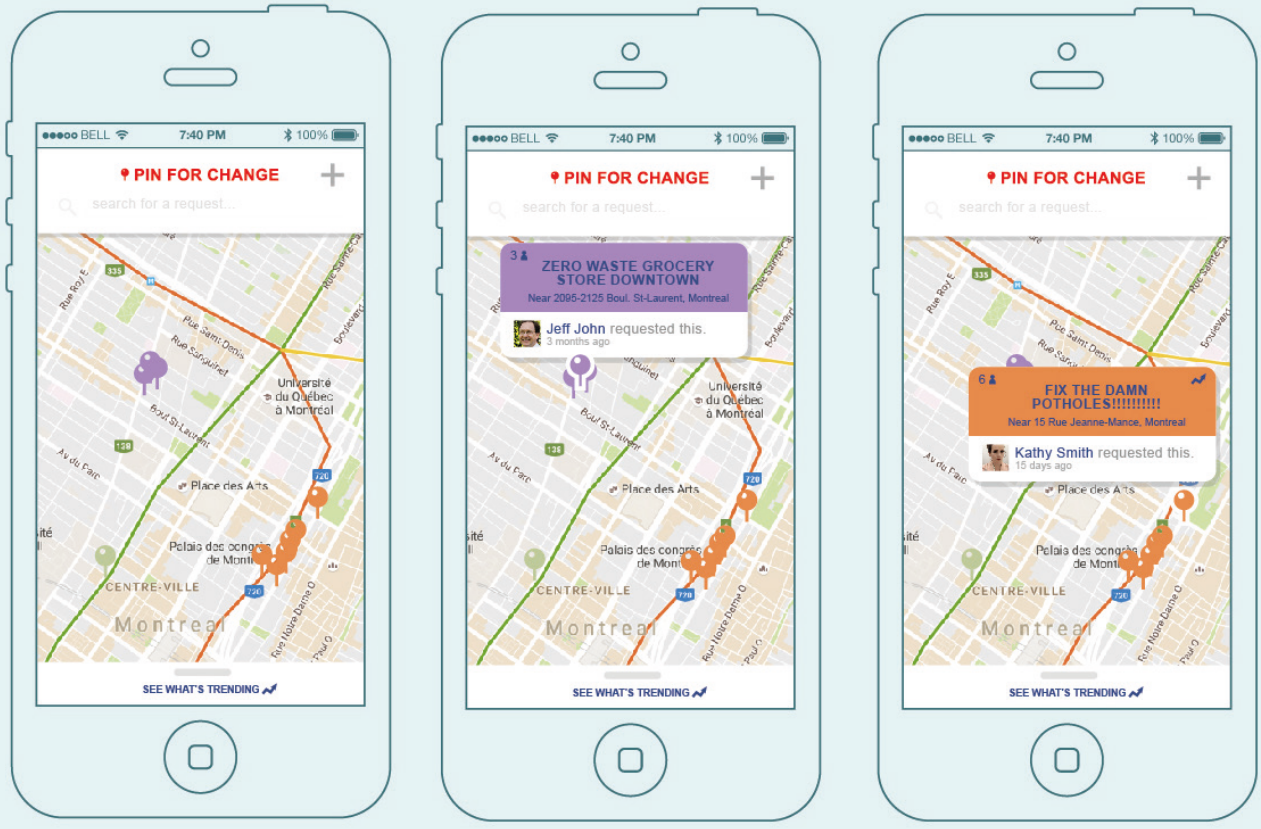
