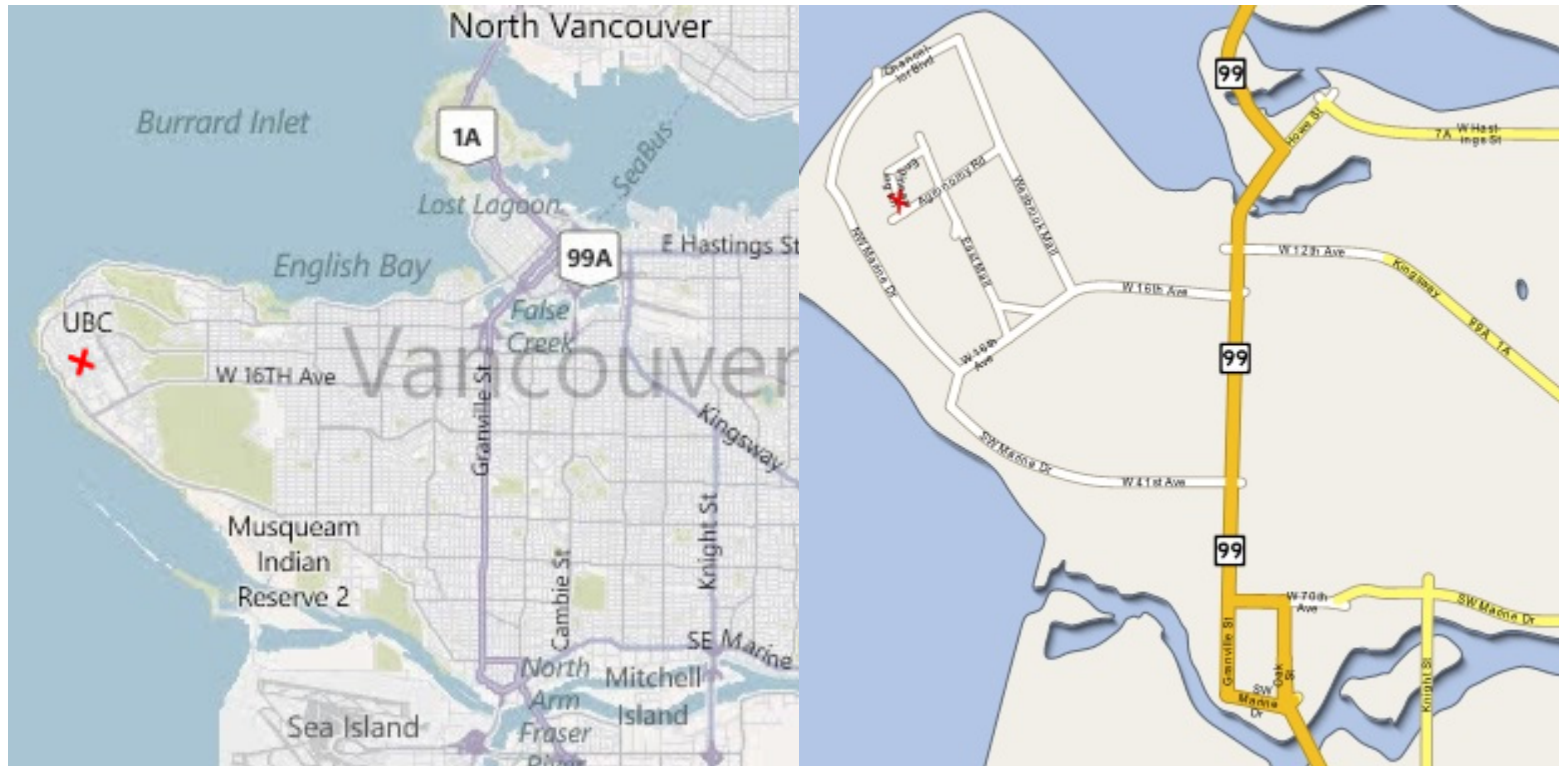


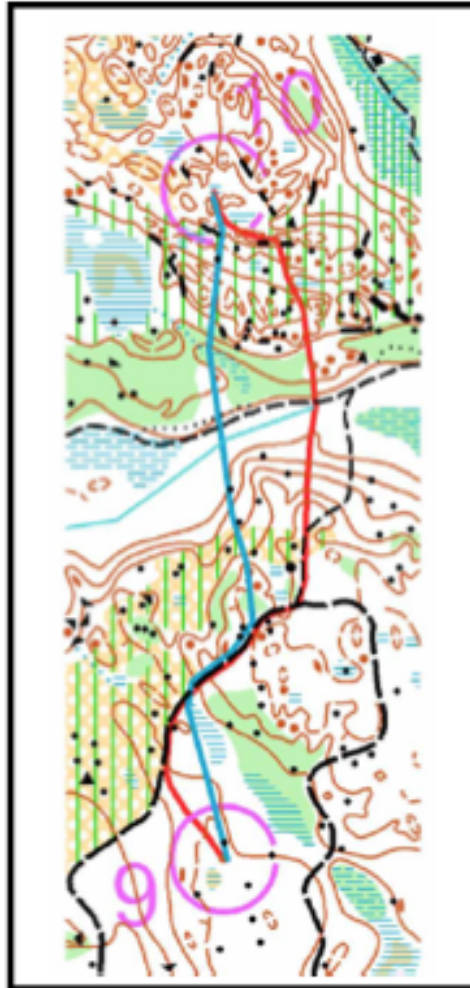
# Project Update

Modifying Route Map Visualizations  
