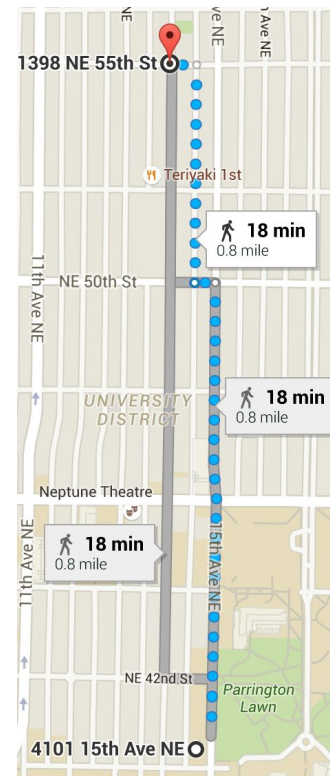Roee Avnon (avnon)
CSE 403
1/6/15

Footie - Project Proposal

Using one's own two feet is a great way to get around new and unfamiliar surroundings, or explore in more careful and precise detail already familiar ones. Foot travel allows one to take in the sights and the smells and the sounds from up close, which is something virtually unoffered in vehicular transportation. However, understanding and discovering the areas of a locale which would allow for maximum enjoyment of pedal exploration can be very challenging. For example, when querying an online mapping and path-finding service, such as Google Maps, for walking directions, the path returned is often the shortest by distance and completely disregards the quality of the path itself. Consider, for example, the example provided in the screenshot on the right, which should be very familiar to University of Washington students. When finding the walking path from 15th and 40th to 14th and 55th, we see that there are 3 paths all with equal distances and times. Google Maps will return either one to you, indeed the default selection in this case was the first option of walking all the way up 15th Ave and then taking a left on the last street. However, as many UW students know, walking directly on University Way (The Ave) would be a much nicer walking option, and would allow someone new to the neighborhood to really get the feel and vibe of the University District. Google Maps, however, gives no indication that this might be the case.

A novel solution is needed. This is where Footie comes in. Footie is an app designed to provide the user with the best *contextual* walking directions. This means providing the client with the most enjoyable walking experience as opposed to the shortest or fastest. Footie accomplishes this by using built-in heuristics to analyze potential foot path candidates. Place strong preference, for example, on coffee shops instead of mechanics, and public parks instead of parking lots. This data is available for the service through 3rd party APIs such as Google Maps for business and location designations and Yelp for business ratings. Footie is perfect for locals and newcomers alike, and highlights a new part of the neighborhood or city to anyone that uses it.