

CoUPon: Check Out UP Orgs Now!

Data Design Document

Submitted to:

Asst. Prof. Ma. Rowena C. Solamo
Faculty Member
Department of Computer Science
College of Engineering
University of the Philippines, Diliman

Submitted by:
Araya, Carl
Comia, Camille
Florita, Nikki

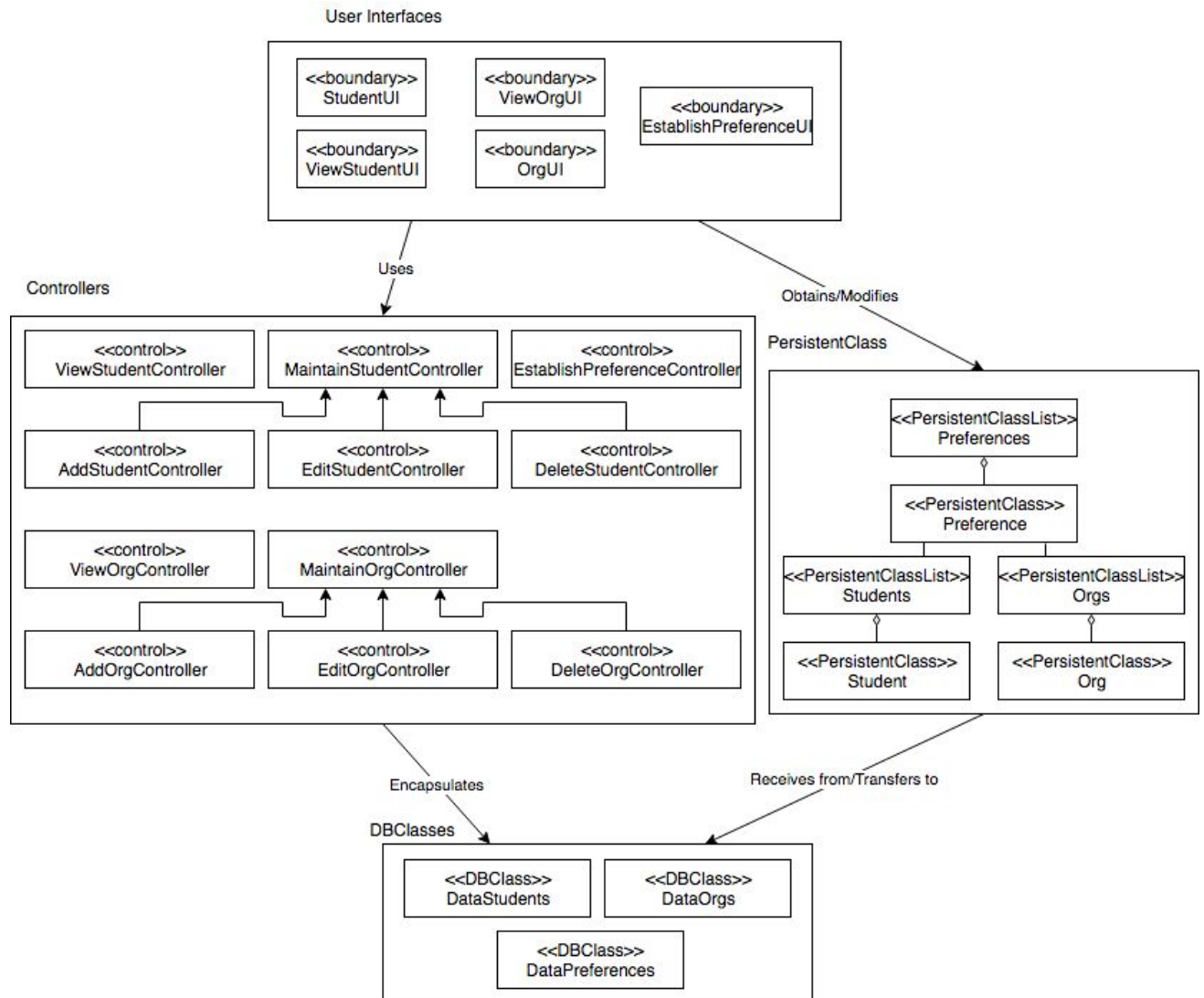
In partial fulfillment of Academic Requirements
for the course
CS 191 Software Engineering I
of the
1st Semester, AY 2017-2018

