# **Project Summary**

What is your name?

Saad Khan

What E-mail address do you use to sign in to Udacity?

#### saadkhan321@gmail.com

What area of the world you used for your project? Post a link to the map position and write a short description. Note that the .osm file of the map should be at least 50MB.

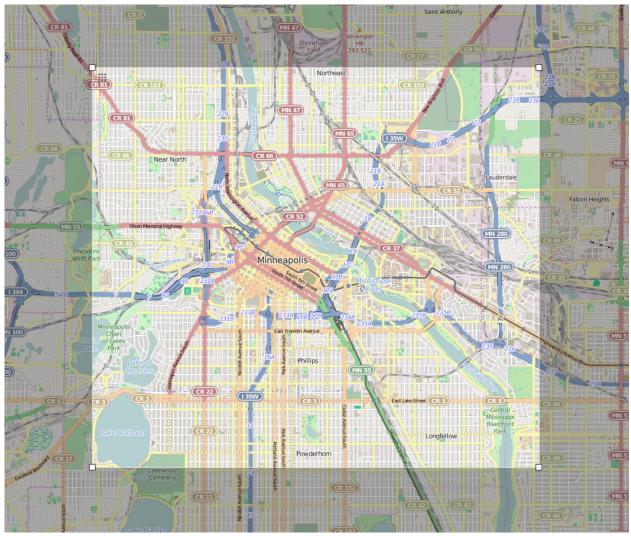
Area used in the project is for Minneapolis, Minnesota, USA. OSM XML file for Minneapolis was downloaded via overpass API link on the openstreetmap website. File size is 52.4MBs.

URL: http://www.openstreetmap.org/export#map=13/44.9734/-93.2513



Selected Area (Boundary Coordinates)

I chose Minneapolis as I have been living here for almost 3 years now. I am interested to know how well is Minneapolis represented on open street maps and would definitely like to improve the quality and readability for my neighborhood.



Selected Area (Map)

Is there a list of websites, books, forums, blog posts, github repositories etc that you referred to or used in this submission (Add N/A if you did not use such resources)?

## Problem 1 [Iterative Parsing Exercise]

- <a href="http://css.dzone.com/articles/processing-xml-python">http://css.dzone.com/articles/processing-xml-python</a>
- <a href="http://www.blog.pythonlibrary.org/2013/04/30/python-101-intro-to-xml-parsing-with-elementtree/">http://www.blog.pythonlibrary.org/2013/04/30/python-101-intro-to-xml-parsing-with-elementtree/</a>
- <a href="http://stackoverflow.com/questions/3545331/how-can-i-get-dictionary-key-as-variable-directly-in-python-not-by-searching-fr">http://stackoverflow.com/questions/3545331/how-can-i-get-dictionary-key-as-variable-directly-in-python-not-by-searching-fr</a>
- https://docs.python.org/2/library/stdtypes.html#dict.items
- http://effbot.org/zone/element-iterparse.htm
- http://www.tutorialspoint.com/python/dictionary keys.htm

# Problem 2 [Tag Types Exercise]

- https://docs.python.org/2/library/re.html#re.search
- https://docs.python.org/2/library/xml.etree.elementtree.html
- https://docs.python.org/2/library/re.html#search-vs-match

# Problem 3 [Exploring Users Exercise]

- http://stackoverflow.com/questions/8749158/removing-duplicates-from-dictionary
- http://www.tutorialspoint.com/python/dictionary keys.htm
- https://docs.python.org/2/library/sets.html#example
- http://en.wikibooks.org/wiki/Python Programming/Sets
- http://www.dotnetperls.com/remove-duplicates-list-python

#### Problem 4 [Improving Street Names Exercise]

- http://stackoverflow.com/questions/930397/getting-the-last-element-of-a-list-in-python
- http://www.decalage.info/en/python/print\_list
- <a href="http://stackoverflow.com/questions/914715/python-looping-through-all-but-the-last-item-of-a-list">http://stackoverflow.com/questions/914715/python-looping-through-all-but-the-last-item-of-a-list</a>
- http://stackoverflow.com/questions/3294889/iterating-over-dictionaries-for-loops-in-python

## Problem 5 [Preparing for Database Exercise]

- http://www.pasteur.fr/formation/infobio/python/ch10.html
- <a href="http://stackoverflow.com/questions/25735516/typeerror-float-argument-must-be-a-string-or-a-number-in-django-distance">http://stackoverflow.com/questions/25735516/typeerror-float-argument-must-be-a-string-or-a-number-in-django-distance</a>
- https://docs.python.org/2/library/xml.etree.elementtree.html#module-xml.etree.ElementTree
- http://stackoverflow.com/questions/3437059/does-python-have-a-string-contains-method
- http://www.tutorialspoint.com/python/string\_startswith.htm