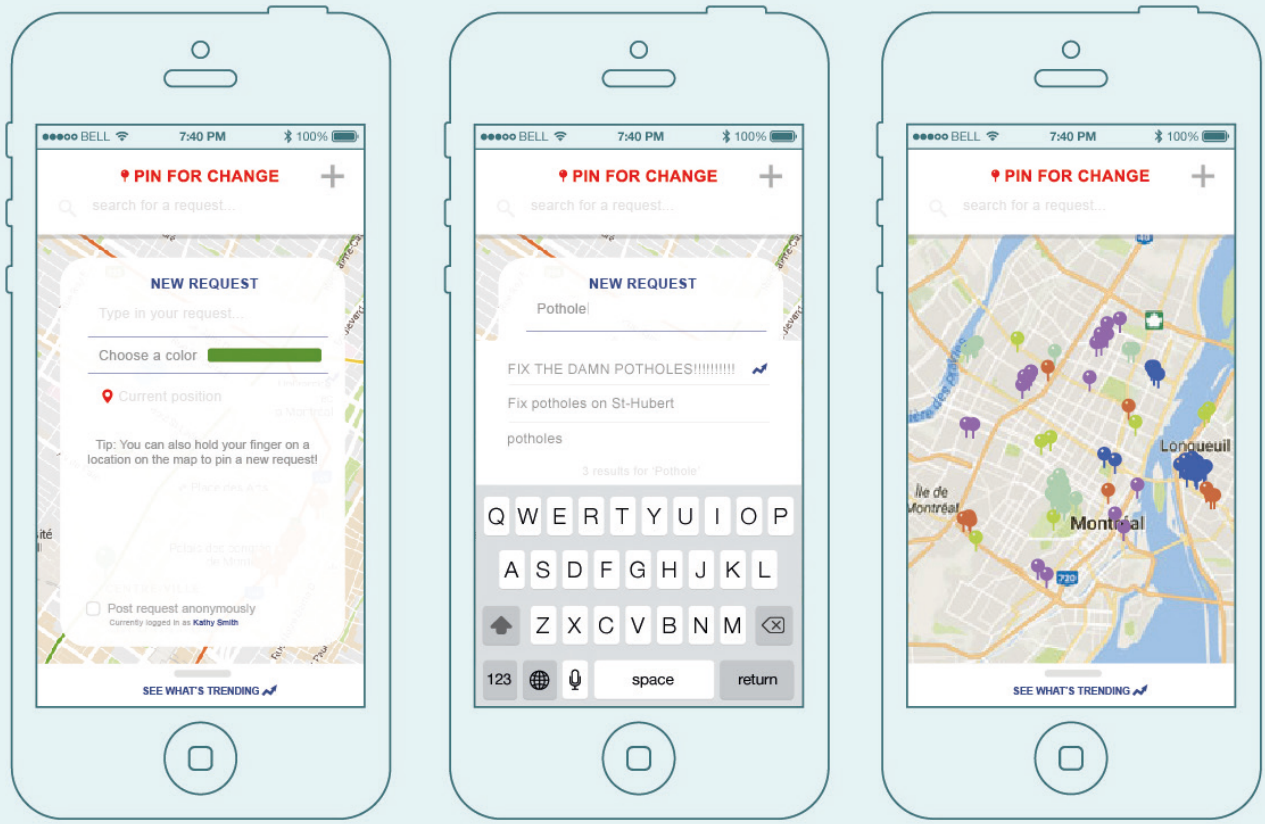
Pin for change

