

Patrick Zhong
Muhammad Nauman
Daniel Huck

Instructions to the MSC:

- Exit room 212 and turn right
 - Proceed forward until you are able to walk down the hallway to your right
 - Go down the stairs and exit ZACH
 - Turn right and walk towards spence street
 - Turn left onto spence street and walk straight until you reach the liberal arts and humanities building
 - Walk to the right side of the building in front of you but proceed in the same direction that you have been heading
 - Continue in that direction and you will reach spence street again
 - Continue straight down spence street until you reach lubbock street
 - turn right onto lubbock
 - Continue until you reach coke street
 - Turn left and proceed until you reach Joe Routt Blvd
 - Turn right on Joe Routt Blvd and walk until you are next to the second building on the right side of the street.
 - Turn right again and walk into the MSC
-

Which set of the four sequences of steps did you identify as being the best? Why?

Daniel's sequence of steps was the best as it was detailed and took into account obstacles (buildings) on the way to the MSC.

In what ways were the sets of sequences that were produced different? How were they similar? How likely do you think it is that multiple people will produce the same computer code for a given programming assignment?

The sequences differed in the general route/direction taken and the level of specificity in the directions, as well as handling edge cases. They all shared the same general / big-picture directions such as "leave the Zachry building". It's pretty unlikely that multiple people will write the same exact code for the same assignment.

Consider whether your choice of the best set of instructions might change depending on the person following them. For example (you may think of other examples), would the best set change:

- If the person following them were already very familiar with campus, or had never set foot on campus.

- If they're familiar with campus, less detail would be required. However, those who have never been on campus would need more specificity in the instructions.
- If the person following the instructions were using a wheelchair, or the person following the instructions were interested in jogging.
 - This set of instructions would not change much as it mainly sticks to flat roads that both joggers and wheelchair users can travel on. One change would be to use the elevator instead of the stairs. Other instructions might need to remove routes going over grass or rocky areas for wheelchair users.
- If the person were in a rush to get to the MSC, or if the person were interested in getting the best overall sense of campus while traveling to the MSC.
 - If they're in a rush they'd likely appreciate less detailed instructions and a more direct route to the MSC, cutting across campus instead of sticking to large roads. However, a person wanting to get a sense of campus might take a more scenic route passing by landmarks.
- If a machine, such as an autonomous vehicle, were following the instructions instead of a person. In this instance, what sensors might be necessary to navigate the instruction set?
 - A machine might not be able to recognize landmarks such as the LAAH building and would have to rely more on the cardinal directions and distance detection (ie. compass, GPS, and distance sensors).

Briefly describe whether different sets of instructions might have been better options in other scenarios.

If they want to go on a less busy route with less people (ie. for biking or driving) that'll require a different set of instructions. Most of what was discussed above would require a different set of instructions as well.

This was a very open-ended question. What questions might you have asked to begin with in order to better know how your sequential steps should have been written? As an example, how important is it where one starts and what direction one is facing?

- How much detail is needed?
- Where in the MSC is the user trying to go?
- Does the user have a compass?
- Does the user have any disabilities?
- Does the user have any preferences of modes of travel?