Iskolendar
Data Design Document

Submitted to:

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In partial fulfillment of Academic Requirements
for the course
CS 191 Software Engineering I
of the
1st Semester, AY 2018-2019

Unique Reference:

The documents are stored in https://github.com/christelespino/iskolendar.

Document Purpose:

The purpose of this document is to show the data design of our system which uses a relational database to store persistent information.

Target Audience:

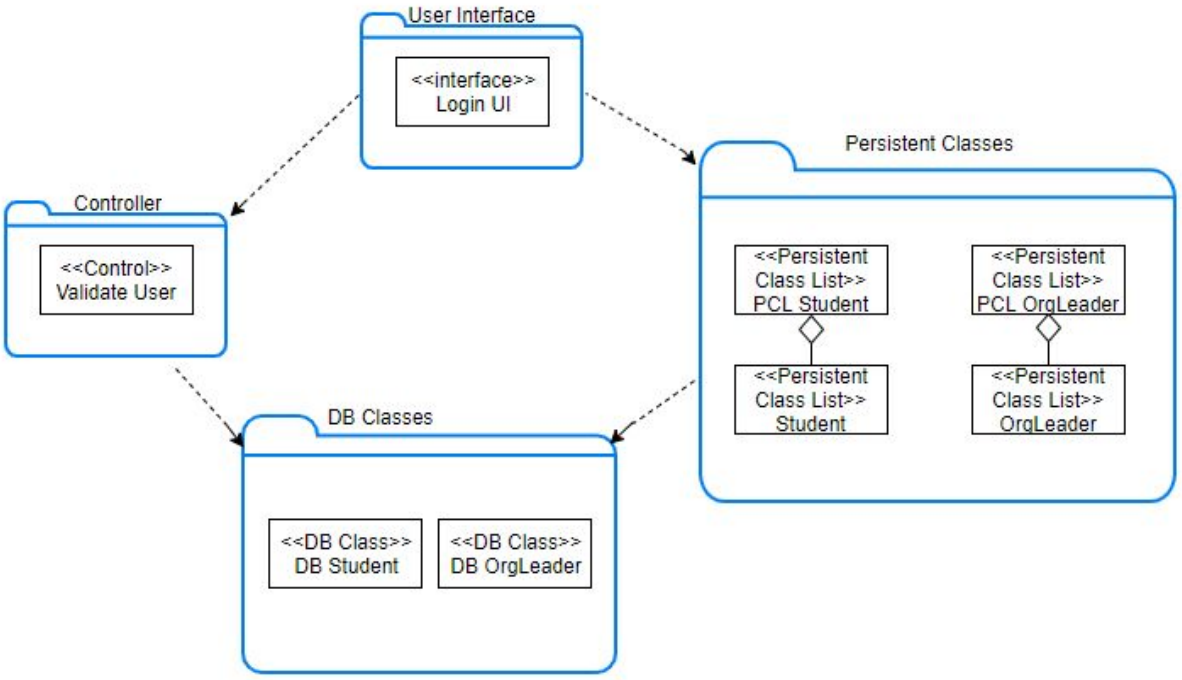
- UP Diliman College of Engineering organizations who need publicity for their events and announcements
- UP Diliman students who wish to be informed of the organizations' events

Revision Control

History Revision:

Revision Date	***Person Responsible***	***Version Number***	***Contribution/Modification***
10/21/2018	Christel Espino	1.0	Initial Document, Created initial draft of Data Diagram and Logical Database Design.
10/22/2018	Patrick Joseph Sanchez	1.1	Transferred the Data Diagram and Logical Database Design
10/22/2018	Christel Espino	1.2	Added the schema for Logical Database Design. Added descriptions for DBClasses.
10/23/2018	Patrick Joseph Sanchez	1.3	Filled the Persistent Classes Table.
10/23/2018	Allure Tanquintic	1.4	Added a Data Diagram.

