Introduction 5](#_Toc454543892)

[1.1 Project Context 5](#_Toc454543893)

[1.2 Purpose and Description 5](#_Toc454543894)

[1.3 Objectives 5](#_Toc454543895)

[1.4 Scope and Limitations 5](#_Toc454543896)

[II. Related Literature 5](#_Toc454543897)

[III. Technical Background 5](#_Toc454543898)

[3.1 Include in-depth discussion on relevant technical aspects of this project 5](#_Toc454543899)

[IV. Design and Methodology 5](#_Toc454543900)

[4.1 Include discussions on conceptual design/system architecture/block diagrams and algorithms 5](#_Toc454543901)

[V. Results and Discussion 5](#_Toc454543902)

[VI. Conclusions and Recommendations 5](#_Toc454543903)

[VII. Appendices 5](#_Toc454543904)

# Abstract

# List of Figures, List of Tables, List of Notations

1. **Introduction**
   1. Project Context

The online pre-registration system project will be integrated with the FLAVIO system of Asia Pacific College (APC) and will be solely used by the APC community. With the use of the system, adding of subjects is taken into the next level. It eliminates the inconvenience of going to different places inside the school to successfully pre-register. It is just one click away from gadgets.

The system first requires authentication (username-password) to access FLAVIO and when students are logged in, they can access the pre-registration system along with the other systems such as Grades Viewer, Flowchart, Assessment Form and Masters List. When they open the pre-registration, they can input subjects they would like to add in their flowchart and that would be sent to the system as a request. The system sends it to the adviser, then approves or disapproves the request. After approving, the registrar updates the masters list and students’ flowchart.

* 1. Purpose and Description

All schools have systems created for students like Enrollment, Pre-registration, Grades Checker, Flowcharts, and Teachers Evaluation. With the use of technology, those features are being used online for easier access and convenience. But, not all schools have all features online.

In APC, the pre-registration system is currently manual wherein students can add subjects to their load at a given period for pre-registering. But before that, program directors of different schools create subjects then passes it to the registrar for verification like conflicting schedules and correct number of units. Then, the registrar updates the Masters List, where all subjects of all courses and its room, schedule and time are posted. Students are assigned in block sections that follow the same track of subjects and can view it at the Online Student’s Flowchart. The pre-registering starts when a student wants to add subjects due to failure in grades or to be ahead in the track of subjects. Certain steps are needed to be followed by students to successfully add a subject in their load. Problems arise in some of the steps resulting to inconvenience like conflicts of the schedule of the adviser and student and wrong input of subjects in students’ flowchart.

Thus, the researchers proposed an online pre-registering system project to satisfy the students, eliminate such problems (ex. conflicts in schedules, crowded offices) and maximize resources. The focus of this project are the students and their satisfaction because they greatly affect all aspects of the school. For example, if a room is too hot, students would not be able to focus properly and will be uninterested in listening to professors because they need the proper temperature in their classroom, thus, the school provides air conditioners. It is the same with the purpose of this project, which is to provide students what they need to satisfy them and to diminish inconvenience in manual pre-registration.

The project would be a new feature in APC’s FLAVIO System which students can access through the Internet in https://www.apc.edu.ph/flavio/inquiry/Login.php. Its existing features include Online Grades Viewer, Student Flowcharts, Masters List, and Registration Form. An online pre-registration feature can provide easier accessibility for students and convenience. It eliminates issues in manual pre-registering like conflicts in special cases, waiting time for the adviser in their office and the inconvenience of walking up and down the stairs.

* 1. Objectives

The objectives of the project are:

* To understand the flow of the current pre-registration process
* To build a prototype of the online pre-registration system
* To collect data from students about their feedback on the pre-registration system
* To look for sample algorithms that may serve as a basis for working on the project
* To provide convenience and satisfy the students, advisers, and APC Community
  1. Scope and Limitations

The APC Community will solely use the online pre-registration project. It will be integrated with the FLAVIO System for easy access and will require authentication for security purposes. Adding of subjects will be the project’s main feature. Once a student fills in the required fields for adding a subject, the request will be sent to the system where it sends the request to an adviser. Crashing of the pre-registration feature due to error in the code will be examined by the group members about such problems like overloading of database will be examined by the Information Technology Resources Office (ITRO) staff. Also, special cases (ex.: accreditation of subjects, advance taking of subjects, adding a subject even if maximum units are already met, etc.) would be settled manually for it requires human interaction in order to analyze further whether it is allowable.

