AppDossier

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Period 2

Client: Maxim Alayev

Name of Project: SociAPP

Group Members: Maxwell Tsao, Andy Tran, Roy Choi, Lucas Jeong, Justin Kim

Criterion B should provide evidence of a rigorous design stage with an overview of all five stages of the project (including the actual intended use of the product by the client) in the Record of Tasks, multiple levels of design sketches out how the development process will proceed that include algorithmic breakdown for complex techniques, and evidence of algorithmic thinking (in the form of flowcharts, UML diagrams, pseudo-code). All high scoring projects included a thorough design stage. NO CODE NEEDS TO BE DONE YET.

Record of Task

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Task number	Planned action	ePlanned outcome	Time estimated	Target completion date	Criterion
1	Spend time to brainstorm and propose potential solutions	Suggest some test products and prototypes that might solve the given problem	2 days	2/11/19	A
2	Spread out a layout of selected prototypes	At least 3 drawings must be completed before I meet with the client again	3 days	2/14/19	A
3	Refer back to the criteria of success to make sure nothing is mistaken and meet with client to discuss about the potential prototypes	Making sure to take notes and ensure that they are organized	1 day	2/15/19	A
4	Finalizing the prototype that would be in use and would be a better application overall	When finalized, implement the final build	2 day	2/17/19	A
5	Begin programming stage using the programming language	Create a runnable application that does the bare minimum of the criterias of success	7 days	2/24/19	B
6	Finish the programming stage and test the criterias of success. Fix any issues or problems	A runnable application that matches the criteria of success	2 days	2/26/19	B
7	Publish the application and give to the client for revisions	Obtain feedback on finished product	1 day	2/27/19	B

Chart of Build Of Features for Product

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Login Page	Home Page	Active Groups	Make New Group	Anonymous Profile
Username box	Log off button to login page	Active group bubbles	Map of school grounds that can be clicked on to add a location marker	Data log
Password Box	Find group button to find group page	Button	WebViewer	TinyDB
Forgot/password change	Edit profile button to edit profile page	Table view label	Icon Drag and Drop	Graph
Enter button/Verification	Make new group button to make group page	Map of current location	Public Cloud Storage	Interests box
Open Home	Display of current groups on map	Home button	Group name text box	School box
	WebViewer		Topic text box	Info box
	Cloud Storage		Info text box	Help button to external site
			Publish button	
			TinyWebDb	
			Cloud messaging	
			Home button	

List of features that must be implemented in the product. These include the basic functions such as the username and password box for the login, the main buttons to either create groups, find groups, or perform other functions integral to maintaining a SociAPP account.