for Easier Mobile Usage

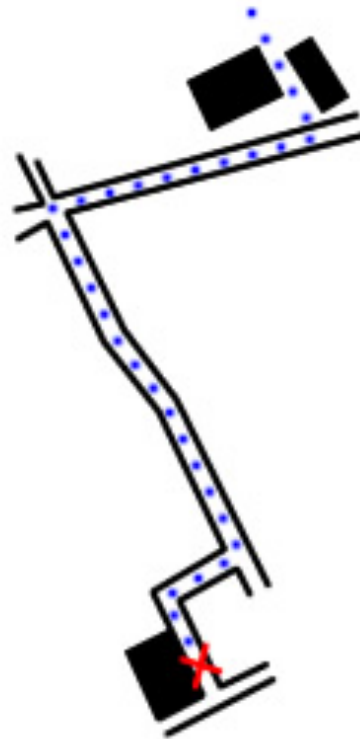
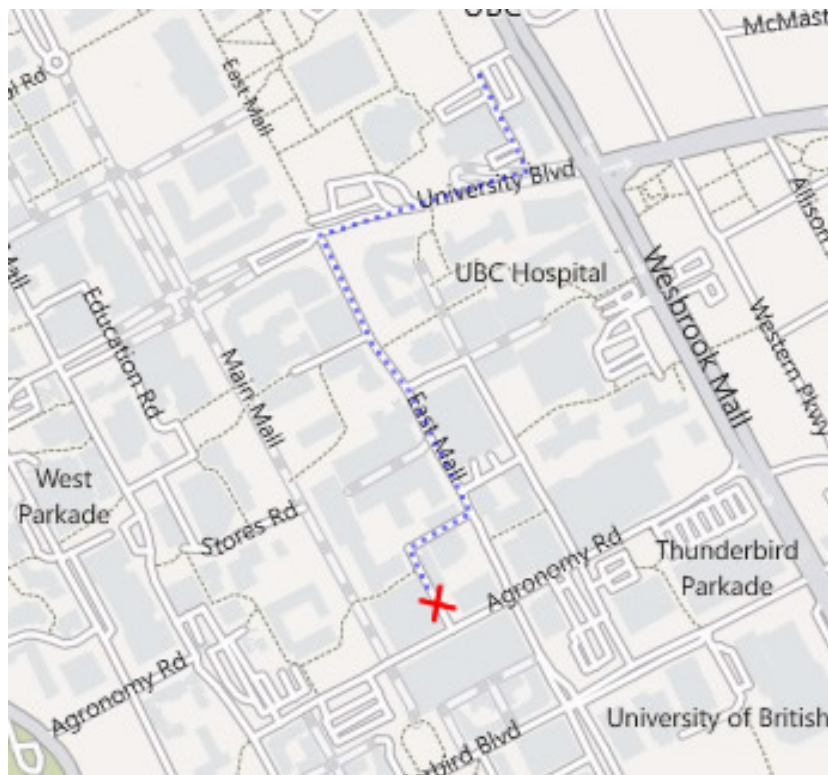
# Destination Map