DOCUMENTATION

Pin For Change is an interactive map where users can either pin their location or enter an address manually, and then proceed to demanding a service they find is missing or uneffi-cient in that particular area. When someone creates a request, it works just like hashtags, and so it is saved into the database, and people can find and reuse that request. For every request, a colour is associated, and so for instance, if the request to ‘’fix a pothole’’ is pink, the more potholes people see in the streets, the more pink dots there will be on the map.

INITIAL PROTOTYPE





Initially, I had hoped to be able to add a feature that calculates which subject is the most trendy according to how many pins it has. Also, I was planning on letting users log in in order to have an account where they can keep track of their requests. Unfortunately, these two features were not added, but I will definitively consider adding them if this project goes further, as they are features that help the app achieve its goal of being a useful, user-friendly tool where people can speak up. Everything else has been successfully integrated. The user can add a pin by touching a location on the map, by searching for an adress or by locating its current location. This gives him many options so that the app is easier and quicker to use. Here is a recap of the features:

EXTRA FEATURES THAT WILL BE IMPLEMENTED IN FUTURE

- Trendy topics
- Able to duplicate pin simply by clicking on it.
- The popup shows how many pins exist that are linked to one request
- User is able to log in, but can post anonymously
- Additional information can be added, such as phone number or email.

FEATURES THAT HAVE ALREADY BEEN IMPLEMENTED

- User can look up an adress
- User can duplicate a pin by chosing the same title
- User can locate his position
- Duplicate button is in place
- User can choose color of his pin

LIBRARIES	WHY WERE THEY USEFUL
- Leaflet	Of course, leaflet was at the core of my project. I decided to use this library as it is very flexible and has a lot of options implemented already. I find it was very user-friendly, even if it took me a while to understand how to use it. A lot of people use it, and so I can fin answers to my problems online.
- Bootstrap Geosearch	This library has been specifically made for Leaflet. I had tried a couple of libraries for searching for adresses, but along the way I found that most of them did not work or had a lot of bugs. I tried around three before choosing this one.
- JsColor	JsColor is the library that I used for the color picker for the marker. At first, I was using something else, but I realized that it did not work on phones. As this app's concept mainly revolves around phones, it had to work on this platform. JsColor also has a lot of useful features.
- Easy Autocomplete	Easy Autocomplete uses Jquery and allowed me to load all the existing subjects when an user enters his marker's title. That way, the same subject will not be created twice, and when the user choses a subject, the color attached to it is automatically loaded as well.
- Jquery	It's pretty self-explanatory why Jquery was useful, I think.

PHP/AJAX/SQLITE PROCESS

At first, I thought that I needed to create a SQLite database. And so I did, and the database's information was posted through PHP and Ajax. I even downloaded an app to help me visually understand how it works (DB Browser for SQLite). However, I realized that I did not really need a SQLite database, as JSON was enough for what I wanted to do. And so, each marker's property is written into a .JSON which is updated through a php file, and then retrieved on the app using Ajax. I learned a lot with JSON, because I had a lot of nested arrays and data to be parsed or, on the opposite, to be stringified. I had to understand how everything worked in order to reload that information and display it on the map. Fortunately, I got a lot of help from you Sabine

ADDITIONNAL FEATURE AFTER DUE DATE

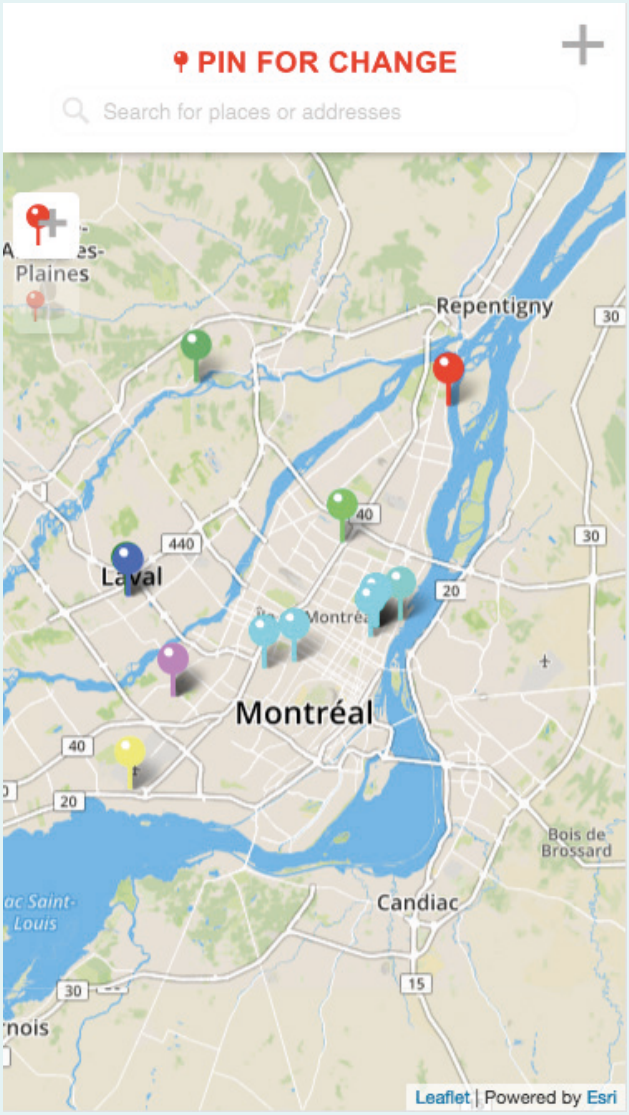
For the final project's due date, I made sure that the basic behaviours were working, such as being able to publish a request and actually see it being displayed and retrieved from the database. Afterwards, we had a little more time to add some features, and as mentionned before, I added the feature which allows the user to retrieve an existing subject, thus automatically chosing the associated color with it as well. I feel that this is an important feature to add, because Pin for Change is really about people coming together to make a difference,