System Flowchart Diagram

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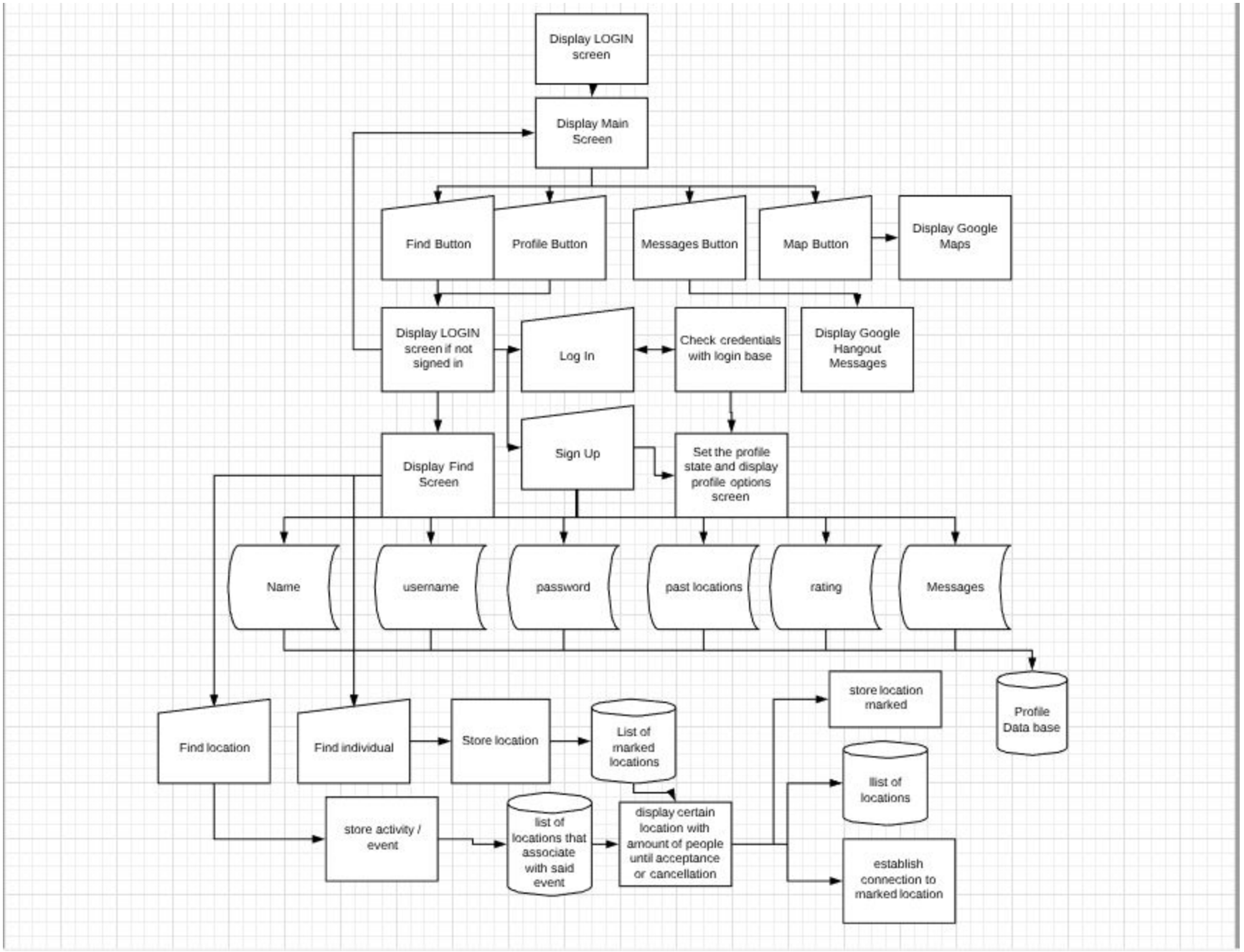

The graphic above shows the processes, visuals, and data that are connected throughout our app, SociAPP

Flowchart Diagram of Product

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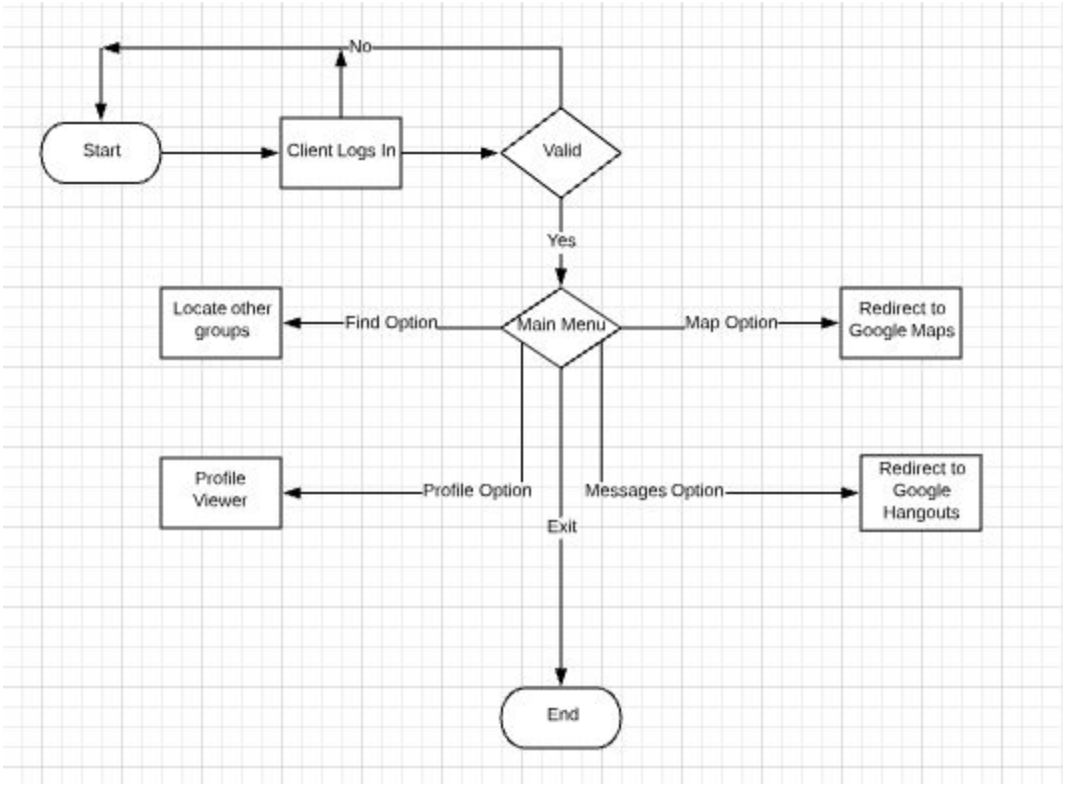

