# DEVELOPING BURLINGTON

"This application is a Bing Maps-based tool designed to provide companies looking to grow business in Burlington with information that might benefit them during the property acquisition process."

Quinn Helm,
000737479

## Brief Purpose of the Application

This application is a Bing Maps-based tool designed to provide companies looking to grow business in Burlington with information that might benefit them during the property acquisition process. To do so, it will allow the user to filter industrial or commercial vacancies on the map according to their needs; as well as provide them with directions to the desired plot. This application will further its usefulness to its target demographic by way of providing additional information about its surrounding location, with the hope of allowing users to make a better-informed decision about purchasing plots for their business.

## Target Audience

Entrepreneurs, companies, and corporations looking to start or expand their operations in Southern Ontario.

Commercial real estate brokers tracking information related to industrial and commercial vacancies across Burlington.

## List of Tasks the Application Allows

**Task 1 –** Users will be able to search for a location and view additional information upon selection (can opt out of this).

**How:** *using an AJAX call, the user will be able to view a series of pushpins on a Bing Map (that can be filtered according to need) that will provide additional information when they select an option. This additional information will be things like nearby locations, directions, or comments by other users (another AJAX call, outlined below).*

*This is the primary task, which is focused on a Bing Map, and will be centered on the app to denote its importance.*

**Task 2 –** Users will be able to view or leave specific comments for other users on each location as a way of encouraging better, more informed decisions. This should provide valuable insight into the community for the application's target demographic.

**How:** *using an AJAX call, the user will be able to leave comments that will be stored in and retrieved from a database table. These comments will be displayed below the Bing Map in newest-to-oldest order. Comments will be stored in a separate table than the location data and use location address to link the comment & location tables together.*

**Task 3 –** Users identifying themselves as the landowner will be able to delete comments pertaining to their land. However, they will be asked to leave verification with no account creation or login necessary.

**How:** *using an AJAX call, the user will be able to "delete" comments from the list of additional information for a location. A comment will only be hidden if the user's name input matches a string stored in the location table – it is done this way as to not require account creation. This will hide the comment from users but will not hide it permanently until further verification has been acquired. This will be accomplished by copying the comment to a separate database table before deleting it from the original.*

## Set(s) of Location Data Used

The location data will be obtained from the ArcGIS geographic information system's "Navigate Burlington" open data subset, specifically the vacant land subset. This will be cross-referenced with the Address Points open data set provided from the same source to provide additional information where relevant. This data is to be stored in a MySQL database table and hosted on CSUnix, retrieved when first loaded and again as necessary from the server based on filters.

Beyond this, I will use the "Find nearby locations" of the Bing Maps API for the purpose of providing location-specific context to the user. The end goal of including nearby locations would be to show the potential of the area to my desired user type, hopefully sparking interest.

https://navburl-burlington.opendata.arcgis.com/datasets/address-points

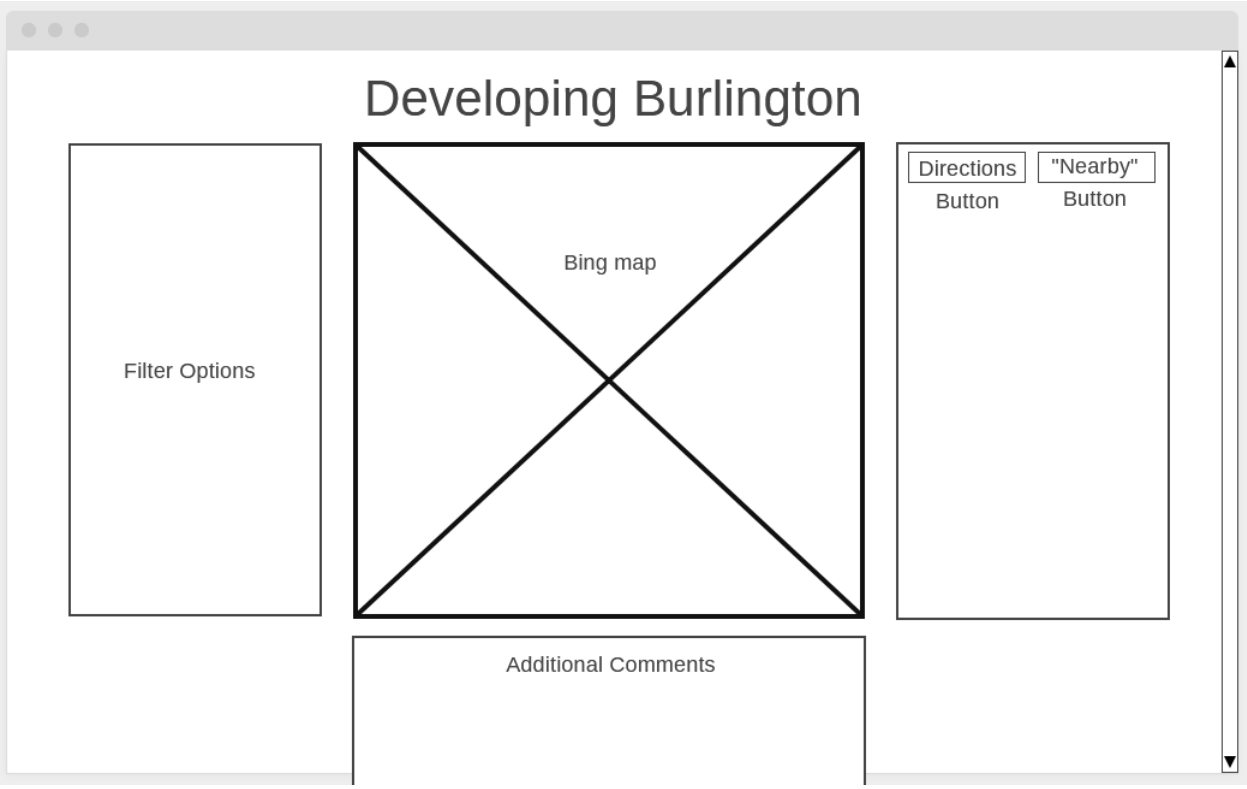
https://navburl-burlington.opendata.arcgis.com/datasets/vacant-land

## Responsive Design

The desktop version of this application will consist of three flexible columns, including a large Bing Map in the center as the focus. On the left of the map will be pin customization options. Specifically, ways to filter the results and will include options to exclude "nearby locations" from obfuscating the other filters. On the right of the map will be the direction results that appear when the user selects a pin on the map.

The application will transition to a smaller, "one column" layout for mobile devices, using a mix of Twitter Bootstrap for styling, and jQuery for hiding the additional column(s). The column for filtering options on the map will be moved *below* the main map element. The directions column will use an *open panel on button press* feature to start hidden and only appear when the user presses the appropriate button. An additional column (*also hidden, and only on the mobile version*) will appear that will contain a list of location buttons, one per, that will enable directions. This will be done to increase usability by not requiring the user to click on small pins on a mobile-sized map.

**Wireframe Application Screen – Desktop**




Note: *the filter options and directions / nearby sections will remain static on the page and scroll down with the user. The map and title of the page will scroll out of view.*

**Wireframe Application Screen – Mobile**