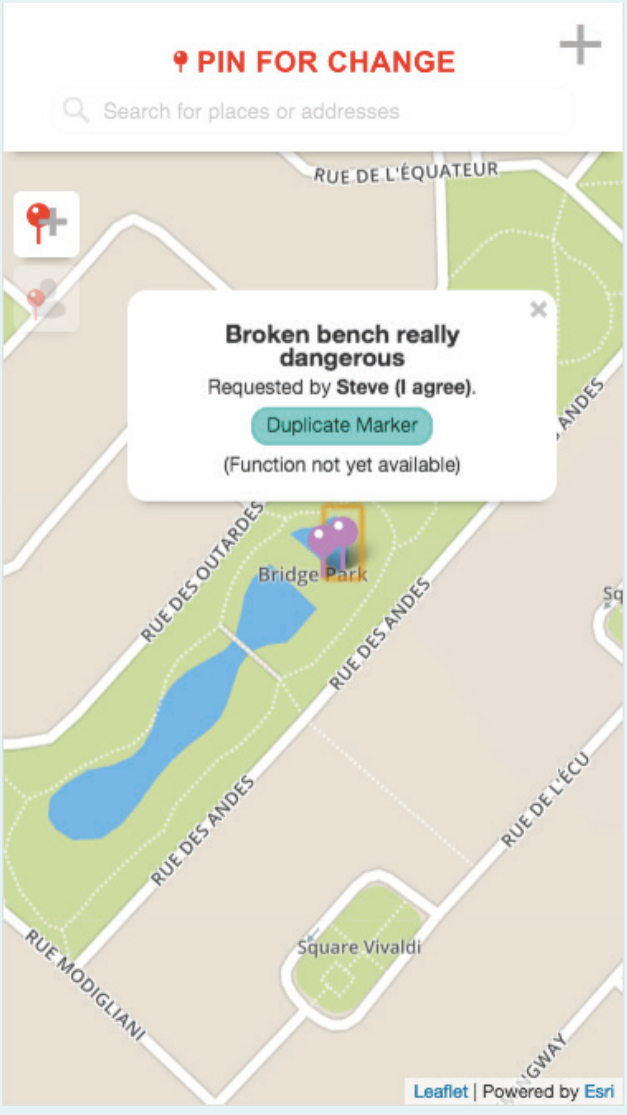
USER INTERFACE

The app has been designed thinking of the user's experience. Since it is to be used on a phone, there is very little text, it is mostly icons. All the text fields to submit a request are big enough so that the user can easily navigate and type in. Also, the map itself is very easy to navigate, you just pinch to zoom and move around with your finger. The design is minimalistic but works well, and everytime I was implementing a feature, I was testing it on my phone too. It is a tool that users can easily incorporate into their everyday lives.