Flowchart diagram of the major functions of the product. Sub-processes detailed in section below

Flowchart Diagram of Sub-process

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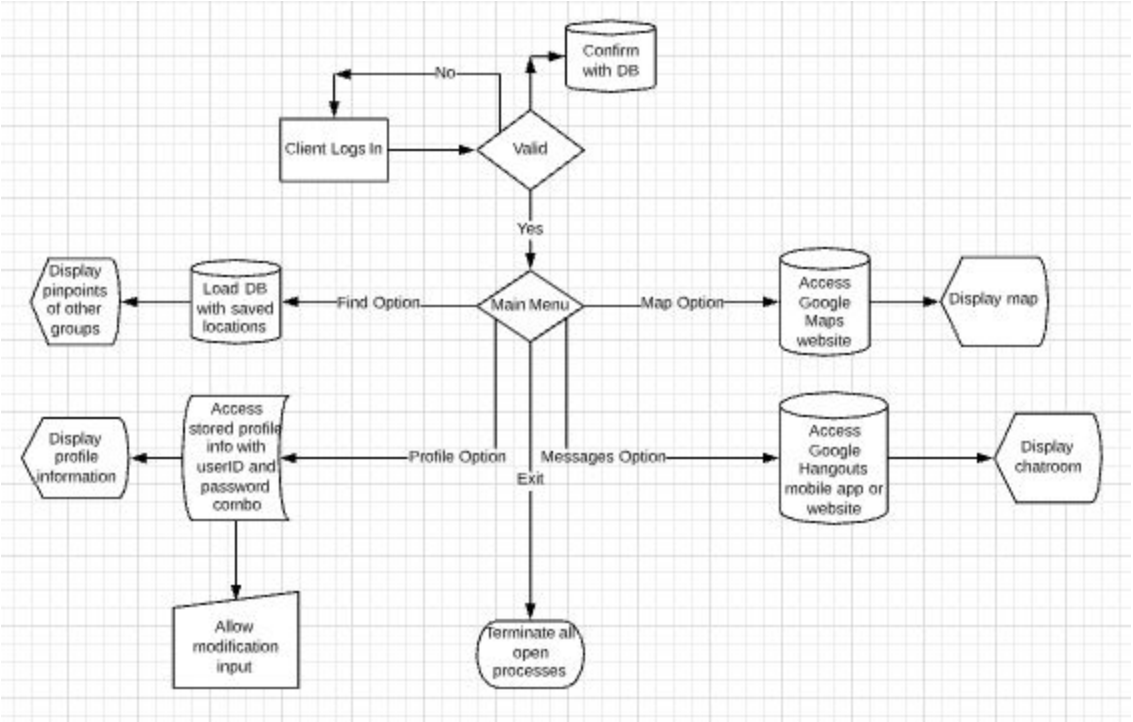

