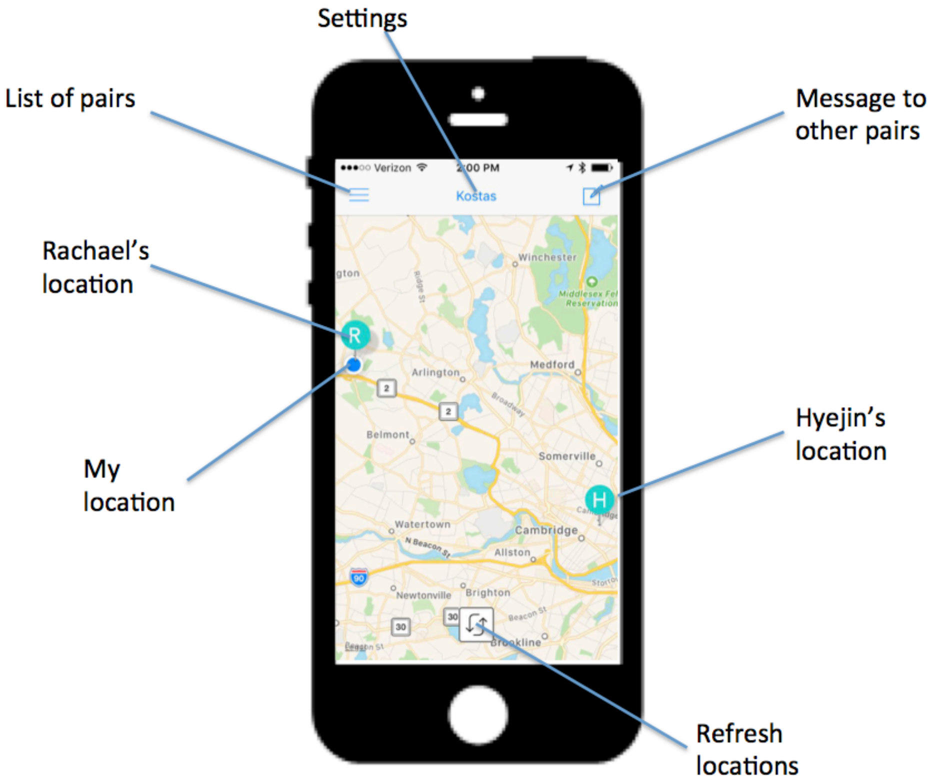
ZING

Zing is an app that allows one to share one's location using the mobile phone's geographical positioning system (GPS). A user can pair with another user so as to share locations and communicate. The following documents the process:

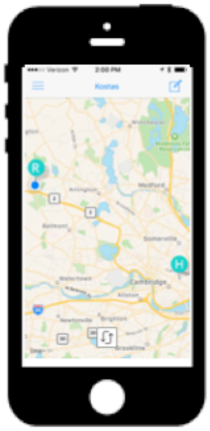
A user is presented with a map on which the people one is paired with appear. Each paired person shows on the map as a pin with their initial letter on it indicating their location on the map. The user's location is indicated with a blue dot on the map. On the lower part of the map, a refresh button appears. When pressed, the pins' locations get updated. In the upper side of the map, three buttons appear. The left one, when pressed, shows a list of all pairs (figure 2). The middle button, when pressed, presents a series of settings (figure 3). The right button allows the user to send messages to the paired users (figure 4).



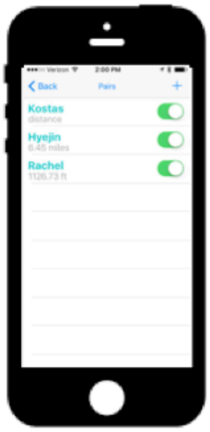
1: The map

Figure 2 shows a list of pairs with their names, distance and a switch to make the pair visible or not. By sliding any pair, that pair can be deleted.

Figure 3 shows a messaging system that allows the user to send messages between the other paired users. Each message can contain international fonts, images, or emoticons.
Figure 4 shows the settings. The user can change his or her name. Then the user can allow the other users to pair or un-pair without any permission. Then the user can select the accuracy of the GPS and the units to be used (imperial or metric)
Figure 5 shows the list of people on one's phonebook. These users can be invited to install the app.