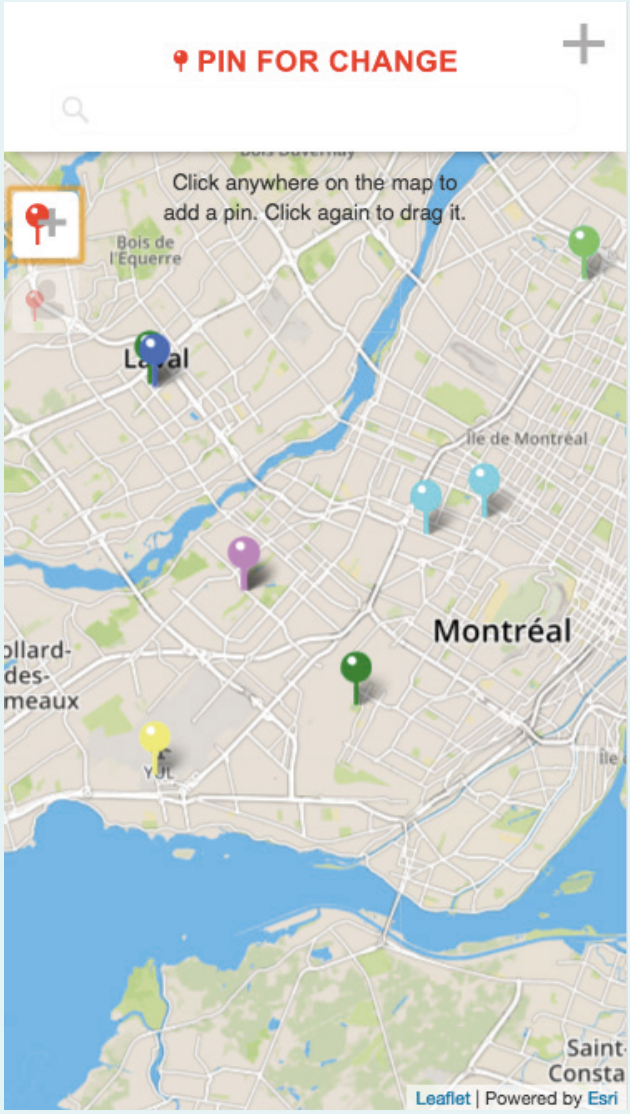
There is one thing that needs to be fixed, and that is the duplicate button. The color should be the same for the pin it's supposed to duplicate. The app is not perfect and I will keep working on it.