/\* walang pang-mobile\*/

# Related Literature

* 1. Ateneo Integrated Student Information System (AISIS)

The Ateneo Integrated Student Information System (AISIS Online) is the portal for Ateneo students, faculty, and staff. Through the AISIS Online, officially enrolled Ateneo students may view pertinent school information including their IPS, grades, class schedules and the like. Students may also eventually enlist using AISIS Online. Ateneo faculty and staff with access to AISIS, on the other hand, may submit grades and access their class schedules from outside the campus.

Our project is similar in a sense that our system would like to use the web to provide the user information concerning his/her subjects that be modified. AISIS Online provides an Online Enlistment service that would give the students the convenience of modifying their subjects online. One of our project’s objectives is to provide convenience and satisfy the students, advisers, and APC Community. With this related literature, we can adopt or implement ideas that we have reviewed in the system and implement it to our proposed system. (Retrieved on August 19, 2016 from <http://aisisonline.ateneo.edu/index.php>)

* 1. De La Salle University Animo.sys Portal

De La Salle University has an online enrollment system which is Animo.sys portal that students can access for encoding the courses they want to take for the next term. Enrollment schedules are posted for students to know when to enroll. All students must have an activated My.LaSalle account to access the enrollment system open from 8 am until 8 pm from Mondays to Fridays in http://my.dlsu.edu.ph/. They must arrange all clearances first before or during the enrollment schedule. Students may have academic advising from the Graduate Program Coordinator of each course who is discussing about the subjects that students want to add. Then, students can check the course codes of the subjects they want to take. Schedules are given for students on when to enroll online. After enrolling, they may claim the Enrollment Assessment Form (EAF) which contains all the subjects they have encoded.

The features that Animo.sys Portal has some features similar to the manual pre-registration system of Asia Pacific College. For example, both systems provide course codes for students to know what subjects they want to add. Another is that both have academic advising for students to be notified whether they can take the subject or not due to different cases like failed pre-requisites, unfinished clearances and unpaid tuition fees. By having a background of how Animo.sys Portal works, it will be a great basis for creating our proposed project which is Asia Pacific College Online Pre-Registration System. (Retrieved on August 19, 2016 from https://my.dlsu.edu.ph/faq/, <http://www.dlsu.edu.ph/offices/registrar/enrollment.asp>)

* 1. University of the Philippines Computerized Registration System (UP CRS)

The Electrical and Electronics Engineering Institute in the University of the Philippines made an explanation about how the University of the Philippines’ Computerized Registration System (UP CRS) works. Students usually go through advanced enlistment during general registration. They also have advanced enlistment in the middle of the period. During advanced enlistment, students would submit a list of their desired subjects to their respective colleges. These lists are submitted online through the UP CRS. The UP CRS then processes these lists according to the student’s enrollment status. The results are to be printed as the UP Form 5-A. During the registration period, the subjects can be added or dropped from the Form 5-A due to different reasons. Then the different colleges would allocate new slots to those subjects that have been dropped by the students. These slots can be viewed in the UP CRS.

The UP CRS has the flexibility we would like our Pre-registration to have. The UP CRS has an option to add, drop and petition subjects online. The UP CRS can also show available slots to all subjects offered just like what APC has which is the Masters List. The UP CRS would be a great basis on what functionalities our Pre-registration system would have. (Retrieved on August 19, 2016 from http://www.eee.upd.edu.ph/academic-programs/enlistment/computerized-registration-system)

# Technical Background

Flavio is a system divided into two parts which are the main system and the Online Inquiry that are used by APC students and faculty. It was created with the use of Cobalt and since the proposed project is to be integrated with Flavio, the team members decided to use Cobalt Mark V, a code-generator framework for the front-end and back-end.