1. Map


Verizon 2:00 PM

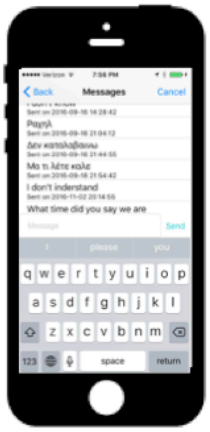
< Back Pairs +

Kostas
distance

Hyejin
6.45 miles

Rachel
1126.73 ft

2. List of pairs


Verizon 7:56 PM

< Back Messages Cancel

I don't know
Sent on 2016-09-16 14:28:42

Ραχηλ
Sent on 2016-09-16 21:04:12

Δεν καταλαβαινω
Sent on 2016-09-16 21:44:55

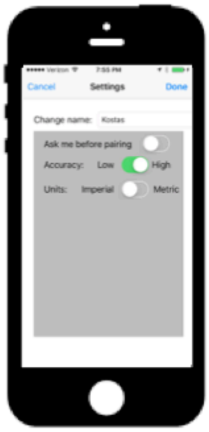
Μα τι λέτε καλε
Sent on 2016-09-16 21:54:42

I don't inderstand
Sent on 2016-11-02 20:14:55

What time did you say we are

Message Send

3. Messaging


Verizon 7:55 PM

Cancel Settings Done

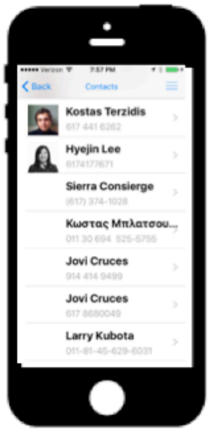
Change name: Kostas

Ask me before pairing

Accuracy: Low High

Units: Imperial Metric

4. Settings


Verizon 7:57 PM

< Back Contacts

Kostas Terzidis
617 441 6262

Hyejin Lee
6174177671

Sierra Consierge
(617) 374-1028

Κωστας Μπλατσου...
011 30 694 525-5755

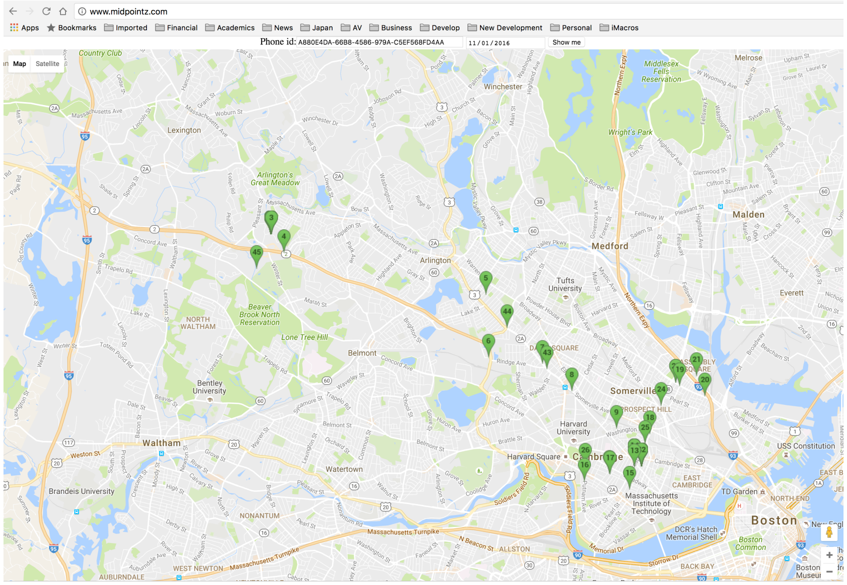
Jovi Cruces
914 414 9499

Jovi Cruces
617 8680049

Larry Kubota
011-81-45-629-6031

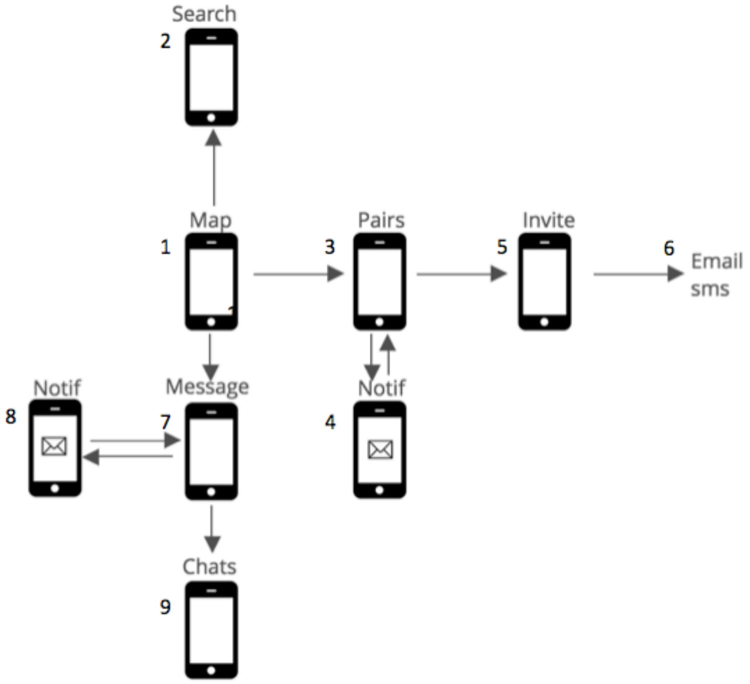
5. Invite

The user can link to a webpage to see the history of all locations by date. The following screen shows the user's locations on November 1, 2016 each one per pin. Each number indicates the sequence of locations. When a pin is selected, the address, notes, and photos taken at that location are presented.