SCREENSHOTS

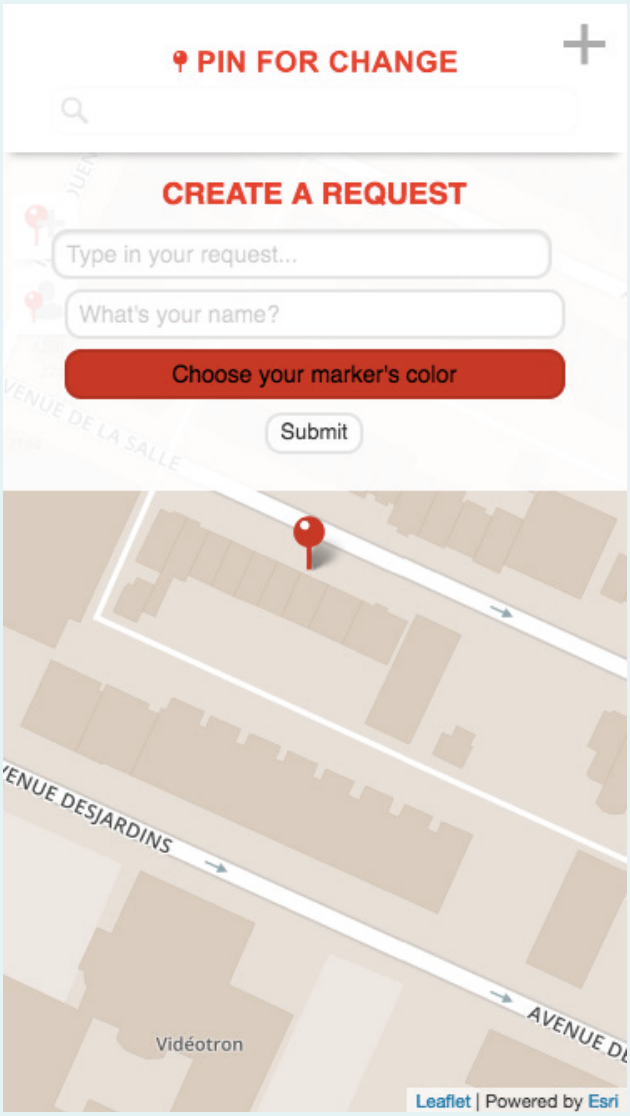




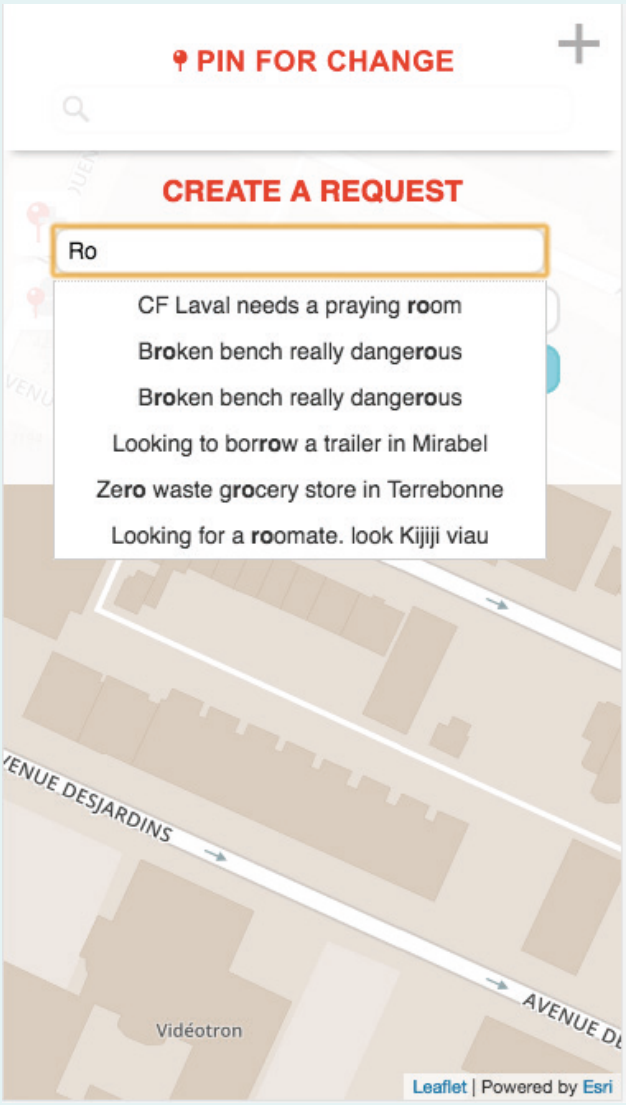
Here, we can see the Boostrap Geosearch library in action.