Revision Control

History Revision:

| <i>Revision Date</i> | <i>Person Responsible</i> | <i>Version Number</i> | <i>Modification</i> |
|---------------------------------|--------------------------------------|----------------------------------|--|
| 11/20/17 | Carl Araya | 1.0 | Initial Document |
| 11/22/17 | Carl Araya | 1.1 | Finalize everything since only member who currently takes database subject |
| 11/25/17 | Nikki Florita | 1.2 | Proofreading and modification of revision control |

Data Design:



Data Access Object (DAO) Classes:

| Class Name | Description |
|-------------------------------|---|
| MaintainStudentController | The main controller for maintaining the student entity. The class is extended by add, edit, and delete subclasses. |
| AddStudentController | Controller for adding a new entry to the student database. Calls the procedure addStudent() to create a new student entity. |
| EditStudentController | Controller for modifying an entry in the student database. Calls the procedure editStudent() to search for a specific entry and modify it. |
| DeleteStudentController | Controller for deleting an entry in the student database. Calls the procedure deleteStudent() to search for the specific entry and delete it. |
| ViewStudentController | Controller for viewing a student entry in the database. This is called when a specific org wants to view details of students who signed up to their org. getStudent() is called to search the entries and display through the ViewStudentUI boundary class. |
| EstablishPreferenceController | Controller for establishing relationship between student and org entities. A new preference entity is created when a student wants to join a specific org based from what is chosen in EstablishPreferenceUI boundary class. |
| MaintainOrgController | The main controller for maintaining the organization entity. The class is extended by add, edit, and delete subclasses. |
| AddOrgController | Controller for adding a new entry to the organization database. Calls the procedure addOrg() to create a new org entity. |
| EditOrgController | Controller for modifying an entry in the organization database. Calls the procedure editOrg() to search for a specific entry and modify it. |
| DeleteOrgController | Controller for deleting an entry in the organization database. Calls the procedure deleteOrg() to search for the specific entry and delete it. |
| ViewOrgController | Controller for viewing an organization entry in the student database. This is called when a student wants to view details about a certain organization. getOrg() is called to search the entries and display through the ViewOrgUI boundary class. |

TransferObject Classes:

| Class Name | Description |
|-----------------|---|
| DataStudents | Contains the details of that student which are the full name, year and course, birthday, student number and contact details. The entity is also associated with a student ID. It can be added, edited or deleted. |
| DataOrgs | Contains the information of that organization which are the name, official logo, description, and contact details. It also has a corresponding org ID. It can be added, edited or deleted. |
| DataPreferences | Establishes the relationship between the student and organization. It can only be accessed through the student. It can be added or deleted only. |

List of Data Source:

Data Source Name: coupondb

Description: Postgresql database

Sample Tables from the Database:

Student

| ID | LastName | FirstName | MI | Year | Course | Birthday | SNo | Email | Contact |
|----------|--------------|--------------|-------------|----------|--------------|----------|-------------|-------------------|--------------|
| SMALLINT | VARCHAR(100) | VARCHAR(100) | VARCHAR(10) | SMALLINT | VARCHAR(100) | DATE | VARCHAR(10) | VARCHAR(100) | VARCHAR(100) |
| PK | NN | NN | | NN | NN | NN | NN | NN | |
| 1 | Araya | Carl | A | 3 | BSCS | 1/1/2000 | 202012345 | carl@gmail.com | |
| 2 | Comia | Camille | | 3 | BSCS | 2/2/2000 | 202067890 | camille@gmail.com | |
| 3 | Florita | Nikki | | 3 | BSCS | 3/3/2000 | 202099999 | nikki@gmail.com | 09171234567 |

Org

| ID | Name | Logo | Description | Contact |
|----------|--------------|---------------|-------------|--------------|
| SMALLINT | VARCHAR(100) | MEDIUMBLOB | TEXT | VARCHAR(100) |
| PK | NN | NN | NN | NN |
| 1 | UP CSI | (binary file) | Lorem | 09061234567 |
| 2 | UP CURSOR | (binary file) | Ipsum | 09061111111 |

Preference

| StudentID | OrgID |
|-----------|----------|
| SMALLINT | SMALLINT |
| PK | PK |
| 1 | 1 |
| 1 | 2 |
| 2 | 2 |
| 3 | 1 |
| 3 | 2 |