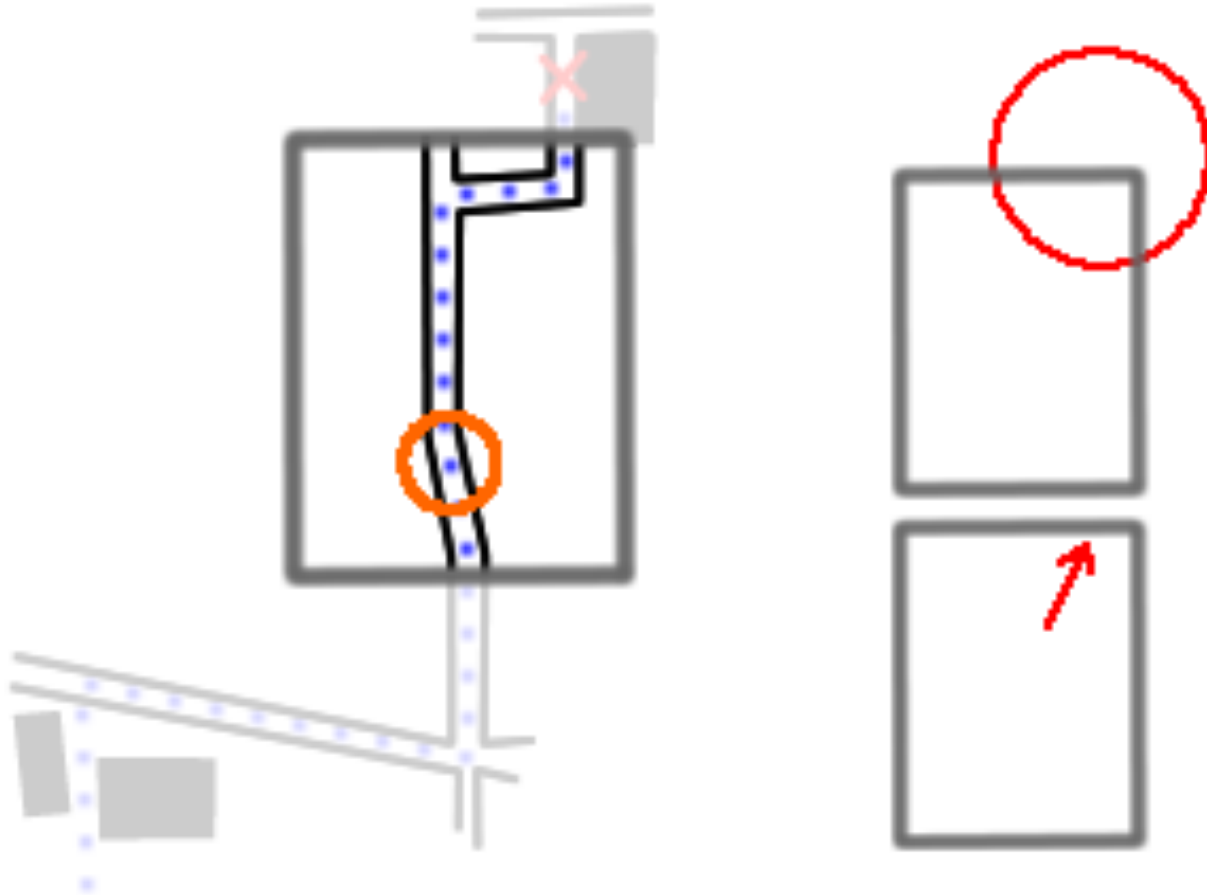
# Simplification



# Route Map



# Small screen



# Basic idea

## Scenario

*The user takes out their touchscreen cell phone and inputs their destination. They then follow the route using the provided visuals, and the map updates as they move towards their destination.*

- An egocentric frame of reference
- Map = path-out

# Progress

- Set up android SDK in Eclipse
- Created basic Google map application
  - Ability to pinch zoom / drag map
- Integrated Android location abilities
  - A “you are here” dot
  - *Can get the app to animate to follow the dot as it moves*