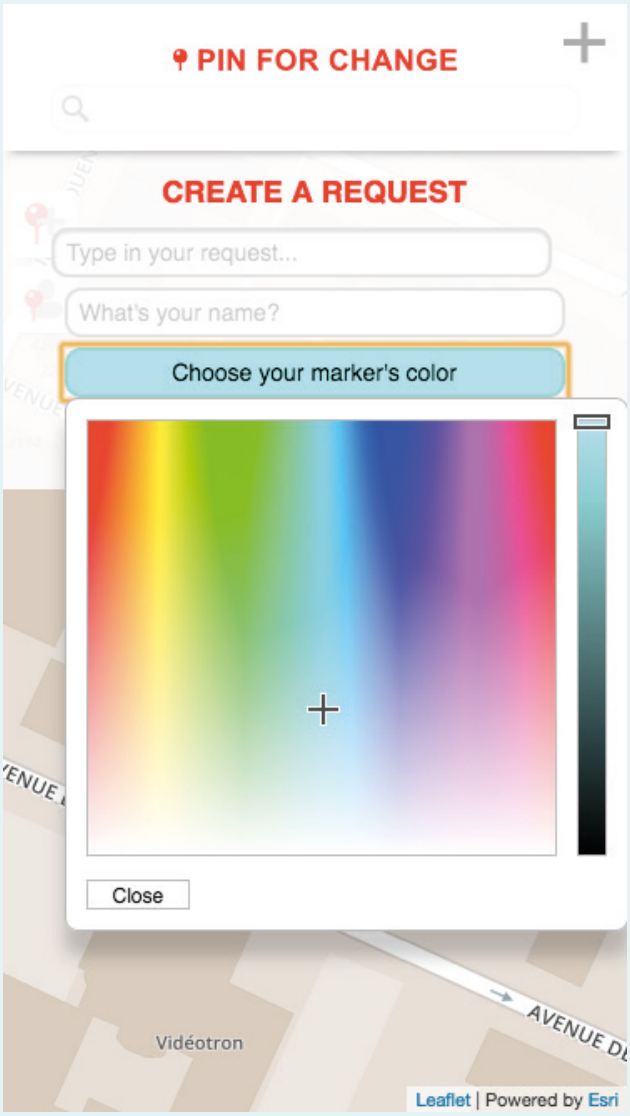
The app guides you through the process.



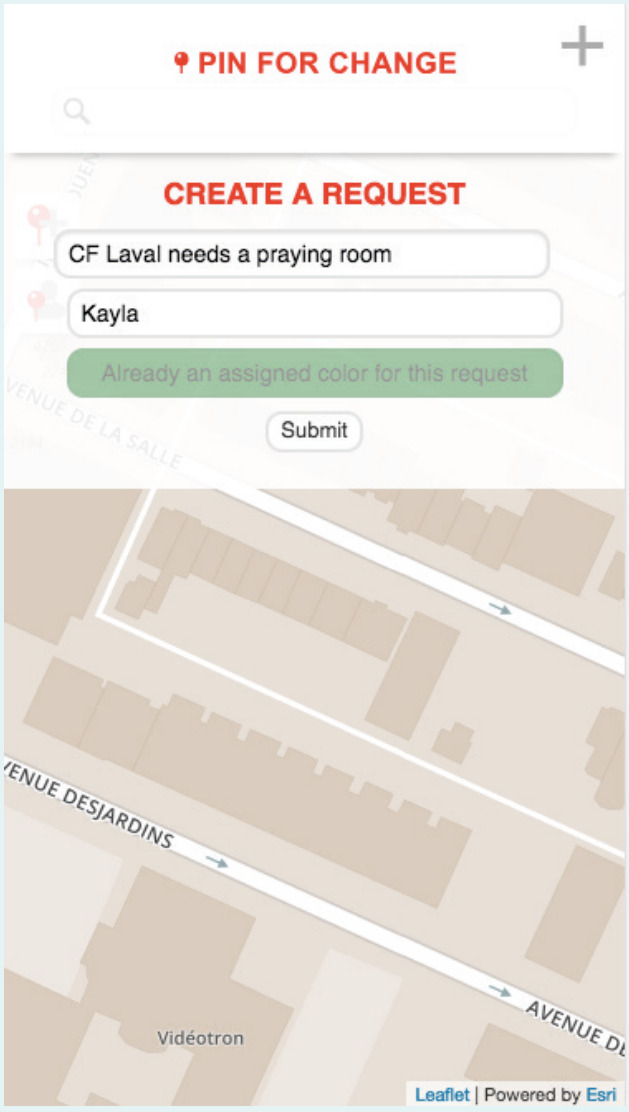
The Create a Request menu



Here you can see the Easy Autocomplete library in action.



Here you can see the JsColor library in action.



You cannot change the color if you choose a subject that already exists.