

Project: ScheduLync
Team No.: 3
Class: CSE 3310; Spring 2024 Module: System Requirements Analysis (SRA) Deliverable: SRA Document

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Date: [3/28/2024]

Revision History

<i>Version number</i>	<i>Date</i>	<i>Originator</i>	<i>Reason for change</i>	<i>High-level description of changes</i>
1.0	3/28/2024	3	Initial draft	

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1. Introduction and Project Overview

This is a calendar app that allows individuals to share schedules and personal calendars in an effort to make plans with one another. It will show the certain days and specific times that someone is available. To begin, a calendar must be imported. When wanting to propose a plan with someone, an individual would tap on one of the available spots of that specific person's availability in their calendar. It can also be sent to a group of multiple people. The app would then send a request with the description of the event to the desired people. The receiver can then accept, decline, or request a different day and time. This app solves the problem of not having an organized shared calendar to plan events with others. It can be used as a social calendar with multiple friends, a way to plan meeting times between co-workers, a shared calendar of important events with family members, an organized schedule for a workplace, and more.

2. Objectives

2.1 BUSINESS OBJECTIVES

The following is a list of business objectives:

Objective 1: Member: All members must complete the following prior to using the system:

- Login using Gmail
- Set up a member profile. This consists of:
 - Display name
 - Profile Picture (optional)

Objective 2: Search: The member must choose to search through the calendar by date, keyword, or a person's name.

Objective 3: Calendar View: The member must choose to filter the calendar view by month, week, or day.

Objective 4: Event Management: The leader of a group has the ability to modify any internal details of an event prior to sending out proposals.

Objective 5: Group Creation: The group leader makes the group and adds/removes members. You must be a group leader to manage members inside the group.

Objective 6: Import Calendar: You should pull your google calendar to ScheduLync to match and manage free times in between existing events inside of google calendar.

2.2 SYSTEM OBJECTIVES

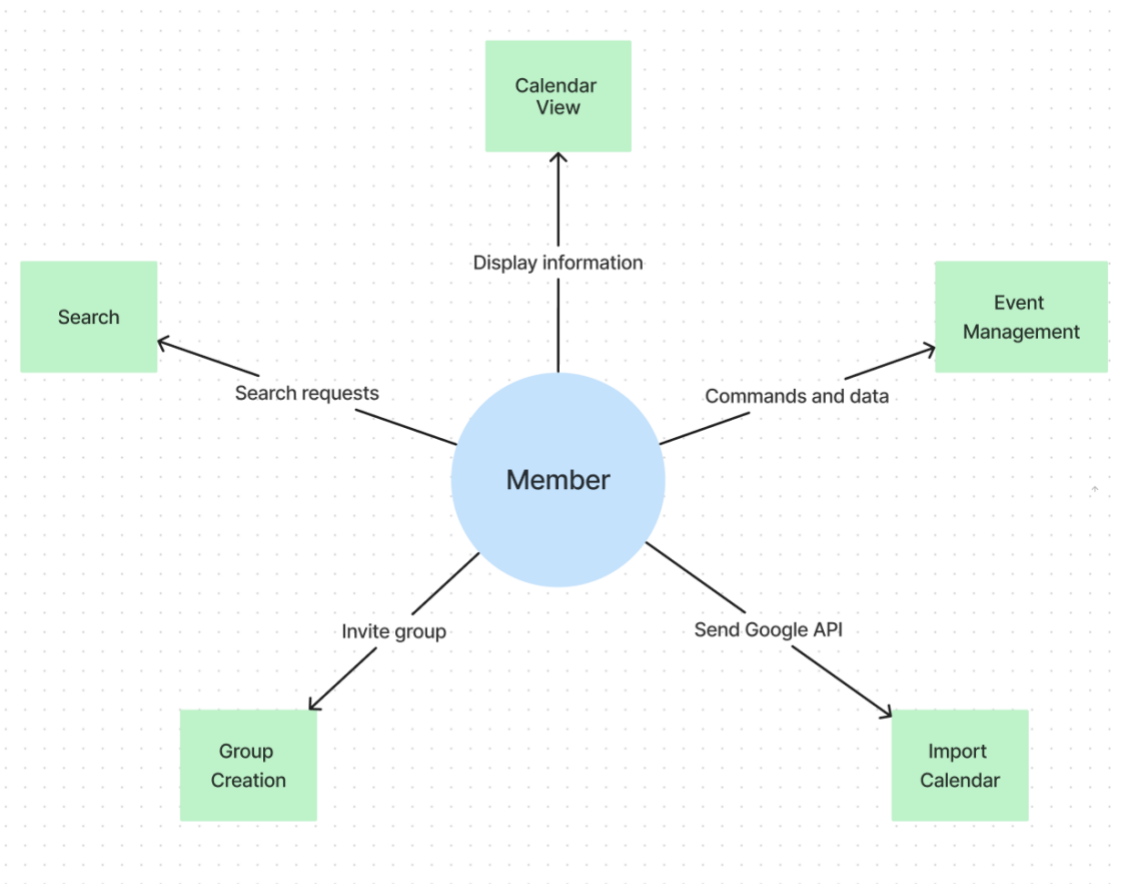
The following is a list of system objectives:

Objective 1: System will be an Android based Mobile system

Objective 2: Google login API will be utilized

Objective 3: Google calendar API will be utilized

3. Project Context Diagram



4. Systems Requirements

4.1 “MEMBER” REQUIREMENTS

REQUIREMENT TITLE:	MEMBER
SEQUENCE No:	001
SHORT DESCRIPTION:	SET UP MEMBER PROFILE
DESCRIPTION:	<p>NEW MEMBERS MUST SET UP A MEMBER PROFILE BEFORE ACCESSING THE APPLICATION. THE FOLLOWING INFORMATION WILL BE COLLECTED:</p> <ul style="list-style-type: none">- Display name- Profile picture (optional) <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none">- Submit- Cancel (i.e., discard changes)- Exit screen (or close)
PRE-CONDITIONS:	<ul style="list-style-type: none">- MUST HAVE LOGGED IN USING GMAIL
POST CONDITIONS:	<ul style="list-style-type: none">- NONE
OTHER ATTRIBUTES:	<ul style="list-style-type: none">- NONE

REQUIREMENT TITLE:	MEMBER
SEQUENCE No:	002
SHORT DESCRIPTION:	REGULAR MEMBER
DESCRIPTION:	A REGULAR MEMBER HAS ACCESS TO ALL APPLICATION FUNCTIONALITIES, EXCEPT FOR ADDING AND REMOVING MEMBERS FROM GROUPS.
PRE-CONDITIONS:	- MUST HAVE LOGGED IN & SET UP A MEMBER PROFILE
POST CONDITIONS:	- NONE
OTHER ATTRIBUTES:	- NONE