Flowchart diagram illustrating sub-processes for each major process

Modular Diagram

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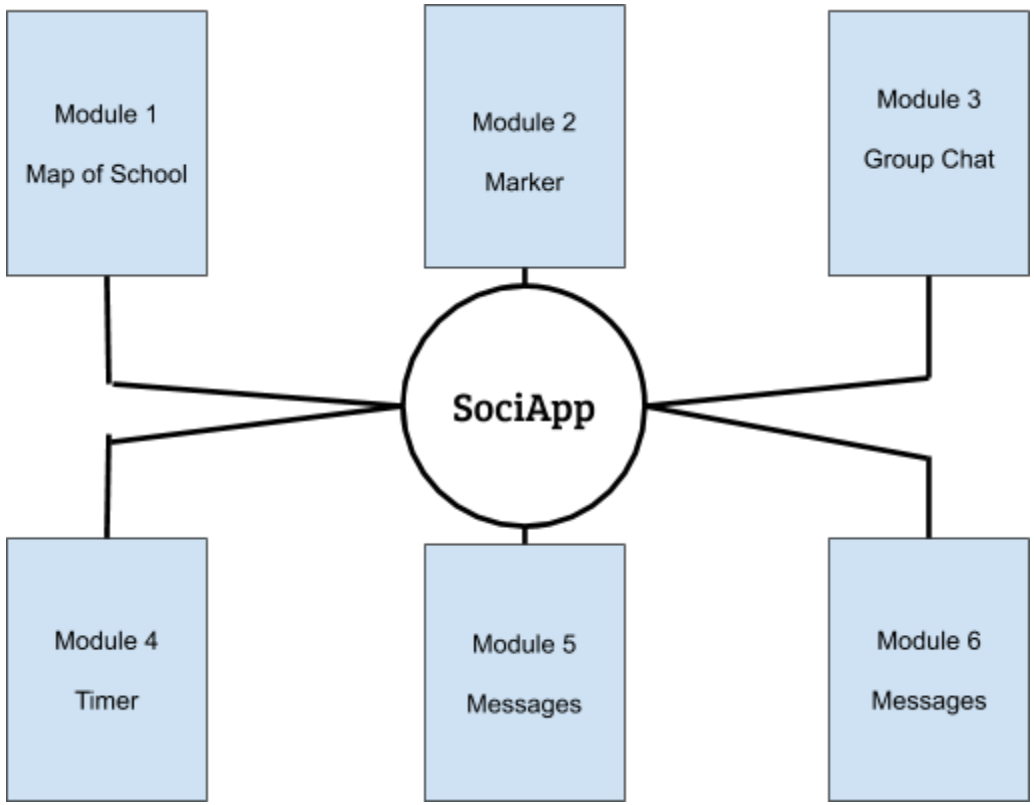

This diagram shows the modules required to create the SociAPP. It needs a timer, messages, buttons, a map, a group chat, and a marker in order to make the basic functions of the app.

