# **Sked-it** Software Architectural Design

#### Submitted to:

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

Submitted by: Dela Sierra, Joshua Joseph Riki V. Garcia, Patric Charles M. Granda, Justin Gabriel R.

In partial fulfillment of Academic Requirements for the course CS 191 Software Engineering I of the 1st Semester, AY 2019-2020



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

System: sked-it Page 1 Version: 4.0 Group No: 3

#### Unique Reference:

The documents are stored in the https://github.com/jvdelasierra/sked-it/tree/master/03-Design%20Engineering/ referenced with Sked-it - Architectural Design.pdf.

#### Purpose:

The purpose of this document is to review and potentially revise the sked-it Analysis Model in order to further develop the software architecture of the application.

#### Audience:

The target audience of this document would be the developers of sked-it and anyone who is interested in our process of building an application.

#### Revision Control:

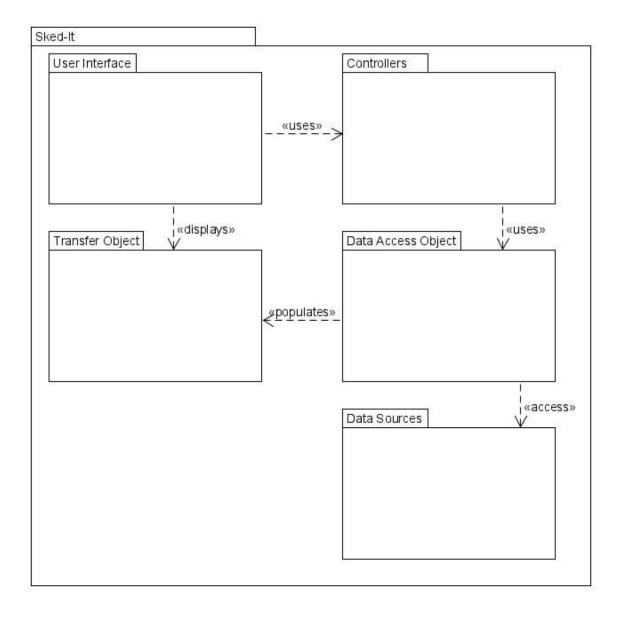
Revision Date	Person Responsible	Version Number	Contribution/Modification
10/28/2019	Joshua V. Dela Sierra	1.0	Initial Document
10/30/2019	Justin Tristan Gabriel R. Granda	2.0	Added User Interface and Controller Packages
10/30/2019	Justin Tristan Gabriel R. Granda	2.5	Added DAO, Transfer Objects and Data Source Packages
10/31/2019	Joshua V. Dela Sierra	3.0	Added Software Architecture Model Diagram
11/01/2019	Patric Charles M. Garcia	4.0	Added System Name and Description. Edited the Description of the Data Sources Package Table

System: sked-it Page 2 Version: 4.0 Group No: 3 **System Name:** sked-it

Description:

Sked-it is an app that we are proposing to make to help people manage their own personal schedules while being able to set-up meetings with other people. The app aims to provide users with a way to make a "routine" schedule which they could update if they have other things to do. One of the main features that we will implement is a Group Scheduling system where people in the same group will be allowed to view a portion of another person's schedule (controlled by the owner of the schedule) within the same group so that the people involved in the group can easily set-up their meetings based on their common free time. A person will then be notified of their schedule with a reminder sent to their phones.

