

# Written Report

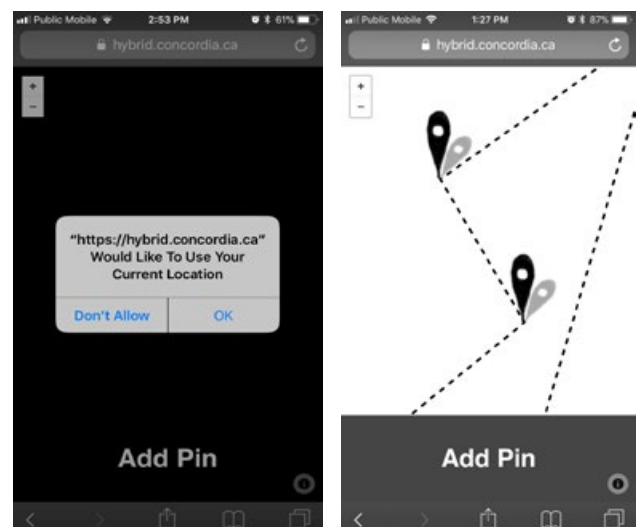
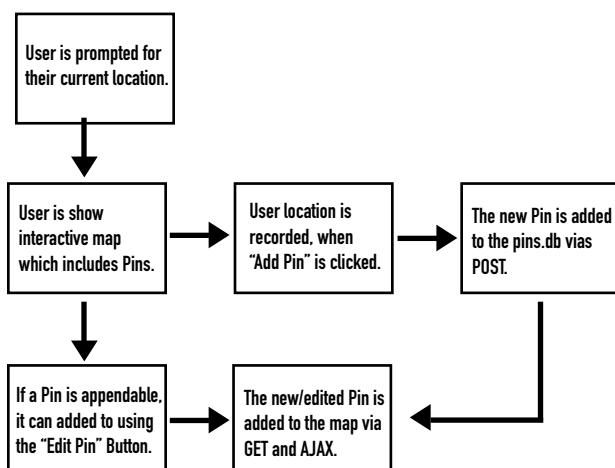
## Project Description

The project "Hatch" is a community-sourced collection of images and descriptions of the various hatch covers in the city of Montreal. The information is then stored in a map form. Users are encouraged to share personal anecdotes regarding a specific hatch cover or about personal events that took place near the location of the hatch. Users are also asked to imagine a specific destination for which the hatch would lead to, and why they would choose this specific destination. The idea is to give these mundane hatch covers a new meaning - that of portals or the entrances to tunnels. This will lead to the creation of a new fantasy map of where these hatch covers might lead to. The users will be able to toggle between the real world map which features markers designating hatch covers in the city, and a fantasy map which shows the destinations the users wish the hatch covers would lead to. The collaborative project will intertwine the reality of urban life with the escapist fantasies of the city dwellers.

## Stage in Project

The user interface of the project has been completed. The project is able to create and store onto a SQLite database and read from it in order to map the various hatch covers to the city map. There are certain functionalities that have not yet been established in the project. These include creating an option so that a marker is appendable or not. There will also be a future option to add an image to the marker. There is also an issue concerning the ability to place a multiple markers in the same area, which will need to be fixed. All pertinent information concerning the marker will need to be shown on the pop-up which appears when a marker is clicked on. There will also be a moving pin which will track the user as they move around the city, this will be created using the "High Accuracy Geolocation" which is a part of the leaflet map API. By using the "High Accuracy Geolocation" the phone will detect the coordinates of where the user is currently at. This is the only way the user will be able to submit a pin to mark a hatch cover: by standing directly on top of the hatch. This will promote a physical interaction with the website and encourage users to explore their urban environment. Another improvement that will need to be made is the CSS, which will be adjusted in order to have an aesthetic which more closely resembled that of a sketchbook. I would like the "Hatch" website project to feel like the user's individual Field Guide to the city. By having a "sketchbook" feel, the website will hopefully feel more personal to the user.

## Images/Diagram



## Purpose of Each Component

The main components of “Hatch” are: the map, the Add Pin page, the Pin database file, the Edit Pin page, and the marker pop-ups.

The “Hatch” map makes use of the Leaflet javascript library (<https://leafletjs.com/>). Using this library I was able to implement a customized marker icon, as well as create pop-ups for the markers. The map uses GET and AJAX in order to read information from the Pin database.

The Add Pin page uses php POST method to add the users/client’s new Pin information into the Pins database.

The Pin database holds all of the information regarding the pins that were submitted by users. This database is the most crucial component in my project because it holds all the information about how/where to populate the markers on the map.

The Edit Pin page in conjunction with the map page uses local storage in order to detect which Pin is about to be edited. The Edit Pin page will display the “name” and “coordinates” of the pin and prompt the user to add more information regarding the desired destination and description. It is important to note that although this is an Edit Pin page the pin information will not be modifiable. Instead, the same user or a new user can append information to an already existing Pin.

The marker pop-ups display the information associated with the pins on the map. The issue with the pop-ups is making them easy to read on a mobile phone without needing to zoom in. There will also be an issue in making the information readable within the pop-ups if there is a lot of writing. I have not yet put a limit on how much text can be appended to a pin. So I will need to find a way to make a large amount of text clean, manageable, and easy to digest when viewing it on a small screen.

I conducted user testing with friends and classmates. I asked the testers about what kind of design would be the most intuitive. While the responses varied, many suggested I put the “Add Pin” and “Edit Pin” side by side as this feels more intuitive for phone users. The “Add Pin” and “Edit Pin” buttons would be in the places where people are used to tapping the screen with their thumbs. There was one suggestion of having the “Edit Pin” option be a part of the pop-up box that appears when a Pin is clicked on. I have taken this into consideration and will be developing a second version with this feature to see if it is preferable.