REQUIREMENT TITLE:	MEMBER
SEQUENCE No:	003
SHORT DESCRIPTION:	GROUP OWNER
DESCRIPTION:	A GROUP OWNER HAS ACCESS TO ALL APPLICATION FUNCTIONALITIES, IN ADDITION TO ADDING AND REMOVING MEMBERS FROM A GROUP.
PRE-CONDITIONS:	- MUST HAVE LOGGED IN & SET UP A MEMBER PROFILE
POST CONDITIONS:	- NONE
OTHER ATTRIBUTES:	- NONE

4.2 “SEARCH” REQUIREMENTS

REQUIREMENT TITLE:	SEARCH
SEQUENCE No:	001
SHORT DESCRIPTION:	SEARCH BY DATE
DESCRIPTION:	<p>ALLOW THE MEMBER TO CHOOSE THE SEARCH BY DATE OPTION TO SEARCH FOR A SPECIFIC EVENT OR SEE IF THEY HAVE ANYTHING SCHEDULED ON A SPECIFIC DAY IN THEIR APP. ENTER THE DATE TO SEARCH BY.</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none">- Submit- Exit (or close)
PRE-CONDITIONS:	<ul style="list-style-type: none">- MEMBER MUST HAVE EVENTS TO SEARCH THROUGH
POST CONDITIONS:	<ul style="list-style-type: none">- NONE
OTHER ATTRIBUTES:	<ul style="list-style-type: none">- NONE

REQUIREMENT TITLE:	SEARCH
SEQUENCE No:	002
SHORT DESCRIPTION:	SEARCH BY KEYWORD
DESCRIPTION:	<p>ALLOW THE MEMBER TO CHOOSE THE SEARCH BY KEYWORD OPTION TO SEARCH FOR A SPECIFIC THING IN THEIR APP. ENTER THE KEYWORD TO SEARCH BY.</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none"> - Submit - Exit (or close)
PRE-CONDITIONS:	<ul style="list-style-type: none"> - MEMBER MUST HAVE EVENTS/PEOPLE TO SEARCH THROUGH
POST CONDITIONS:	<ul style="list-style-type: none"> - NONE
OTHER ATTRIBUTES:	<ul style="list-style-type: none"> - NONE

REQUIREMENT TITLE:	SEARCH
SEQUENCE No:	003
SHORT DESCRIPTION:	SEARCH BY PERSON
DESCRIPTION:	<p>ALLOW THE MEMBER TO CHOOSE THE SEARCH BY PERSON OPTION TO SEARCH FOR A SPECIFIC PERSON OR SEE IF THEY HAVE ANYTHING SCHEDULED WITH THAT PERSON IN THEIR APP. ENTER THE PERSON'S NAME TO SEARCH BY.</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none"> - Submit - Exit (or close)
PRE-CONDITIONS:	- MEMBER MUST HAVE PEOPLE TO SEARCH THROUGH
POST CONDITIONS:	- NONE
OTHER ATTRIBUTES:	- NONE

REQUIREMENT TITLE:	SEARCH
SEQUENCE No:	004
SHORT DESCRIPTION:	SEARCH RESULT FOUND
DESCRIPTION:	THE MEMBER'S SEARCH WAS VALID AND HAD A RESULT. THE MEMBER CAN SCROLL/LOOK THROUGH THE RESULT(S).
PRE-CONDITIONS:	- RESULT MUST BE VALID
POST CONDITIONS:	- SHOW THE RESULT(S) OF THE SUCCESSFUL SEARCH
OTHER ATTRIBUTES:	- NONE

REQUIREMENT TITLE:	SEARCH
SEQUENCE No:	005
SHORT DESCRIPTION:	NO SEARCH RESULT FOUND
DESCRIPTION:	<p>THERE WERE NO RESULTS IN THE MEMBER'S SEARCH. THE MEMBER CAN CHOOSE TO EXIT THE SCREEN OR TRY USING A DIFFERENT SEARCH.</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none"> - Exit - Submit
PRE-CONDITIONS:	<ul style="list-style-type: none"> - RESULT MUST BE INVALID OR THERE ARE NO RESULTS REGARDING THE MEMBER'S SEARCH
POST CONDITIONS:	<ul style="list-style-type: none"> - DISPLAY A "NO DATA FOUND" MESSAGE ON THE SCREEN
OTHER ATTRIBUTES:	<ul style="list-style-type: none"> - ALLOW MEMBER TO TRY AGAIN USING EITHER OF THE THREE CHOICES OR EXIT THE SEARCH

4.3 "CALENDAR VIEW" REQUIREMENTS

REQUIREMENT TITLE:	CALENDAR VIEW
SEQUENCE No:	001
SHORT DESCRIPTION:	VIEW BY MONTH
DESCRIPTION:	<p>ALLOW THE MEMBER TO FILTER THE CALENDAR TO VIEW BY MONTH. THIS OPTION WILL SHOW THE CALENDAR BY MONTH.</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none">- Month- Exit
PRE-CONDITIONS:	<ul style="list-style-type: none">- THE CURRENT DAY MUST BE KNOWN
POST CONDITIONS:	<ul style="list-style-type: none">- THE DISPLAY SCREEN WILL BE CHANGED TO THE SPECIFIC VIEW
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	CALENDAR VIEW
SEQUENCE No:	002
SHORT DESCRIPTION:	VIEW BY WEEK
DESCRIPTION:	<p>ALLOW THE MEMBER TO FILTER THE CALENDAR TO VIEW BY WEEK. THIS OPTION WILL SHOW THE CALENDAR BY WEEK.</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none"> - Week - Exit
PRE-CONDITIONS:	<ul style="list-style-type: none"> - THE CURRENT DAY MUST BE KNOWN
POST CONDITIONS:	<ul style="list-style-type: none"> - THE DISPLAY SCREEN WILL BE CHANGED TO THE SPECIFIC VIEW
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	CALENDAR VIEW
SEQUENCE No:	003
SHORT DESCRIPTION:	VIEW BY DAY
DESCRIPTION:	<p>ALLOW THE MEMBER TO FILTER THE CALENDAR TO VIEW BY DAY. THIS OPTION WILL SHOW THE CALENDAR BY DAY.</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none"> - Week - Exit
PRE-CONDITIONS:	<ul style="list-style-type: none"> - THE CURRENT DAY MUST BE KNOWN
POST CONDITIONS:	<ul style="list-style-type: none"> - THE DISPLAY SCREEN WILL BE CHANGED TO THE SPECIFIC VIEW
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	CALENDAR VIEW
SEQUENCE No:	004
SHORT DESCRIPTION:	DISPLAY VIEW
DESCRIPTION:	<p>DEPENDING ON WHICH OPTION IS CHOSEN BY THE MEMBER, THE SCREEN WILL SHOW THAT SPECIFIC OPTION VIEW. THE DEFAULT VIEW IS BY MONTH. THE MEMBER WILL BE ABLE TO SCROLL THROUGH THE CALENDAR TO SEE FUTURE EVENTS AND PAST EVENTS.</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none"> - Exit
PRE-CONDITIONS:	<ul style="list-style-type: none"> - THE MEMBER MUST HAVE CHOSEN A SPECIFIC VIEW OPTION
POST CONDITIONS:	<ul style="list-style-type: none"> - DISPLAY THE VIEW THAT IS CHOSEN BY THE MEMBER
OTHER ATTRIBUTES:	<ul style="list-style-type: none"> - ONCE AN OPTION IS CHOSEN, THE MEMBER CAN CHOOSE A DIFFERENT OPTION TO VIEW THE CALENDAR BY

