

# Sked-it

## Software Architectural Design

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### ***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.

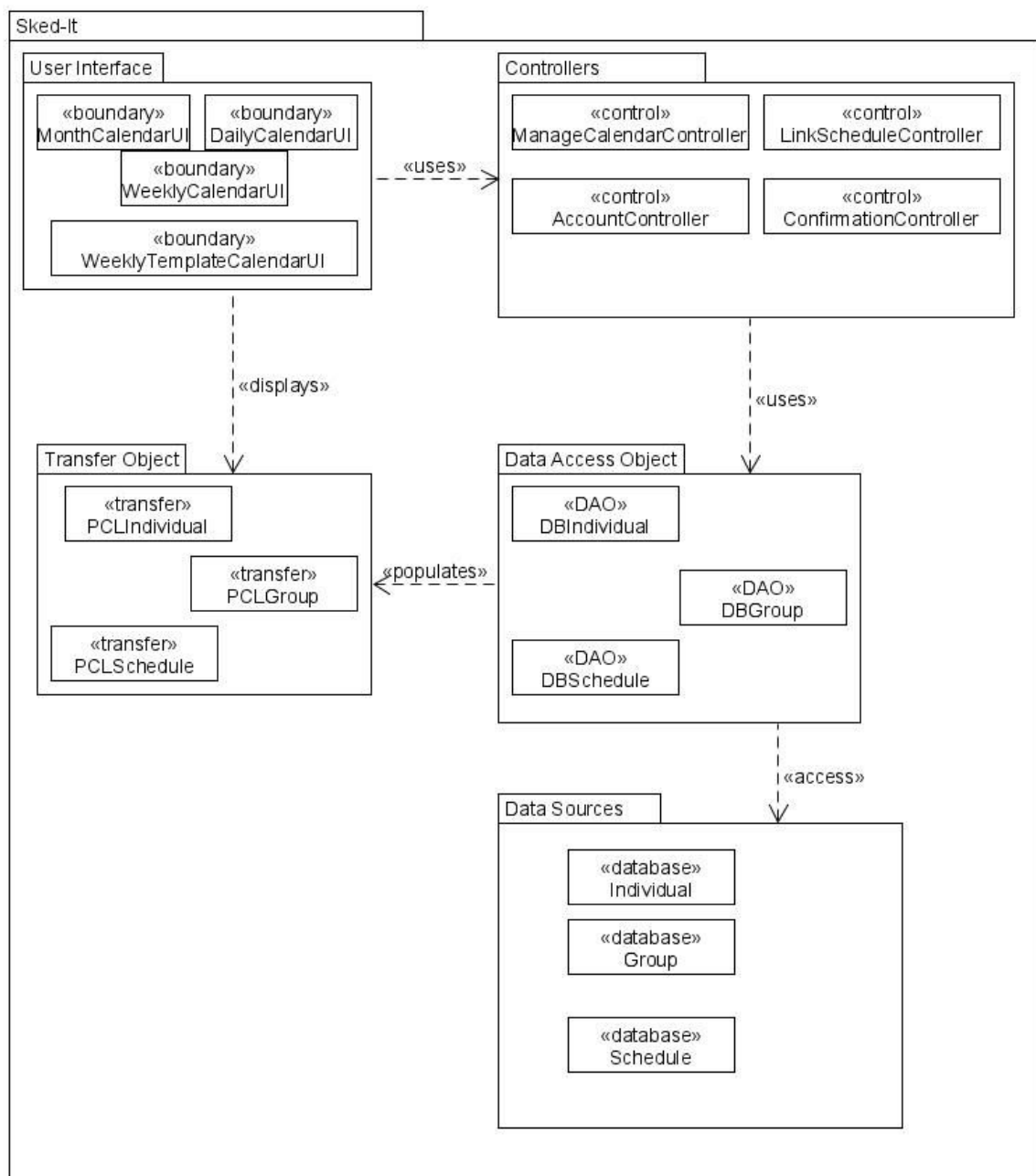
### ***Revision Control:***

| <b><i>Revision Date</i></b> | <b><i>Person Responsible</i></b> | <b><i>Version Number</i></b> | <b><i>Contribution/Modification</i></b>  |
|-----------------------------|----------------------------------|------------------------------|--|
| 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.<br>Edited the Description of the Data Sources Package Table |
| 11/01/2019                  | Joshua V. Dela Sierra            | 5.0                          | Revised SAM Diagram  |
| 31/01/2020                  | Justin Tristan Gabriel R. Granda | 6.0                          | Updated Data Source Packages   |

**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:**



### ***User Interface Package:***

| Screen Name              | Description   |
|--------------------------|---|
| MonthCalendarUI          | <p>This is the interface of the end user to the system whenever he/she needs to manage his/her monthly calendar.</p> <p>Responsibilities:</p> <pre>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)</pre>         |
| WeeklyTemplateCalendarUI | <p>This is the interface of the end user to the system whenever he/she needs to manage his/her weekly template calendar.</p> <p>Responsibilities:</p> <pre>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)</pre> |
| WeeklyCalendarUI         | <p>This is the interface of the end user to the system whenever he/she needs to manage his/her weekly calendar.</p> <p>Responsibilities:</p> <pre>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)</pre>          |
| DailyCalendarUI          | <p>This is the interface of the end user to the system whenever he/she needs to manage his/her daily calendar.</p> <p>Responsibilities:</p> <pre>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)</pre>           |
| LoginUI                  | <p>This is the interface of the end user to the system whenever he/she needs to enter the system.</p> <p>Responsibility:</p> <pre>public String enterLoginDetails(String email, String password)</pre>  |
| CreateProfileUI          | <p>This is the interface of the end user to the system whenever he/she needs to create an account for the system.</p> <p>Responsibility:</p> <pre>public String enterProfileDetails(String email, String password, boolean agreeOnTerms)</pre>  |

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

### *Controllers Package:*

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

*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.   |

***Transfer Objects Package:***

| <b>Class Name</b> | <b>Description</b>  |
|-------------------|---|
| 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.      |



*Data Sources Package:*

| Filename or Database Name | Descriptions  |
|---------------------------|---|
| Individual                | <p>It contains the details of all the individual users in the sked-it app found in a relational database system.</p> <p>Elements:<br/>email<br/>name<br/>hashed_password<br/>schedule</p>                                     |
| Group_Details             | <p>It contains the details of all the groups in the sked-it app found in a relational database system.</p> <p>Elements:<br/>groupID<br/>name<br/>members</p>  |
| Group_Members             | <p>It contains the members of all the groups in the sked-it app found in a relational database system.</p> <p>Elements:<br/>groupName<br/>groupMember</p>   |
| Group_Schedule            | <p>It contains the details of the group schedules in the sked-it app found in a relational database system.</p> <p>Elements:<br/>groupMember<br/>groupName<br/>eventID<br/>date<br/>timeStart<br/>timeEnd<br/>description</p> |
| Approved_Sched            | <p>It contains the details of the approved group schedules in the sked-it app found in a relational database system.</p> <p>Elements:<br/>email<br/>eventID</p>   |
| Schedule                  | <p>It contains the schedules of all the users in the sked-it app found in a relational database system.</p> <p>Elements:<br/>eventID</p>  |

|  |   |
|--|---|
|  | day<br>date<br>timeStart<br>timeEnd<br>description<br>email |
|--|---|