UPCC
Software Architecture

Submitted to:

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Revision Control

History Revision:

Revision Date	Person Responsible	Version Number	Modification
11/24/17	Ciana Lim	1.0	Initial Document. Added the Purpose, Audience, Description of the document, the Software Architecture Diagram, and the User Interface Design Classes.
11/28/17	James Abaja	2.0	Added the Data Design Classes and their descriptions.
11/29/17	Rayven Ely Cruz	3.0	Added Business Logic Classes and their descriptions.

Purpose:

This document's purpose is to show the software architecture of the UPCC system. This document has specifically done the software architecture for use cases 3.0, 3.1, and 4.0
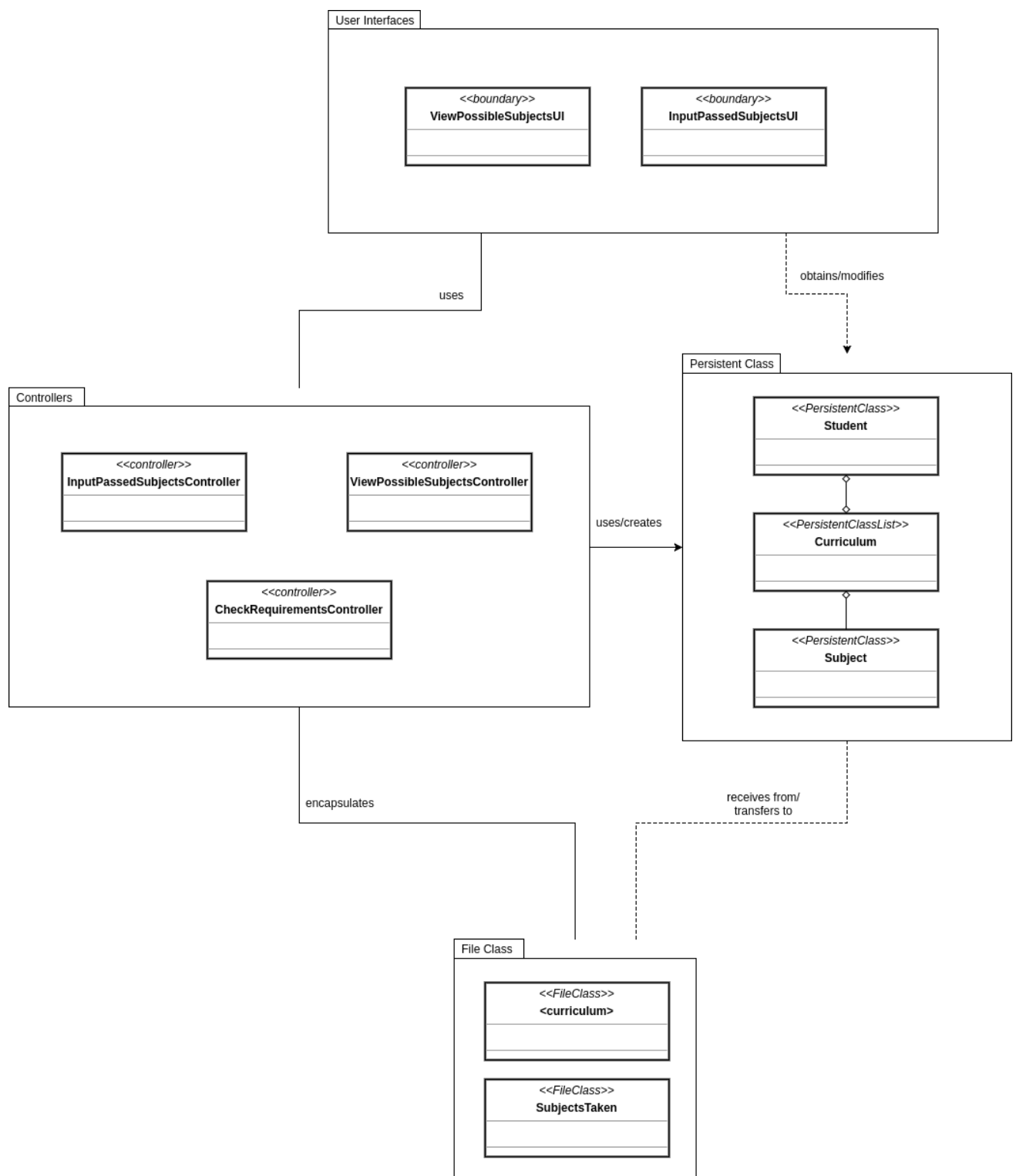
Audience:

The target audience of this document are the developers who are interested in continuing and extending the project, users who are interested in how the system works, and the professor handling the course.

System Name: UPCC

Description: The UPCC system allows UP Diliman students under the BS Computer Science (BS CS) program to select the curriculum they're currently following. They can also input the subjects they've already passed, and view the subjects they can take afterwards. The system also allows administrators to manage the curriculums by adding, editing, and deleting curriculums, and subjects. The document will focus on the input subject and the viewing subject aspect of the system.

Software Architecture Diagram:

User Interfaces

<<boundary>>
ViewPossibleSubjectsUI

<<boundary>>
InputPassedSubjectsUI

uses

obtains/modifies

Persistent Class

<<*PersistentClass*>>
Student

<<*PersistentClassList*>>
Curriculum

<<*PersistentClass*>>
Subject

Controllers

<<controller>>
InputPassedSubjectsController

<<controller>>
ViewPossibleSubjectsController

<<controller>>
CheckRequirementsController

uses/creates

encapsulates

receives from/
transfers to

File Class

<<*FileClass*>>
<curriculum>

<<*FileClass*>>
SubjectsTaken

User Interface Design Classes:

Screen Name	Description
InputPassedSubjectsUI	This interface allows the Student user to mark the subjects from the list. The marked subjects will then be sent to InputPassedSubjectsController which will update the list of subjects passed by the Student user.
ViewPossibleSubjectsUI	This interface allows the Student user to view the subjects that he/she can take.

Business Logic Classes:

Control	Description
InputPassedSubjectsController	This controller is in charge of marking the subjects that the Student user input.
CheckRequirementsController	This controller is in charge of checking which subjects the Student user can take given his/her passed subjects and updating the list of subjects that the Student user can take.
ViewPossibleSubjectsController	This controller is in charge of displaying the list of subjects that the Student user can take.

Data Design Classes:

Class Name	Description
Student	The Student class contains the information about the student, such as the curriculum being followed and subjects that have been taken by the student.
Curriculum	The Curriculum class defines the structure of a curriculum to be used inside the system. It contains the curriculum name, and list of subjects under the curriculum, defined under the Subject class.
Subject	The Subject class contains the information of a subject inside the Curriculum class such as the subject name, subject description, prerequisites and corequisites, etc.
<curriculum>	<curriculum> is a file class containing the list of subjects inside the curriculum with the name <curriculum>. It will be used as the main resource for the system to be referenced for the data about the curriculum and its subjects.
SubjectsTaken	SubjectsTaken is a file class containing the subjects already taken by the user, updated every time the user adds a subject to the list inside the system containing the subjects he/she has already taken, and along with it the total number of units for the computation of Junior and Senior standing.