4.4 “EVENT MANAGEMENT” REQUIREMENTS

REQUIREMENT TITLE:	EVENT MANAGEMENT
SEQUENCE No:	001
SHORT DESCRIPTION:	PROPOSE EVENT
DESCRIPTION:	<p>THE MEMBER SHOULD BE ABLE TO PROPOSE THE EVENT AFTER CREATING IT WHICH IS ESSENTIALLY ASKING/REQUESTING AN EVENT.</p> <ul style="list-style-type: none">- Can propose to group(s) <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none">- Propose- Cancel
PRE-CONDITIONS:	<ul style="list-style-type: none">- AN EVENT MUST BE CREATED PRIOR TO PROPOSAL
Post CONDITIONS:	<ul style="list-style-type: none">- WILL SAVE/UPDATE INFORMATION OF THE EVENT REGARDING WHO ACCEPTS AND DECLINES
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	EVENT MANAGEMENT
SEQUENCE No:	002
SHORT DESCRIPTION:	UPDATE EVENT
DESCRIPTION:	<p>THE MEMBER CAN UPDATE INFORMATION OF AN EVENT IF THINGS HAPPEN TO CHANGE. THESE CHANGES CAN CONSIST OF:</p> <ul style="list-style-type: none"> - Location - Time - Date - Description
PRE-CONDITIONS:	<ul style="list-style-type: none"> - AN EVENT MUST BE CREATED PRIOR TO UPDATE - CAN ONLY BE UPDATED PRIOR TO PROPOSAL AS WELL
POST CONDITIONS:	NONE
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	EVENT MANAGEMENT
SEQUENCE No:	003
SHORT DESCRIPTION:	DELETE EVENT
DESCRIPTION:	<p>THE CREATOR/GROUP LEADER CAN DELETE THE ENTIRE EVENT IF NEEDED. THE MEMBER, WHEN IN THE EVENT MANAGEMENT SCREEN, CAN PRESS:</p> <ul style="list-style-type: none"> - Delete event (Will ask “Are you sure?” if clicked on) - Cancel
PRE-CONDITIONS:	<ul style="list-style-type: none"> - AN EVENT MUST BE CREATED PRIOR TO DELETION
POST CONDITIONS:	<ul style="list-style-type: none"> - EVENT AND ALL ITS INFORMATION WILL BE PERMANENTLY DELETED
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	EVENT MANAGEMENT
SEQUENCE No:	004
SHORT DESCRIPTION:	RECEIVE EVENT
DESCRIPTION:	<p>ALLOWS THE MEMBER TO RECEIVE A PROPOSAL/INVITE TO AN EVENT VIA EMAIL/APP NOTIFICATIONS. WHEN THE MEMBER CLICKS ON THE INVITATION, IT WILL OPEN THE APP AND GIVE THEM THE OPTION TO EITHER CLICK:</p> <ul style="list-style-type: none"> - Accept - Decline - Remind me later
PRE-CONDITIONS:	<ul style="list-style-type: none"> - MEMBER MUST HAVE NOTIFICATIONS ON OR AN EMAIL CONNECTED TO THEIR ACCOUNT TO RECEIVE IT IN REAL TIME (OTHERWISE THEY WILL SEE IT NEXT TIME THEY OPEN THE APP).
POST CONDITIONS:	<ul style="list-style-type: none"> - WILL UPDATE THE EVENT DETAIL BY ADDING THE MEMBER TO THE LIST OF PEOPLE WHO IS GOING (DEPENDING ON THE SELECTION THEY CHOOSE).
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	EVENT MANAGEMENT
SEQUENCE No:	005
SHORT DESCRIPTION:	NOTIFY EVENT
DESCRIPTION:	<p>ALLOWS THE APP TO SEND OUT NOTIFICATIONS VIA EMAIL OR APPLICATION ONCE THE MEMBER/CREATOR OF AN EVENT CLICKS PROPOSE.</p> <ul style="list-style-type: none"> - Will send to other members that were listed on the invitation list
PRE-CONDITIONS:	<ul style="list-style-type: none"> - AN EVENT MUST BE CREATED PRIOR TO PROPOSAL
POST CONDITIONS:	<ul style="list-style-type: none"> - NOTIFICATION WILL GO OUT TO MEMBERS ON DESIGNATED GROUP THAT WAS SELECTED FOR PROPOSAL
OTHER ATTRIBUTES:	NONE