Data Design: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Login UI
Controller
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Validate User
Persistent Classes
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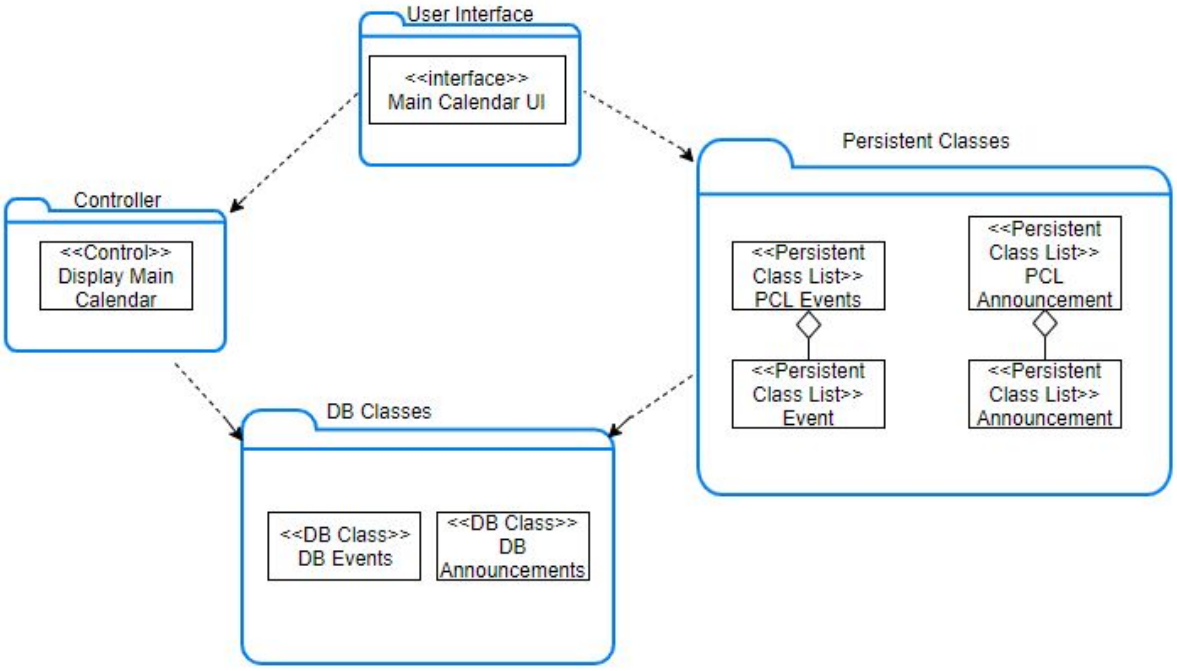
Class List>>
PCL Student
<<Persistent
Class List>>
PCL OrgLeader
<<Persistent
Class List>>
Student
<<Persistent
Class List>>
OrgLeader
DB Classes
<<DB Class>>
DB Student
<<DB Class>>
DB OrgLeader