# Obstacles

- Implementing direction capabilities = difficult
  - Use an intent to get a KML file
  - Parse the KML file
  - Use an overlay to draw the route on top of the map
- Modifying the map
  - Overlays to draw visualizations for the off screen locations
  - Use overlays to hide information that is not needed?
  - Use data from KML file to know about turns and change the amount of information that is hidden?



```
<?xml version="1.0" encoding="UTF-8"?><kml xmlns="http://earth.google.com/kml/2.0"><Document><name>ubc to Dunsmuir St, Vancouver, BC</name><Style id="roadStyle"><LineStyle><color>7fcf0064</color><width>6</width></LineStyle></Style><Snippet><![CDATA[<font size="+1"><a href="http://maps.google.ca/maps?saddr=ubc&daddr=Dunsmuir+Street,+Vancouver,+British+Columbia&hl=en&sll=49.261226,-123.113927&sspn=0.261249,0.574722&geocode=FVGz7wldjWCn-CHzoipz59Sdxw%3BFXL-7wldSWqpcmxlHMzf3GGVDErJeWfCpnMzA&vpsrc=0&mra=ls&t=m&z=13">Printable view</a></font>]]></Snippet><Placemark><name>Head southeast on E Mall S toward Applied Science Ln</name><description><![CDATA[go 1.2&#160;k]]></description><address>ubc</address><StyleMap><Pair><key>normal</key><Style><IconStyle><Icon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/go.png</href></Icon><hotSpot x="0.500000" y="0.000000" xunits="fraction" yunits="fraction" /></IconStyle><ListStyle><ItemIcon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/go-lv.png</href></ItemIcon></ListStyle></Style></Pair><Pair><key>highlight</key><Style><IconStyle><scale>1.300000</scale><Icon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/go.png</href></Icon><hotSpot x="0.500000" y="0.000000" xunits="fraction" yunits="fraction" /></IconStyle><ListStyle><ItemIcon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/go-lv.png</href></ItemIcon></ListStyle></Style></Pair></StyleMap><Point><coordinates>-123.248560,49.263420,0</coordinates></Point><LookAt><longitude>-123.248560</longitude><latitude>49.263420</latitude><range>100.000000</range><tilt>45.000000</tilt><heading>151.639359</heading></LookAt></Placemark><Placemark><name>Turn left onto W 16 Ave</name><description><![CDATA[go 350&#160;m]]></description><StyleMap><Pair><key>normal</key><Style><IconStyle><Icon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/pause.png</href></Icon><hotSpot x="0.500000" y="0.000000" xunits="fraction" yunits="fraction" /></IconStyle><ListStyle><ItemIcon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/pause-lv.png</href></ItemIcon></ListStyle></Style></Pair><Pair><key>highlight</key><Style><IconStyle><scale>1.300000</scale><Icon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/pause.png</href></Icon><hotSpot x="0.500000" y="0.000000" xunits="fraction" yunits="fraction" /></IconStyle><ListStyle><ItemIcon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/pause-lv.png</href></ItemIcon></ListStyle></Style></Pair></StyleMap><Point><coordinates>-123.241040,49.254060,0</coordinates></Point><LookAt><longitude>-123.241040</longitude><latitude>49.254060</latitude><range>100.000000</range><tilt>45.000000</tilt><heading>151.589920</heading></LookAt></Placemark><Placemark><name>At the roundabout, continue straight to stay on W 16 Ave</name><description><![CDATA[go 7.0&#160;k]]></description><StyleMap><Pair><key>normal</key><Style><IconStyle><Icon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/pause.png</href></Icon><hotSpot x="0.500000" y="0.000000" xunits="fraction" yunits="fraction" /></IconStyle><ListStyle><ItemIcon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/pause-lv.png</href></ItemIcon></ListStyle></Style></Pair><Pair><key>highlight</key><Style><IconStyle><scale>1.300000</scale><Icon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/pause.png</href></Icon><hotSpot x="0.500000" y="0.000000" xunits="fraction" yunits="fraction" /></IconStyle><ListStyle><ItemIcon><href>http://maps.gstatic.com/intl/en_ca/mapfiles/kml/paddle/pause-lv.png</href></ItemIcon></ListStyle></Style></Pair></StyleMap><Point><coordinates>-123.236530,49.255580,0</coordinates></Point><LookAt><longitude>-123.236530</longitude><latitude>49.255580</latitude><range>100.000000</range><tilt>45.000000</tilt><heading>66.849701</heading></LookAt></Placemark>
```

...

# Questions?

■ You are here?