4.5 “GROUP CREATION” REQUIREMENTS

REQUIREMENT TITLE:	GROUP CREATION
SEQUENCE No:	001
SHORT DESCRIPTION:	ASSIGN LEADER
DESCRIPTION:	<p>ALLOWS THE MEMBER WHO MADE THE GROUP TO BECOME THE GROUP LEADER</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none">- Select leaders
PRE-CONDITIONS:	<ul style="list-style-type: none">- YOU MUST BE IN THE TAB THAT GOES IN THE PROCESS OF CREATING A GROUP
Post CONDITIONS:	<ul style="list-style-type: none">- THE LEADERS ASSIGNED WILL BE ABLE TO ADD OR REMOVE MEMBERS
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	GROUP CREATION
SEQUENCE No:	002
SHORT DESCRIPTION:	ADD MEMBER
DESCRIPTION:	<p>ALLOWS THE GROUP LEADER TO ADD MORE MEMBERS</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none"> - Add members
PRE-CONDITIONS:	<ul style="list-style-type: none"> - THE GROUP MUST HAVE A LEADER THAT CONTROLS ADDING MEMBERS
POST CONDITIONS:	<ul style="list-style-type: none"> - THE LIST OF MEMBERS WILL BE UPDATED TO 1) THOSE WHO WERE REQUESTED AND STILL HAVE NOT ACCEPTED, 2) THOSE WHO ACCEPTED THE REQUEST AND ARE NOW IN THE GROUP
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	GROUP CREATION
SEQUENCE No:	003
SHORT DESCRIPTION:	REMOVE MEMBER
DESCRIPTION:	<p>ALLOWS THE LEADER TO REMOVE MEMBERS THEY ADDED BEFORE</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none"> - remove member
PRE-CONDITIONS:	<ul style="list-style-type: none"> - THE GROUP MUST HAVE A LEADER THAT CONTROLS REMOVING MEMBERS, AND THERE SHOULD BE MEMBERS TO REMOVE
POST CONDITIONS:	<ul style="list-style-type: none"> - THE MEMBER LIST SCREEN WILL BE UPDATED
OTHER ATTRIBUTES:	NONE

REQUIREMENT TITLE:	GROUP CREATION
SEQUENCE No:	004
SHORT DESCRIPTION:	SEND NOTIFICATION
DESCRIPTION:	<p>ALLOWS THE GROUP LEADER TO SEND NOTIFICATIONS TO THE CURRENT LIST OF MEMBERS</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none"> - Create group and notify
PRE-CONDITIONS:	<ul style="list-style-type: none"> - THERE SHOULD BE A LIST OF MEMBERS TO NOTIFY
POST CONDITIONS:	<ul style="list-style-type: none"> - NONE
OTHER ATTRIBUTES:	NONE

4.6 “IMPORT CALENDAR” REQUIREMENTS

REQUIREMENT TITLE:	IMPORT CALENDAR
SEQUENCE No:	001
SHORT DESCRIPTION:	SYNC GOOGLE CALENDAR
DESCRIPTION:	<p>IMPORT/SYNC CALENDAR FROM GOOGLE CALENDAR TO OUR APP</p> <p>MEMBER CAN PRESS:</p> <ul style="list-style-type: none">- enable google calendar sync
PRE-CONDITIONS:	<ul style="list-style-type: none">- LOGIN TO GOOGLE ACCOUNT
POST CONDITIONS:	<ul style="list-style-type: none">- DISPLAYS IMPORTED EVENTS FROM GOOGLE CALENDAR ONTO OUR APP
OTHER ATTRIBUTES:	NONE

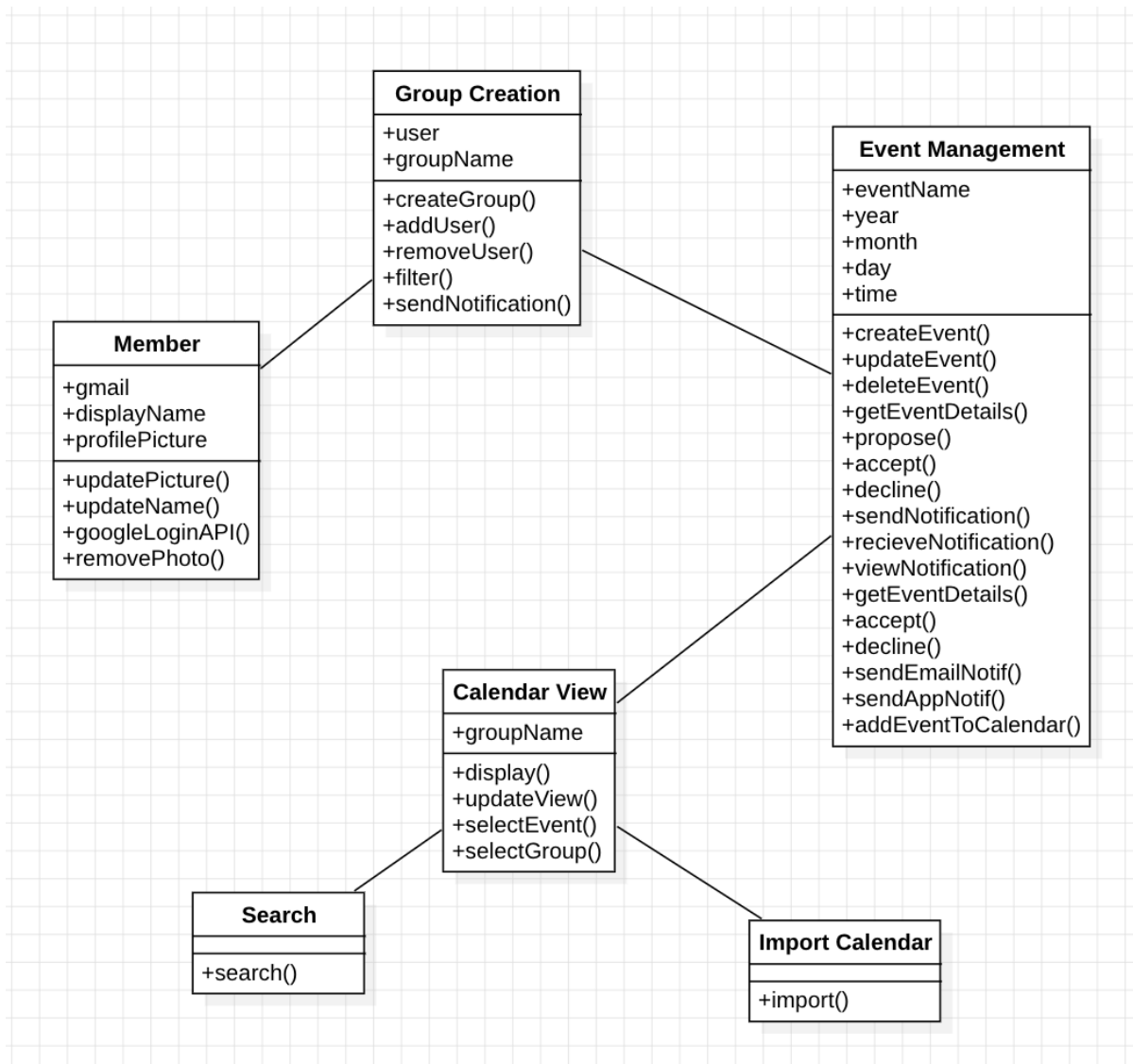
5. Software Processes and Infrastructure