User Interface
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Main Calendar UI
Controller
<<Control>>
Display Main
Calendar
Persistent Classes
<<Persistent
Class List>>
PCL Events
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Class List>>
PCL
Announcement
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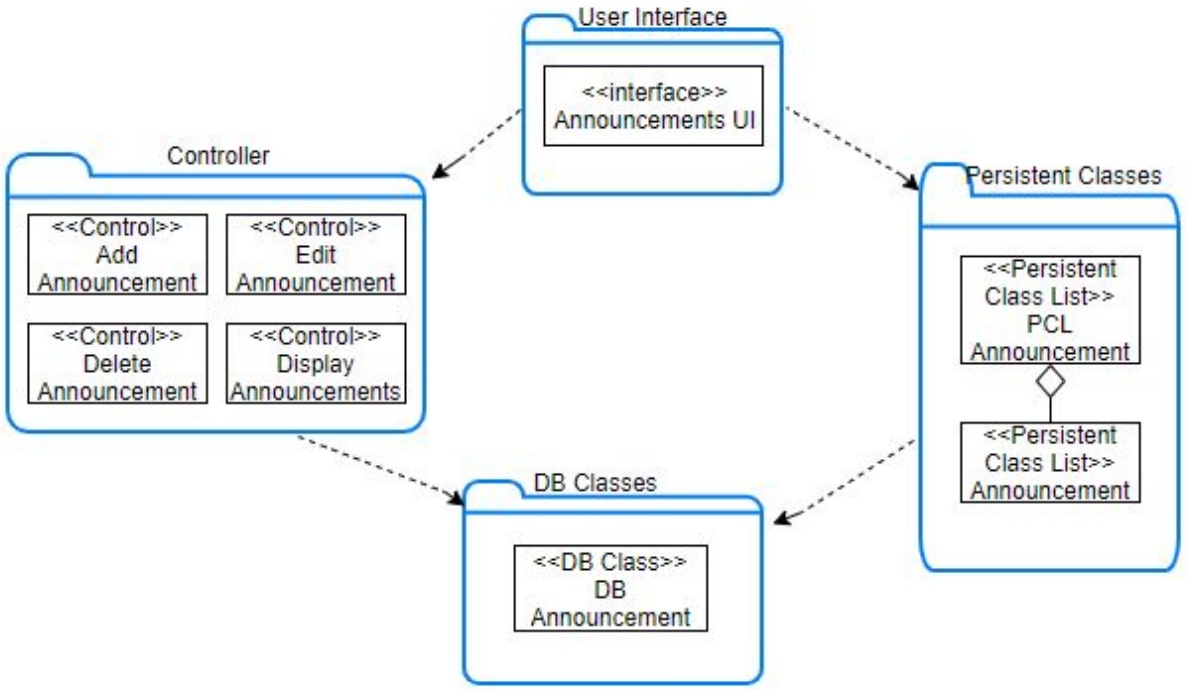
DB
Announcements


User Interface
<<interface>>
Announcements UI
Controller
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Add
Announcement
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Edit
Announcement
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Delete
Announcement
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Display
Announcements
Persistent Classes
<<Persistent
Class List>>
PCL
Announcement
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Class List>>
Announcement
DB Classes
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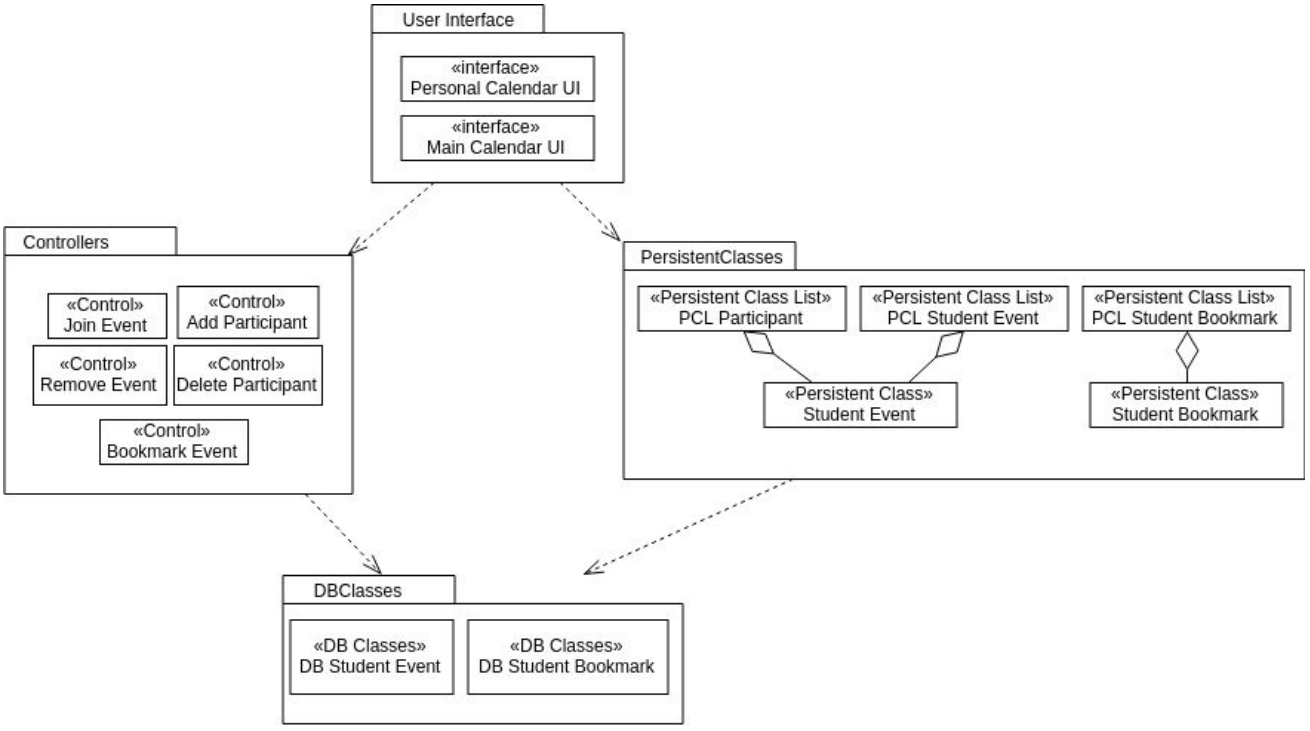
DB
Announcement


