Sked-itSoftware Architectural Design

Submitted to:

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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:

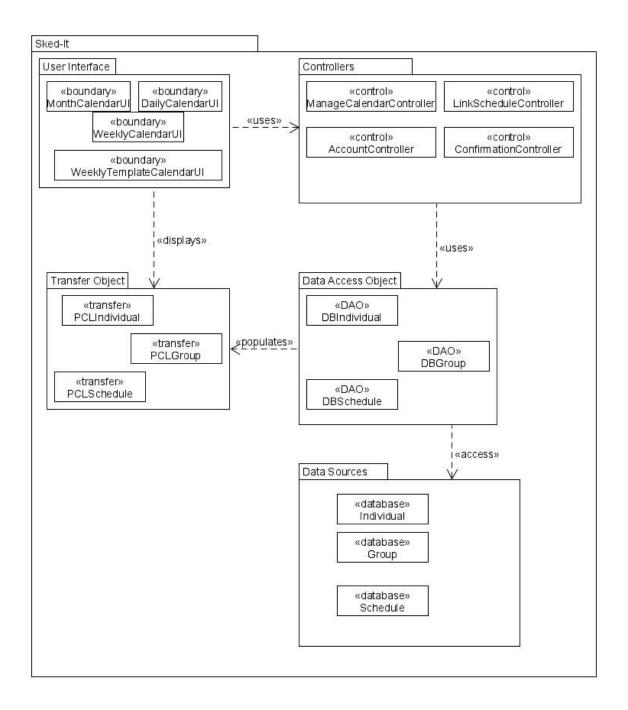
| Revision Date | Person Responsible | Version Number | Contribution/Modification |
|------------------|-------------------------------------|-------------------|---------------------------------------------------------------------------------------------|
| | | Number | |
| 10/28/2019 | Joshua V. Dela 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 |
| 11/01/2019 | Joshua V. Dela Sierra | 5.0 | Revised SAM Diagram |

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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:



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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) |

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| 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) |

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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) |

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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. |

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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. |

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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. |

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