5.1 HARDWARE AND INFRASTRUCTURE

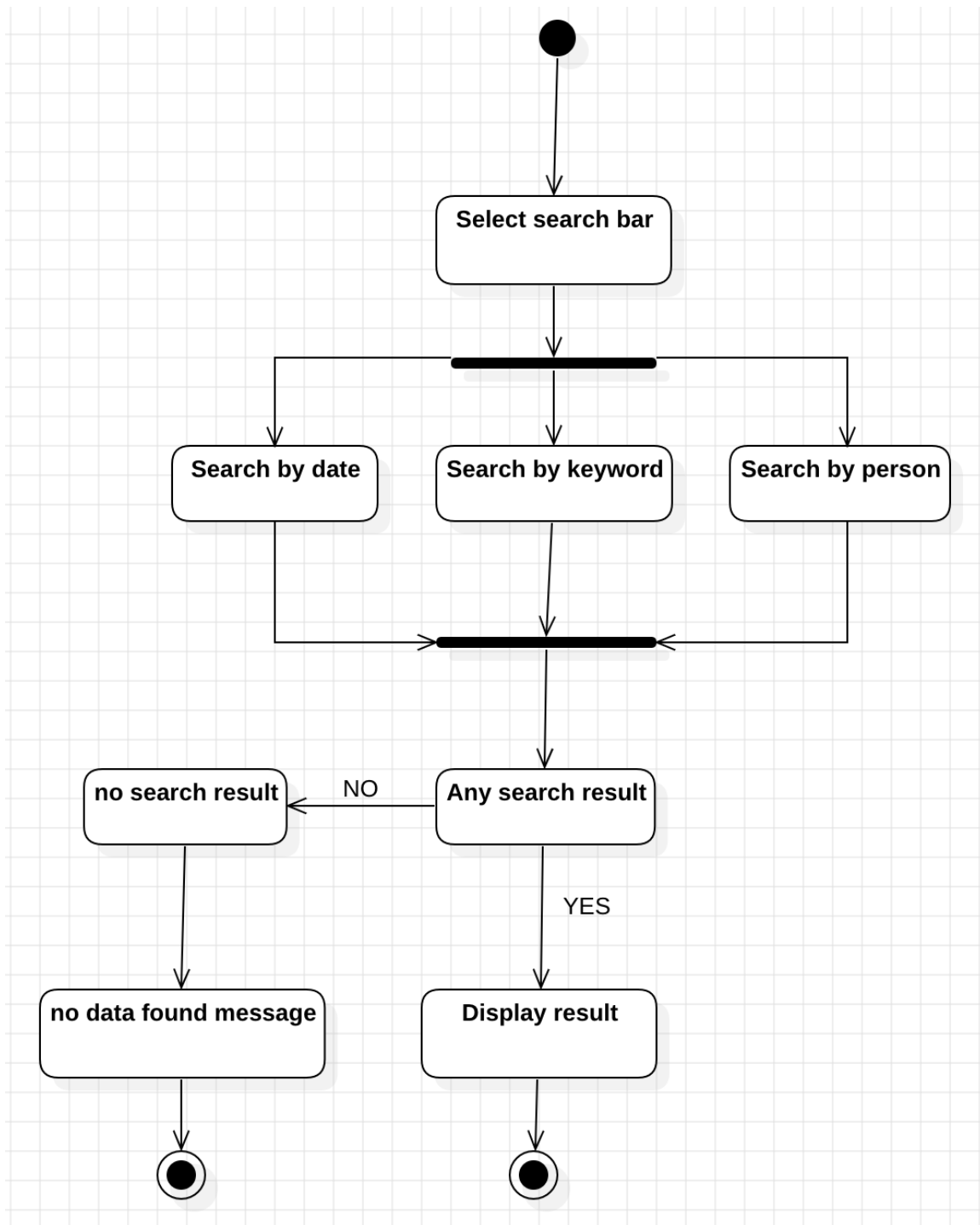
Members should have any recently up to date android device.