Inheritance and Class Diagram | UML Diagram

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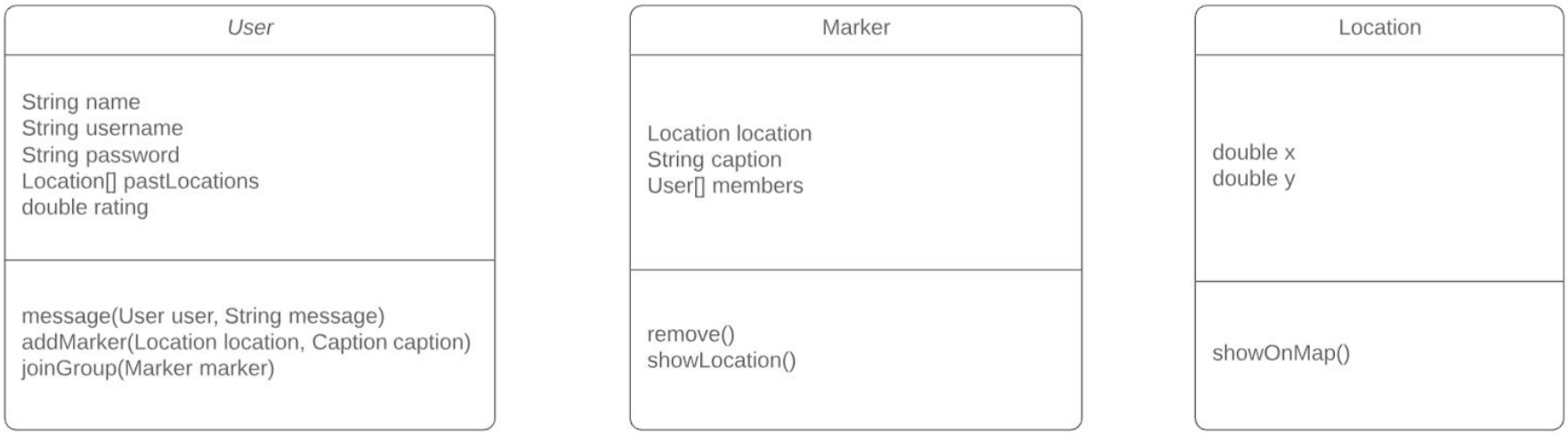
SociAPP Class UML Diagram



This is the UML Diagram for a potential design for the app
Since all the users have the same set of operations, there is only one user class
Also since the app relies heavily on the available widgets such as Google Maps, there are not many new class structures that need to be defined
However, since AppInventor will be used in developing the app and AppInventor most closely resembles a procedural programming language rather than an object-oriented programming language, this design will probably not make it into the final product.

Data Dictionary | Variable Table

(identify names | types of data | inputs outputs | range of data*)

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Name		Type	Input	Output	Range
user	name	String	set and modified by the user on the profile page	displayed on the profile page	proper name
	username	String	set and modified by the user on the profile page	displayed on the profile page	6 to 16 alphanumeric characters
	password	String	set and modified by the user on the profile page	hidden	8 to 16 alphanumeric characters
	pastLocations	Location[]	automatically stored as the user joins a group	displayed on the profile page	should have the past 5 to 10 locations where the uer has lunched
	rating	double	calculated by the system	displayed on the profile page	0 to 5
	notifyList	User[]	list updated by user	displayed on the profile page	should have distinct users
marker	location	Location	set and modified by the owner of the marker via Google Maps	displayed as a pin on Google Maps	should be within bounds of Troy High School at a proper lunching location
	caption	String	set and modified by the owner of the marker	displayed on the information page of the marker	a description of the lunch group
	members	User[]	list updated as members join	displayed on the information page of the marker	should have a reasonable number of distinct users
location	x	double	via Google Maps	pin is displayed on Google Maps	should be within bounds of Troy High School
	y	double			
users		User[]	list updated as new user accounts are created	stored in database	user database
markers		Marker[]	list updated as users create new markers	stored in database	list should be refreshed everyday