#### Revised Software Architecture Model:



System: sked-it Page 3
Version: 4.0 Group No: 3

## User Interface Package:

Screen Name	Description
MonthCalendarUI	This is the interface of the end user to the system whenever he/she needs to manage his/her monthly calendar.
	Responsibilities: public void addEventCalendar(boolean addOrDelete, String date, String time, String description, String groupPrivacy) public void updateEventCalendar(String eventID, String date, String time, String description, String groupPrivacy) public void deleteEventCalendar(String eventID, boolean addOrDelete)
WeeklyTemplateCalendarUI	This is the interface of the end user to the system whenever he/she needs to manage his/her weekly template calendar.
	Responsibilities: public void addEventCalendar(boolean addOrDelete, String date, String time, String description, String groupPrivacy) public void updateEventCalendar(String eventID, String date, String time, String description, String groupPrivacy) public void deleteEventCalendar(String eventID, boolean addOrDelete)
WeeklyCalendarUI	This is the interface of the end user to the system whenever he/she needs to manage his/her weekly calendar.
	Responsibilities: public void addEventCalendar(boolean addOrDelete, String date, String time, String description, String groupPrivacy) public void updateEventCalendar(String eventID, String date, String time, String description, String groupPrivacy) public void deleteEventCalendar(String eventID, boolean addOrDelete)
DailyCalendarUI	This is the interface of the end user to the system whenever he/she needs to manage his/her daily calendar.
	Responsibilities: public void addEventCalendar(boolean addOrDelete, String date, String time, String description, String groupPrivacy) public void updateEventCalendar(String eventID, String date, String time, String description, String groupPrivacy) public void deleteEventCalendar(String eventID, boolean addOrDelete)
LoginUI	This is the interface of the end user to the system whenever he/she needs to enter the system.  Responsibility: public String enterLoginDetails(String email, String password)
CreateProfileUI	This is the interface of the end user to the system whenever he/she needs to create an account for the system.  Responsibility:  public String enterProfileDetails(String email, String password, boolean agreeOnTerms)

System: sked-it Version: 4.0 Page 4 Group No: 3

ForgetPasswordUI	This is the interface of the end user to the system whenever he/she forgot the password for the system.  Responsibility: public String enterDetails(String email)
LinkScheduleUI	This is the interface of the end user to the system whenever he/she needs to link a schedule to a group.  Responsibility: public String enterDetails(String groupCalendarID, string eventID)
ConfirmScheduleIO.	This is the interface of the end user to the system whenever he/she needs to link a schedule to a group.  Responsibility:  public String confirmDetails(String groupCalendarID, string eventID)  public String cancelDetails(String groupCalendarID, string eventID)

System: sked-it
Version: 4.0

Page 5
Group No: 3

## Controllers Package:

Controller Name	Description
ManageCalendarController	This controller handles creating, updating and deleting calendars for the user.
	Responsibilities: public void updateCalendar(String eventID, String date, String time, String description, String groupPrivacy)
AccountController	This controller is responsible for maintaining existing user accounts, including logging in and managing forgotten passwords.
	Responsibilities: public String loginSystem(String email, String password) public void RenewPassword(String email)
LinkScheduleController	This controller handles schedule linking (i.e. finding common free time between schedules).
	Responsibilities: public Schedule linkSchedules(String eventID_1, String eventID_2) public boolean isCommonTimeFound(String eventID)
ConfirmationController	This controller handles cases when users need to confirm their schedule with the group.
	Responsibilities: public String setConfirmedSched(Schedule a) public void cancelConfirmedSched(Schedule a)

System: sked-it
Version: 4.0

Page 6
Group No: 3

## Data Access Objects Packages:

DAO Name	Description
DBIndividual	This data access object is responsible for getting Individual data from a database.
DBGroup	This data access object is responsible for getting Group data from a database.
DBSchedule	This data access object is responsible for getting Schedule data from a database.

System: sked-it
Version: 4.0

Page 7

Group No: 3

## Transfer Objects Package:

Class Name	Description
Individual	This persistent class is responsible for holding a single athlete record
Schedule	This persistent class is responsible for holding a schedule record
Group	This persistent class is responsible for holding a single group record
PCLIndividual	This persistent class list is responsible for holding a list of Individual records.
PCLSchedule	This persistent class list is responsible for holding a list of Schedule records.
PCLGroup	This persistent class list is responsible for holding a list of Group records.

System: sked-it
Version: 4.0

Page 8
Group No: 3

### Data Sources Package:

Filename or Database Name	Descriptions
Individual	It contains the details of all the individual users in the sked-it app found in a relational database system.
Group	It contains the details of all the groups in the sked-it app found in a relational database system.
Schedule	It contains the schedules of all the users in the sked-it app found in a relational database system.

System: sked-it
Version: 4.0

Page 9

Group No: 3