Cobalt uses XAMPP, a cross-platform web server that includes the Apache and MySQL modules which are used for the framework to run. The programming languages used are Hyper Text Markup Language (HTML) and Cascading Style Sheets (CSS) for the design and Hypertext Preprocessor (PHP) and MySQL for the logic. The project team members use Atom, a cross-platform source code editor to have an organized and proper platform for coding.

The hardware requirements of Cobalt were followed for the proposed system. Laptops and computers that are created from the last 7 years to present can be used to access the system. There are no specific Operating System requirements as long as it can use any web-server for PHP.

When implemented, APC students can access the system by logging in to https://www.apc.edu.ph/flavio using their existing accounts. Flavio accounts are created at the start of their stay at APC.

# Design and Methodology

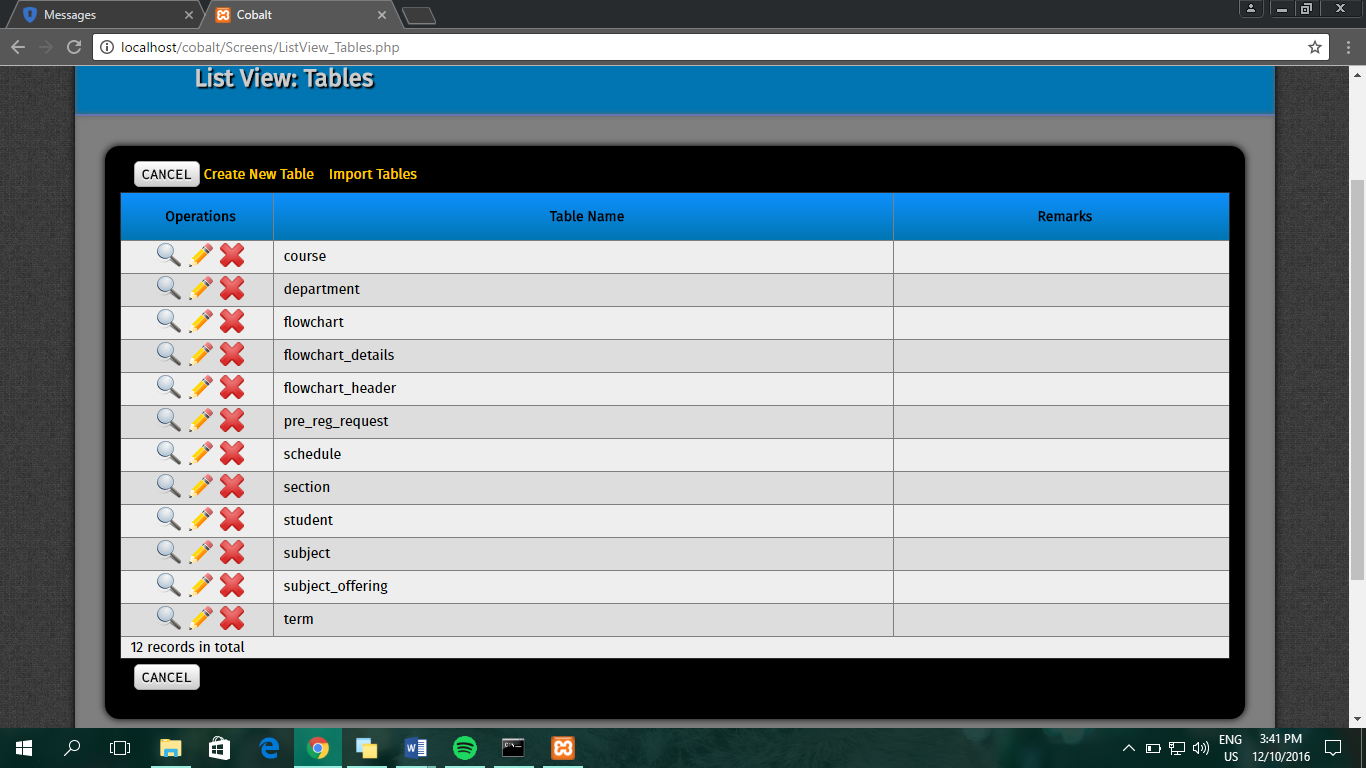
* Database
* Design
* Users
* Security
* Saan compatible
* Modularity-maintainability-reusability