A table of different variables that would be used to store data

**Range of data should callout or identify the what would be normal, extreme, abnormal data*

Database

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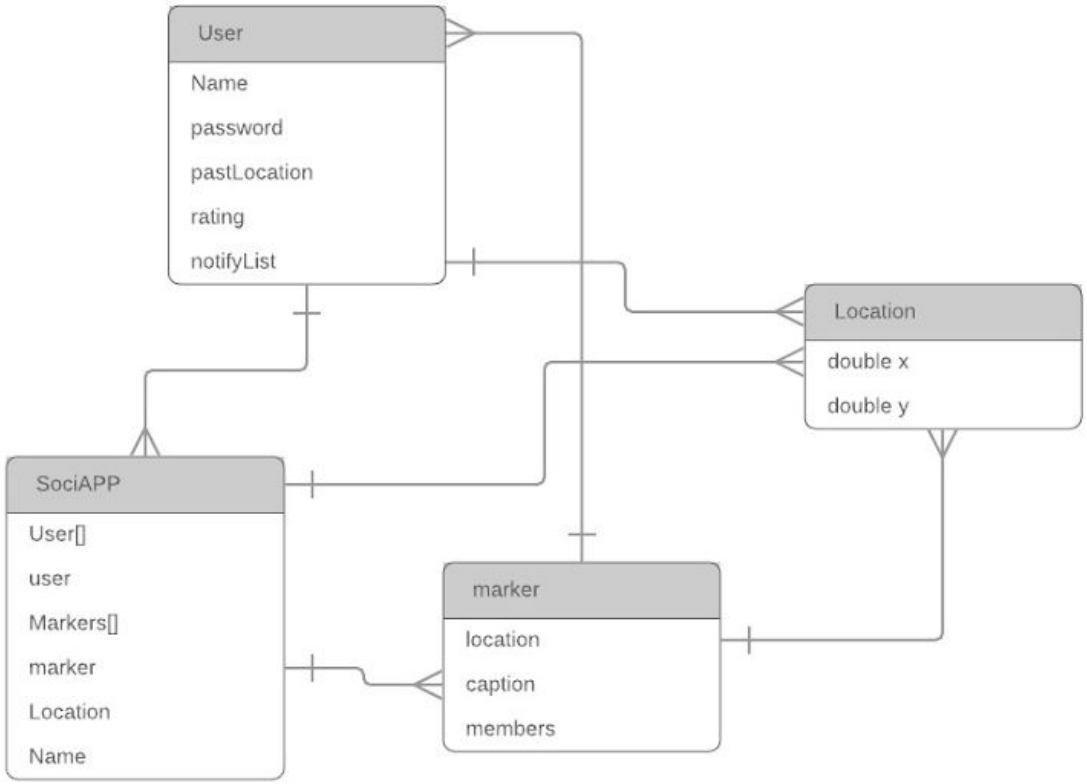
Database

Justin Kim | February 12, 2019



This database diagram represents all the data stored in the database of Sociapp. As one can see, this database is made up of multiple classes and objects that help the system/app function.

CRC Cards

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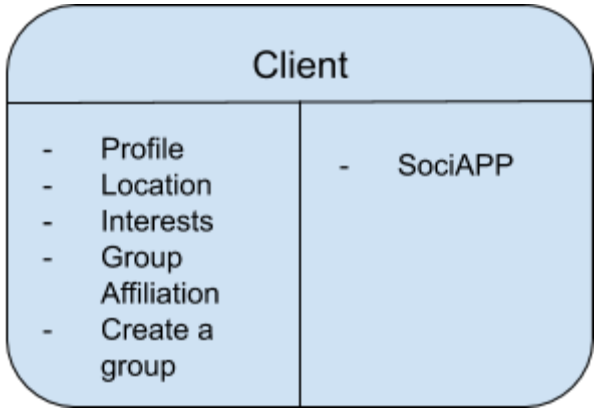

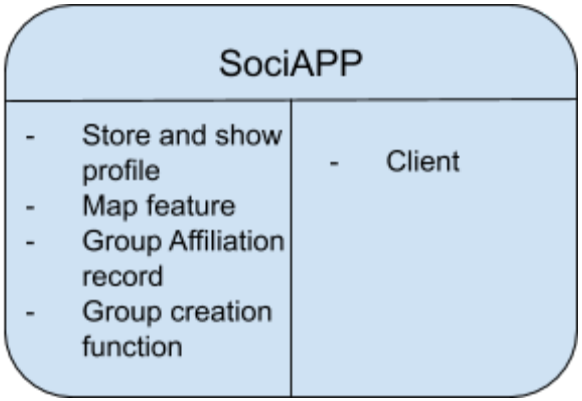

Class-Responsibility-Collaboration Cards which outline the functions of dominant classes during the use of this product. The client is able to manage accounts and view groups while sociAPP is responsible for delivering the requested features and functions.