www.midpointz.com

Phone id: A880E4DA-66B8-4586-979A-C5EF568FD4AA 11/01/2016 Show me

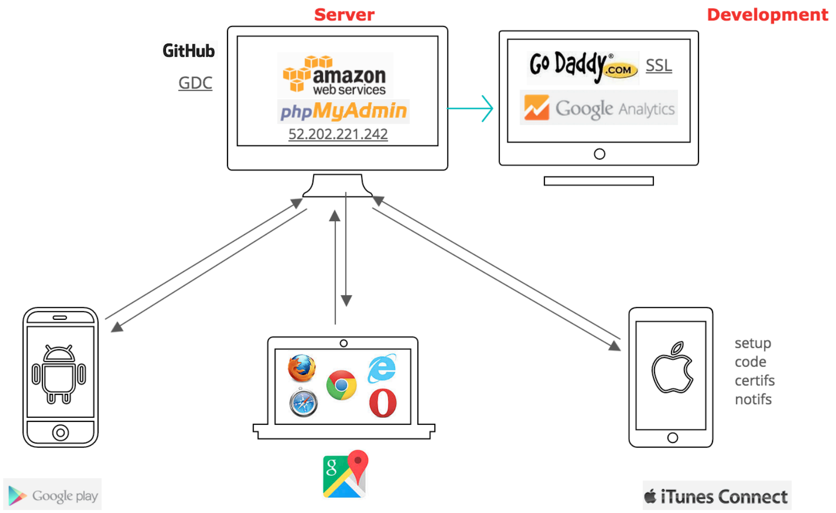
The following diagram shows the storyboard of the system. From the map (1) one can search for locations (2). Then, the user can see all paired users (3). Pairs can be deleted or add with push notifications (4). Additional users can be invited by opening the phonebook (5). An sms or email invitation will be send to the user (6).
A user can send messages to the paired users (7). These appear as push notifications (8). All messages are organized as chat rooms (9).



The following diagram shows the system's internal workings:

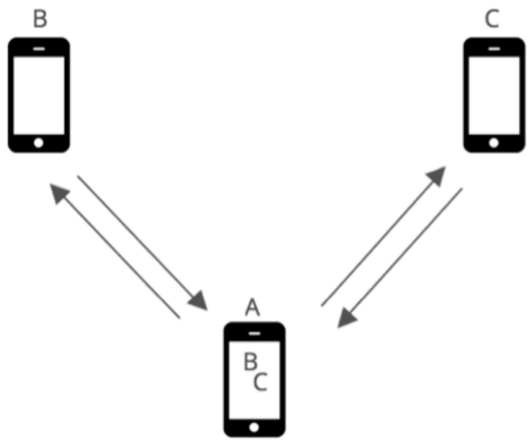
Backend:

A server (Amazon AWS EC2) is setup for a LAMG system on medium volume. A SSL DNS points to the server's elastic IP. Security is standard. A MySQL database is set with four tables: users, pairs, past locations, and messages. A Go server is setup to connect the database and serve as an API.



Frontend

An iOS and Android app is setup. The system interfaces with the backend through POST API REST-ed calls. The system can get GPS locations through a singleton location manager. The delegate can update the location while the app is inactive or on background.



The web version is set on the Go server as a template. It includes an index.html file and a javascript file. Data is passed on from the MySQL database to the Google Maps API in order to display information on the map.

For more information please email to logismics@gmail.com

Questions

1. Why is location important?
   a) To know where you are
   b) To know where others are
   c) To trace where you've been
   d) To meet others
   e) ______________________

2. How do you send a message from person A to person B when you have the same one code running on both mobile phones?

3. How can see how an inactive system behaves when the system is inactive.

4. How do you call a command that takes 20 seconds to complete, without waiting for 20 minutes?

5. Is it a breach of privacy for an app to open someone's phonebook?

6. How do you get the most recently dated row using SQL?

7. How do you setup an SSL certificate?

8. How do you have a go server run indefinitely?

9. How do you prevent others from stealing your app idea?
   a) Patent
   b) Hardware device associated with software
   c) Client database
   d) Branding

10. What are the main steps to setup a software startup?

11. How do you track the activities of your app (i.e. how many downloads, stay period, crashes, hacking, etc.)?