User Interface
«interface»
Personal Calendar UI
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Main Calendar UI
Controllers
«Control»
Join Event
«Control»
Add Participant
«Control»
Remove Event
«Control»
Delete Participant
«Control»
Bookmark Event
PersistentClasses
«Persistent Class List»
PCL Participant
«Persistent Class List»
PCL Student Event
«Persistent Class List»
PCL Student Bookmark
«Persistent Class»
Student Event
«Persistent Class»
Student Bookmark
DBClasses
«DB Classes»
DB Student Event
«DB Classes»
DB Student Bookmark

Data Access Object (DAO) or DBClasses:

Class Name	**Description**
DBStudent	This data access object is responsible for getting student data from a database.
DBOrgLeader	This data access object is responsible for getting org leader data from a database.
DBEvent	This data access object is responsible for getting data of a certain event from a database.
DBAnnouncement	This data access object is responsible for getting data of announcements from a database.
DBStudentEvent	This data access object is responsible for getting data of the events a student has joined for the personal calendar, and the participants for each event for the main calendar from a database.
DBStudentBookmark	This data access object is responsible for getting data of the events a student has bookmarked for the personal calendar.

TransferObject or Persistent Classes:

Class Name	**Description**
Student	This persistent class is responsible for holding a single student record
PCLStudent	This persistent class list is responsible for holding a list of student records.
OrgLeader	This persistent class is responsible for holding a single org leader record
PCLOrgLeader	This persistent class list is responsible for holding a list of org leader records.
Event	This persistent class is responsible for holding a single event record
PCLEvent	This persistent class list is responsible for holding a list of event records.
Announcement	This persistent class is responsible for holding a single announcement record
PCLAnnouncement	This persistent class list is responsible for holding a list of announcement records.
StudentBookmark	This persistent class is responsible for holding a single record of a student and an event he has bookmarked.
PCLStudentBookmark	This persistent class list is responsible for holding a list of students and events they have bookmarked.
StudentEvent	This persistent class is responsible for holding a single record of a student and an event he has joined.
PCLStudentEvent	This persistent class list is responsible for holding a list of records of students and events they have joined and correspondingly, events and their participants.

Database Name: Iskolendar Database
Description: This is the database that contains the information that will be displayed on the system's calendars and information about the users of the system. The following is the list of tables:

Tables	Descriptions
Student	It contains the record of all registered students.
OrgLeader	It contains the record of all registered Eng'g org leaders.
Event	It contains the events held by the organizations and their descriptions.
Announcement	It contains the log of announcements posted by org leaders.
StudentEvent	It contains the events each student will attend and correspondingly, the participants for each event.
StudentBookmark	It contains the events each student has bookmarked.