5.2 UML DIAGRAMS

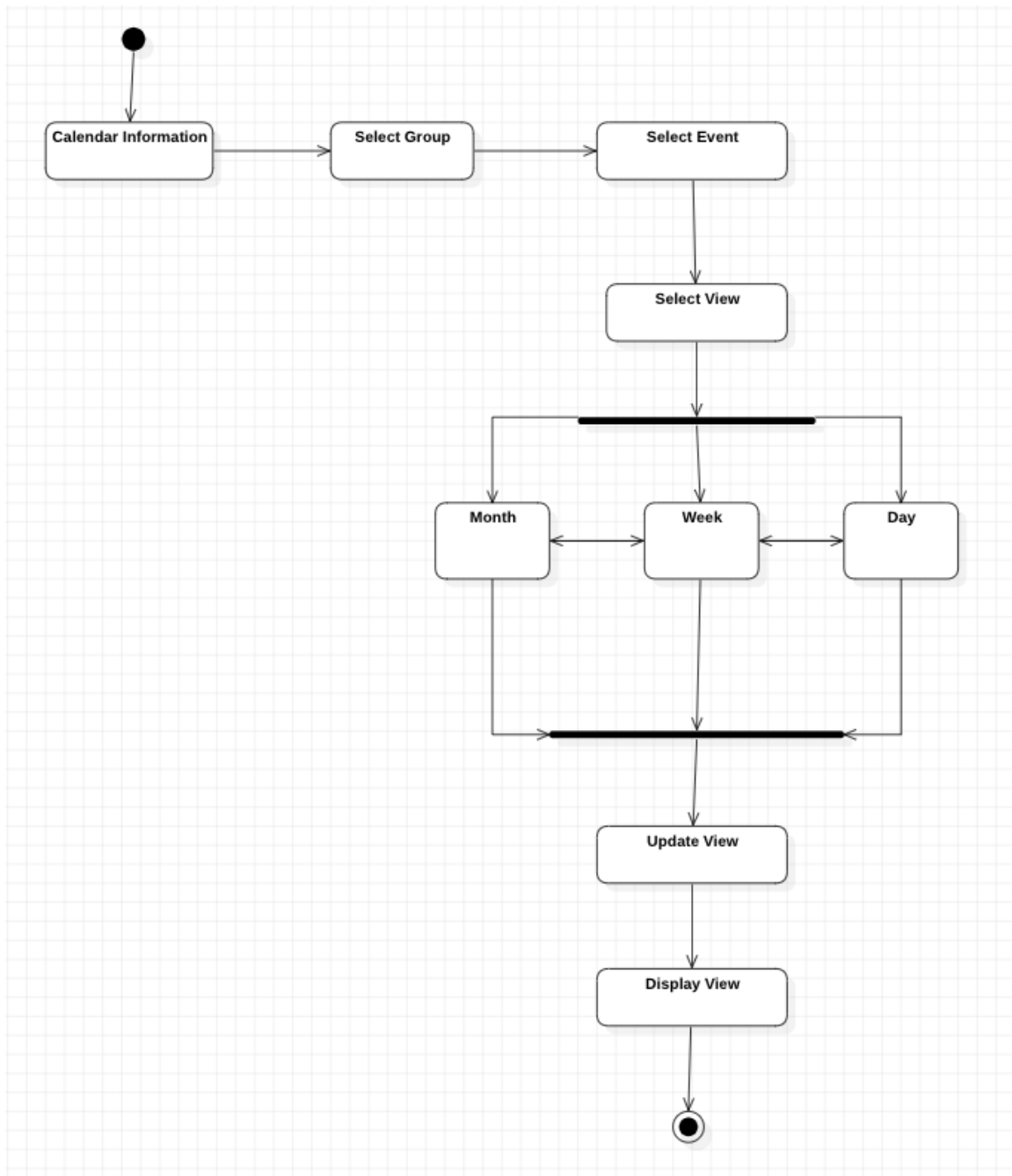
5.2.1 UML-Class-System



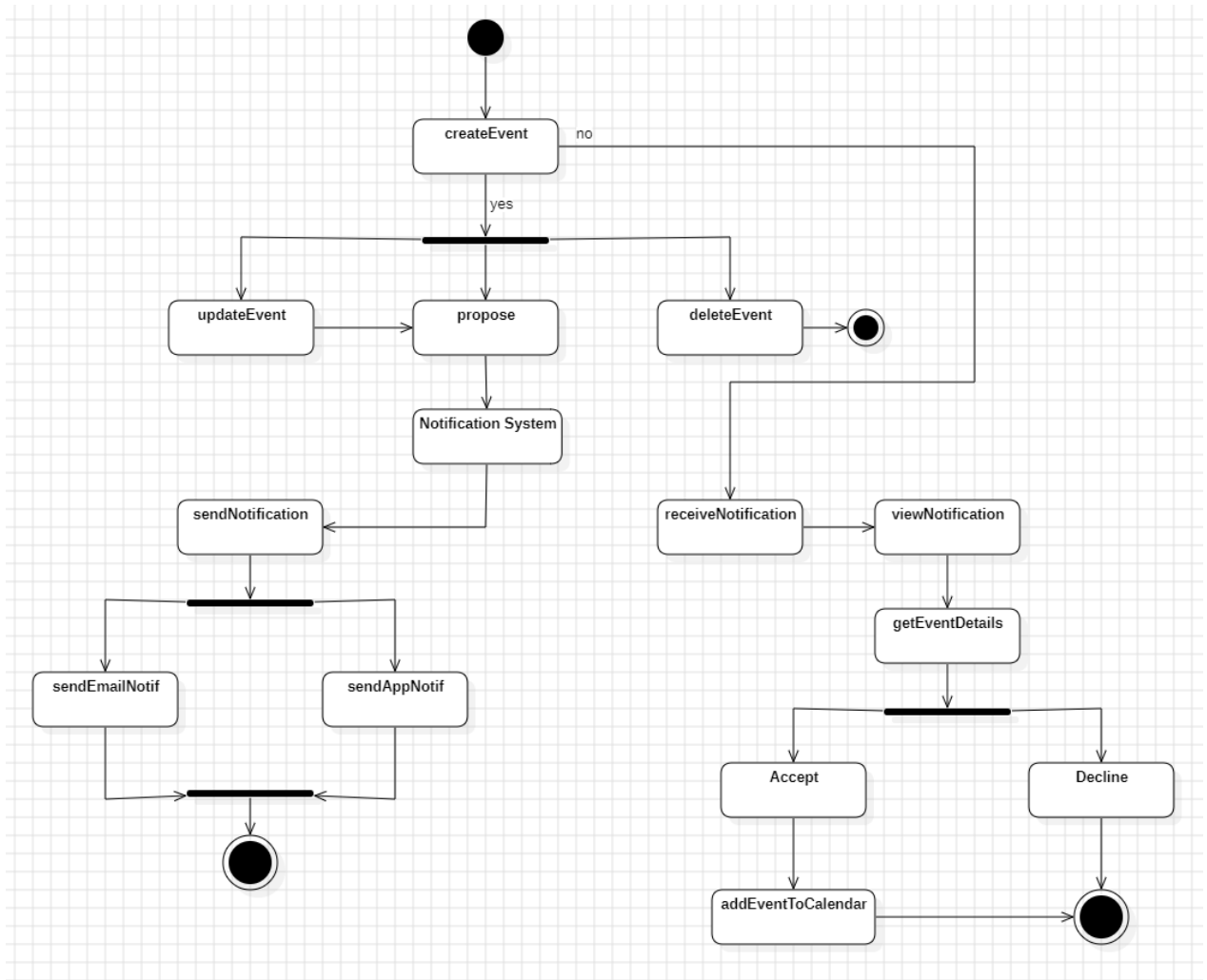
5.2.2 UML-Activity-Search



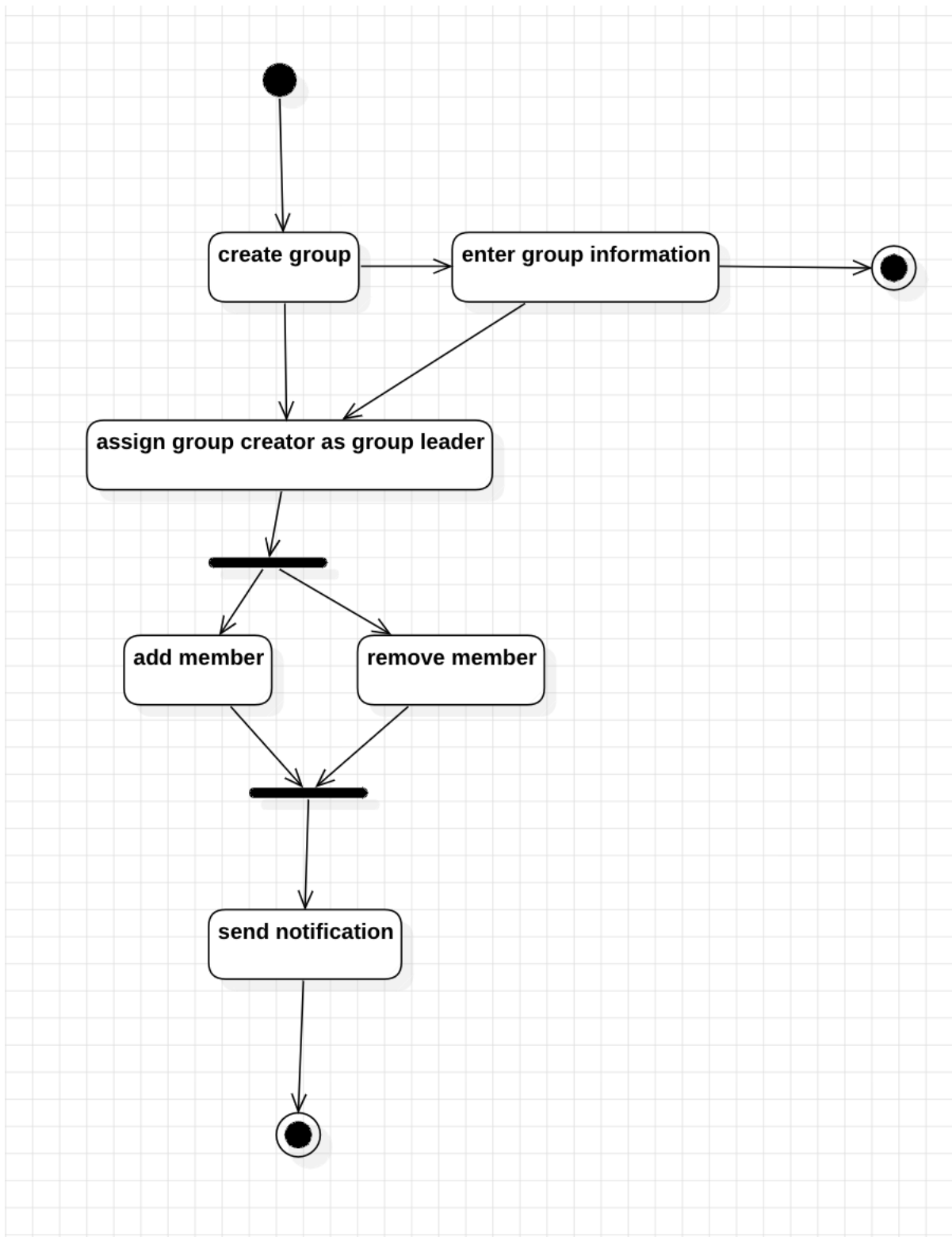
5.2.3 UML-Activity-CalendarView



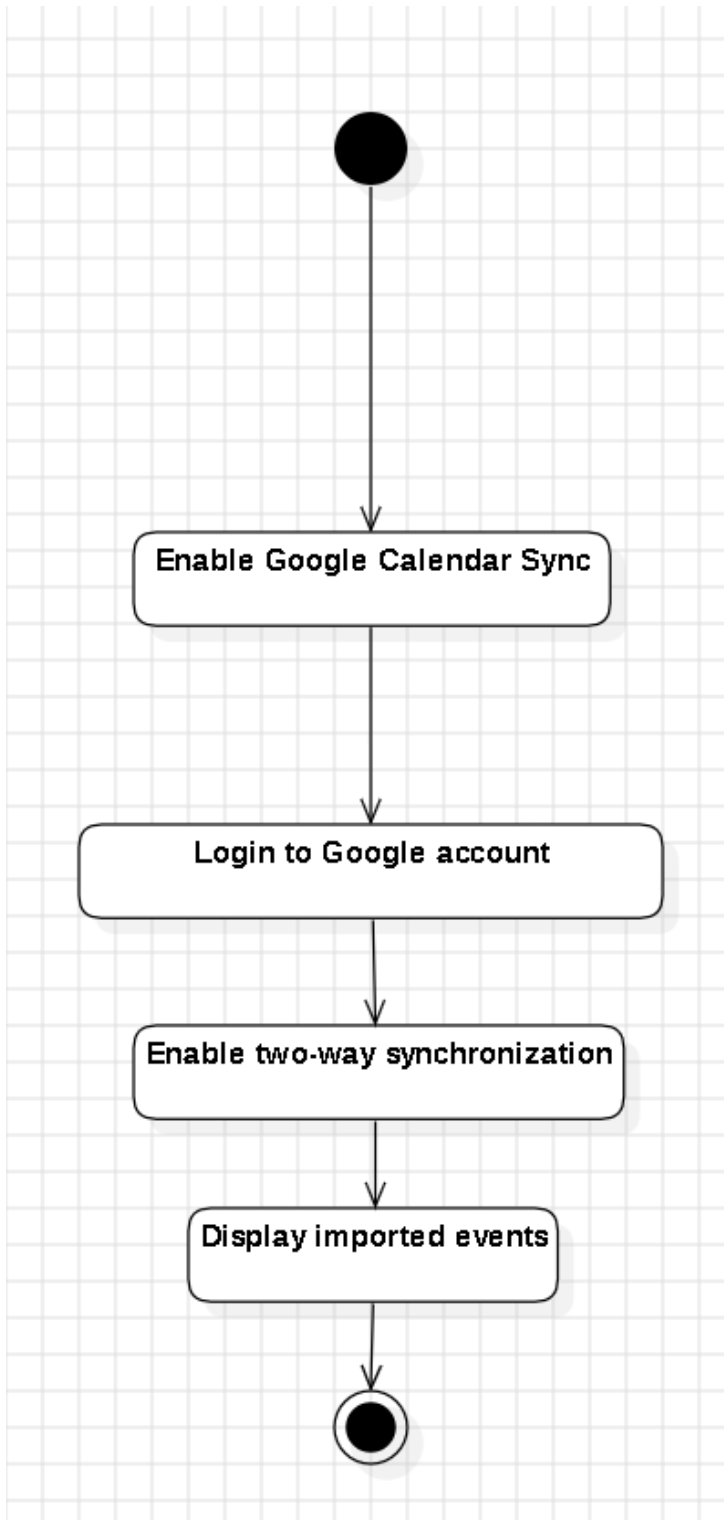
5.2.4 UML-Activity-EventManager



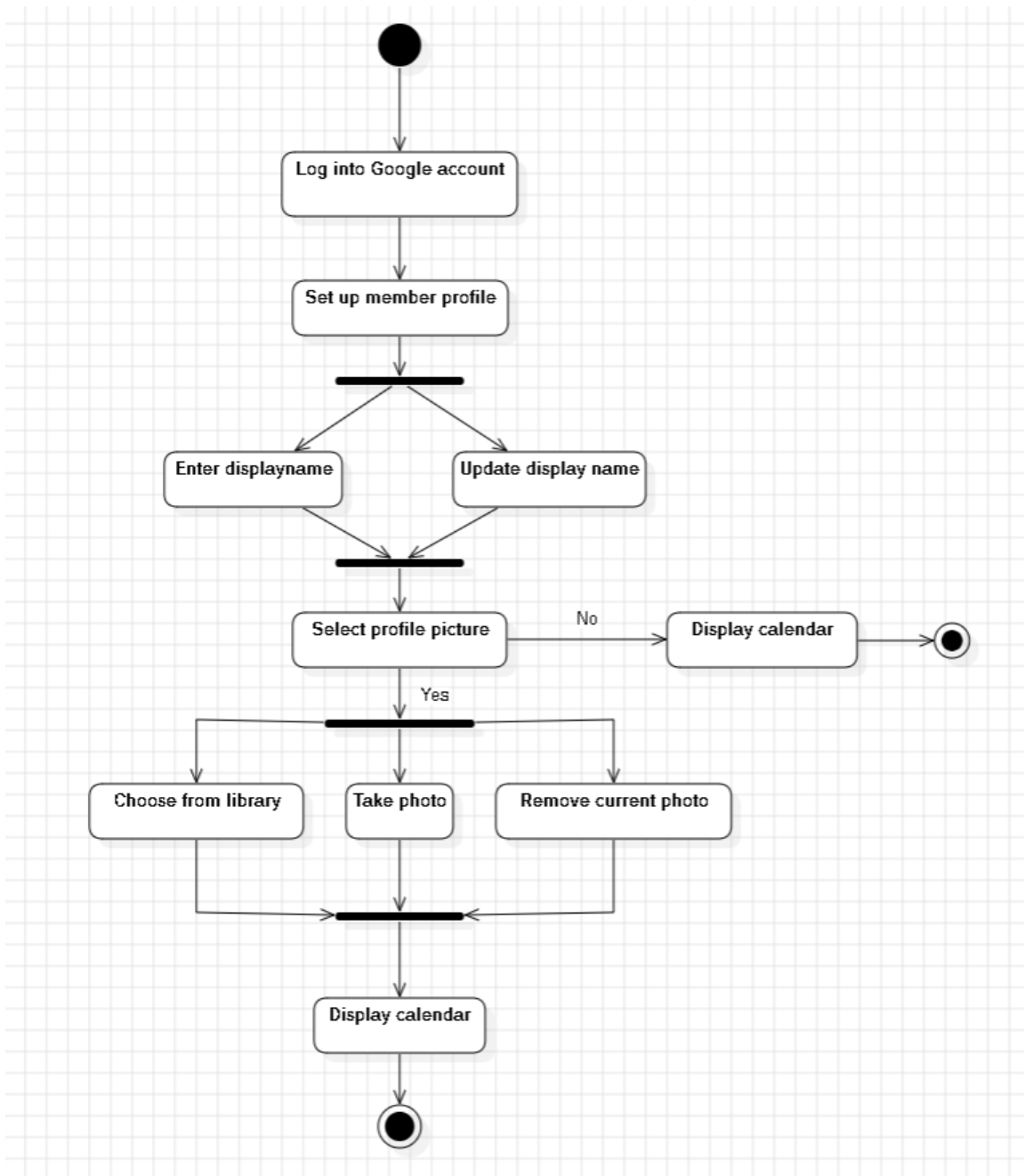
5.2.5 UML-Activity-GroupCreation



5.2.6 UML-Activity-ImportCalendar



5.2.7 UML-Activity-Member



5.3 CONCEPTUAL DATA MODEL

None

5.4 SCREEN SHOTS

None available currently.

5.5 TEST PLAN

A test plan will be provided at a later stage of the project.

6. Assumptions and Constraints

6.1 ASSUMPTIONS

The following is a list of assumptions:

- Assume user has a Google account
- Assume user has events in their Google Calendar
- Assume user has friends/family/work group

6.2 CONSTRAINTS

The following is a list of constraints:

- Team lacks Android development skills
- Schedule very aggressive