To create the prototype of the proposed system, Cobalt was used for the front-end and the back-end. The web-server XAMPP was used all throughout the development because Cobalt requires a localhost server with the Apache and MySQL modules. The prototype was ran in the team’s preferred browser Google Chrome due to its /\*shit about google chrome kung bakit maayos\*/. /\*Pwede rin tanong sa CSO ano pinaka prefer or pinaka maganda for Cobalt\*/ 0….3

/\*explain pa pano dinesign yung db \*/

For the database, phpMyAdmin was used which is accessible by running XAMPP. All tables and data needed for the prototype was stored inside the database. Data are pre-created for presentation purposes in order to visualize the process of the system clearly. /\* Soon maiintegrate na with Flavio, so totoo na yung data\*/

Current Tables:



*Tables inside Cobalt*

To create the design of the prototype, Cobalt framework and XAMPP are used. In XAMPP Control Panel, Apache and MySQL module are started then access the localhost at preferred browser, for the project, Google Chrome is used. In localhost/phpmyadmin, an SQL File named cobalt is imported in order to access localhost/cobalt and the database for pre-registration is created. In localhost/cobalt, the project prototype can be created and the database created in phpmyadmin is used for the prototype. The tables from the database of the pre-registration is also used for the prototype. After generating the project created in localhost/cobalt, a new folder with new files of the prototype is created inside \xampp\htdocs\cobalt\Generator\Projects. The folder is cut and pasted in the webroot (\xampp\htdocs). After that, the project can already be accessed on the web browser in localhost/nameofproject.

For the project, there are two main users which are the root and the student (user). The student can add subjects for the following term. The root can edit other tables like the subjects offered and schedules.

# Results and Discussion

# Conclusions and Recommendations

The research conducted along with the development of the system proved that an online pre-registration system is attainable. Based on the results, a high percentage of students have positive feedbacks towards the prototype of the system. Currently, the project’s feature is the requesting of students for subjects by choosing and adding it to their load. Those requests are sent to their respective advisers for approval. Once the request is verified, the students are notified whether their requests are approved or not. Also, students can view their flowchart to see what are their subjects.

More work can be done in order to optimize the system and by that, the project members recommend to future researchers to include a module wherein students can view their registration forms with the pre-registered subjects. In addition, a module for showing the schedule of pre-registration periods can be useful for students to be notified and lessen problems regarding schedules.

# Appendices

## Relevant Source Code

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## Evaluation Tool or Test Document

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## Sample Input / Output Reports

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## User Guides

Upon the first enrollment of a student, the ITRO generates a FLAVIO account used for accessing both the main Flavio system and the Online Inquiry. Professors also have existing Flavio accounts. Therefore, there is no registration feature for the online pre-registration system.

* Allowed Users

APC students and professors

* Where to go

Users must access <http://apc.edu.ph/flavio>.

* Logging In

## One-page Curriculum Vitae per team member

**ROMULUS DIEGO PASCUAL GLORIA**

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**OBJECTIVE**

A managerial intern position where I can fully utilize my skills while making a significant contribution to the success of the company.

**EDUCATIONAL BACKGROUND**

Tertiary

Asia Pacific College

Magallanes, Makati City

Bachelor of Science in Computer Science

(undergraduate)

June, 2014-Present

Secondary

St. Scholastica’s College, Manila

Malate, Metro Manila

2010-2014

Elementary

St. Scholastica’s College, Manila

Malate, Metro Manila

2004-2009

**CERTIFICATIONS**

2015 Honor Student

**ORGANIZATIONS**

2014-present Member of Junior Philippine Computer Society

**RELATED SKILLS**

* Research Writing Skills
* Technical Skills (MS Word, Excel, PowerPoint, Use of Internet search engines, Email)
* Programming Skills (HTML, PHP, MySQL)

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* Programming Skills (HTML, PHP, MySQ

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