List of Features to Build

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1. Log-in function
2. Log-in button
3. Password checker
4. Password update link
5. Cloud based data storage
6. Home page
7. Log-out button
8. Find a group button
9. Make a group button
10. Edit profile button
11. Active thumbnail of school map with group icons
12. Page with active groups on a gps accurate map
13. Bubbles in map representing groups
14. Expandable bubbles with group details
15. Clears bubbles after a lunch is over
16. Home button
17. GPS Map of school groups
18. Ability to add a location marker for a group
19. Group name text box
20. Topic text box

21. Info text box
22. Publish button which displays group on map to all users
23. Interests text box
24. School text box
25. Info text box
26. Log of user activity box
27. Help button to external site
28. System to transfer between pages

This is a list of all features that are necessary for the functionality of the app as intended. Each item must be implemented on different pages in order for the app to work.

Schedule for building the product[1]

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Task number	Planned action	Planned outcome	Time estimated	Target completion date	Criterion
1	Implement the design of the app onto MIT App Inventor.	Have the whole design of the app on App Inventor.	2 days	2/15	This design should include buttons, markers, a map, and a main screen that a person first sees when he or she opens up the app.

[1] The requirements for this worksheet will depend on the product being developed, the development environment, and development paradigm.

2	Create code for the marking a location on the map and make it so that the mark can be seen by other people	Create the code needed to place markers on a given map	2 days	2/17	Make sure the user is able to mark on the map so that others can see his or her potential location. Also, make sure that the map is identical to the real location area.
4	Create more code for the marker so that the user's personal information can only be viewed by the person.	Create functional code needed for Criterion 3	3 days	2/20	Make sure that the user's personal informati on is only viewed by the user him/hers elf. Other users using

					that app should not have the ability to see the personal information of another user through a marker.
5	Create code so that when a user pinpoints a location with a marker, other people the user knows can receive a notification. The marker should be labeled as “lunch group.” Also, create code for a button called “watch.” This button can be used to add other users to a list of notifications.	Create functional code that allows a user to create markers and join lunch groups. Also, create code for a button that allows user to add friends/other users to a notifications list	4 days	2/24	Make sure that when the user pinpoints his or her location, other users of the app can receive a notification to know the user’s location. Also, the user should have to ability to

					add his or her friends that use the app to a list of notifications. Those friends/other users should receive future notifications.
6	Create code to a timer on the markers.	The markers should appear for a certain amount of time and	2 days	2/26	The user should be able to place a marker on the map during lunch. By the end of lunch, the marker should no longer remain.

7	Create code that can ask to gain a rating from the user	The user should get a pop-up survey after he or she has used the app	1 days	2/27	A pop-up survey with a questionnaire should appear after the user has used it. Hopefully, the user is able to input a rating. This rating will help the developers know what issues to fix
8	Create code that sets a limit to how much requests a user can make to other people. If the user goes over the limit, the app should deny the user from sending requests for a set amount of time.	Create functional code that sets a limit to how much a person can send requests.	2 days	2/28	The user should not be able to send an unlimited amount of requests during lunch time. In

					order to ensure that, if the user goes over the set limit, the user has to wait for a couple of minutes before using the app again.
9	Create code in a button that takes a user to a chatroom when the user selects a marker.	Have functional code that can allow the user to access chat rooms through a marker	1 day	3/1	When a user taps on a marker on a given map, the user should be able to access a chat room where he or she can contact the owner/ot

					her user of the marker.
10	Create code for a do not disturb button to block notifications during lunch period	Have functional code that allows a user to click on a button that blocks a notification.	2 days	3/3	The user should be able to click a button that blocks notifications from other users who use the app.
11	Check that the app works.	The app should be finished for the user (Maxim) to use. Any errors should be fixed by then.	2 days	3/5	The app should work with the least amount of errors/glitches.
This is the schedule that outlines milestones and their predicted time of achievement. The schedule serves as both a guide and a record of upcoming events and past events during the design and development of the product.					

The code for this project will be due 3/5