- Team lacks a high production budget

6.3 OUT OF SCOPE MATERIAL

The following is a list of “out of scope” material:

- Post Project maintenance is not covered
- Training users beyond implementation is not covered
- Compliance with future regulations is not considered
- Option to not pull from google calendar and work as our own independent calendar app, allows to work less more like a google calendar extension
- Display search history

7. Delivery and Schedule

Task/Milestone Description	Anticipated Start Date	Anticipated End Date	Status {Complete, In Progress, To Be Completed- TBC}	Comments
Prepare UML diagrams	2/6/2024	2/29/2024	Complete	Deliverable → UML document
SRA document (Includes project objectives, Requirements and UML diagrams)	3/1/2024	3/28/2024	Complete	Deliverable will be the SRA document. All stakeholders agree on the content of the SRA by signing in section 8.
Member	3/28/2024	4/4/2024	TBC	Toan Nguyen will oversee this section.
Search	4/18/2024	4/22/2024	TBC	Madison Pham will oversee this section.
Calendar View	4/18/2024	4/20/2024	TBC	Madison Pham will oversee this section.
Event Management	4/11/2024	4/18/2024	TBC	Anthony will oversee this section.
Group Creation	4/4/2024	4/11/2024	TBC	Hansoul Jung will oversee this section.
Import Calendar	4/11/2024	4/13/2024	TBC	Hansoul Jung will oversee this section.
Test Plan Delivery	3/29/2024	4/18/2024	TBC	Deliverable will be the Test plan document.
User Manual	4/30/2024	5/2/2024	TBC	
Final Milestone: project delivery	5/2/2024	5/2/2024	TBC	Deliverable will be the final project binder plus product demo

8. Stakeholder Approval Form

Stakeholder Name	Stakeholder Role	Stakeholder Comments	Stakeholder Approval Signature and Date
Bahram Khalili	Client		
Tuan Dang	Client Project Manager		
Anthony Nguyen	Developer		
Hansoul Jung	Developer		
Madison Pham	Developer		
Toan Thai Nguyen	Developer		

Appendix:

None