Logical Database Design:

STUDENT

SN_student	Username	Password	Name	DegProgram	Year	EmailAd
CHAR(9)	VARCHAR (20)	VARCHAR (20)	VARCHAR (250)	VARCHAR (250)	SMALLINT	VARCHAR(250)
X(9)	X(20)	X(20)	X(250)	X(250)	9	X(250)
PK,UA	**NN**	**NN**	**NN**			
201500123	jdcruz0	cruz123	Juan Dela Cruz	BS Computer Science	4	jdelacruz@up.edu.ph
201707777	ironman	rich	Tony Stark	BS Industrial Engineering	2	ironman@up.edu.ph
201609876	captainamerica	supersoldier	Steve Rogers	BS Chemical Engineering	3	null

ORGLEADER

SN_eol	Username	Password	Name	Position	Organization	OrgAcronym	DegProgram	EmailAd
CHAR(9)	VARCHAR (20)	VARCHAR (20)	VARCHAR (250)	VARCHAR (250)	VARCHAR (250)	VARCHAR (20)	VARCHAR (250)	VARCHAR(250)
X(9)	X(20)	X(20)	X(250)	X(250)	X(250)	X(20)	X(250)	X(250)
PK,UA	**NN**	**NN**	**NN**		**NN**	**PK,NN**		

201600180	Lily	collins180	Lily Collins	Vice President for External Affairs	UP Association of Civil Engineering Students	UP ACES	BS Civil Engineering	lily.collins@gmail.com
201515151	Brendon	urie151	Brendon Urie	President	UP Career Assistance Program for Engineering Students	UP CAPES	BS Chemical Engineering	burie@up.edu.ph
201502483	Falcon	wilson145	Samuel Thomas Wilson	Vice President for Public Relations	UP Circle of Industrial Engineering Majors	UP CIEM	BS Industrial Engineering	falcon@up.edu.ph

EVENT

EventID	**Title**	**DateStart**	**Date End**	**Time Start**	**TimeEnd**	**Type**	**OrgAcronym**	**Venue**	**Scope**	**Description**	**Limit**
SMALLINT	VARCHAR(250)	DATE	DATE	TIME	TIME	VARCHAR(50)	VARCHAR(20)	VARCHAR(250)	VARCHAR(50)	VARCHAR(5000)	SMALLINT
9999	X(250)	YYYY-MM-DD	YYYY-MM-DD	HH:MM:SS	HH:MM:SS	X(50)	X(20)	X(250)	X(50)	X(5000)	999
PK	**NN**	**NN**				**NN**	**NN**				
0001	Career Series	2018-10-02	2018-10-05	null	null	Seminar	UP CAPES	Engineering Colleges	College-restricted	A series of talks on possible career paths of Engineering students.	null
0002	IEshikawa 13	2018-10-19	2018-10-20	08:00:00	17:00:00	Competition	UP CIEM	Melchor Hall	Program-restricted	null	100
0003	Blackout: Retro Bliss	2018-10-19	null	19:30:00	null	Party	UP ACES	Circles Events Place	University-wide	null	300

ANNOUNCEMENT

AnnID	EventID	OrgAcronym	Body	DateCreated	SN_eol
SMALLINT	SMALLINT	VARCHAR(20)	VARCHAR(5000)	TIMESTAMP	CHAR(9)
9999	9999	X(20)	X(5000)	YYYY-MM-DD HH:MM:SS	X(9)
PK	**NN**	**NN**	**NN**	**NN**	**FK**
1003	0002	UP CIEM	Registration will now begin at 8AM instead of 9AM. Please be on time.	2018-09-10 12:42:03	201502483
1004	0003	UP ACES	To all attendees, please be in your retro attire. See you there!	2018-09-18 18:04:04	201600180
1005	0001	UP CAPES	Kindly check your MyCAPES accounts for the mechanics of the Career Series and the current standing of points.	2018-09-30 21:12:00	201515151

STUDENTEVENT

SN_student	EventID
CHAR(9)	SMALLINT
X(9)	9999
PK,UA,FK	**PK,FK**
201500123	0001
201707777	0002
201500123	0003
201707777	0001

STUDENTBOOKMARK

SN_student	EventID
CHAR(9)	SMALLINT
X(9)	9999
PK,UA	**PK,FK**
201707777	0003
201609876	0001
201609876	0003