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# By submitting this assignment, all team members agree to the following:
# "Aggies do not lie, cheat, or steal, or tolerate those who do"
# "I have not given or received any unauthorized aid on this assignment"
#
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# Aidan Cormier
# Section: 102-504
# Assignment: Lab 2
# Date: 5 September 2018
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## Christopher Tran

- 1. Walk out of room 240 and make a right
- 2. When you see the stairs turn right
- 3. When you reach the stairs left and go down the stairs
- 4. Once you reach the first floor turn right and go straight towards the door
- 5. Walk out of the Zachry Engineering Complex towards Spence Street
- 6. When on spence street turn left and walk until you reach ross street
- 7. Turn right onto ross street and continue walking until you reach an intersection of 3 roads
- 8. Turn left on that road and walk straight while ignoring jones street and old main dr until you reach the MSC at the end of the road
- 9. You will see a fountain and the building to the right is the Memorial Student Center

## Mihir Chadaga

- 1. Exit the Zachry Engineering Center via the main entrance.
- 2. Turn left onto Spence Street.
- Continue straight on Spence Street until the intersection between Spence Street and Ross Street.
- 4. Turn right onto Ross Street.
- 5. Continue straight on Ross Street until a split in the road.
- 6. Take a left and continue until you reach another fork.
- 7. Take the left again onto Houston Street and continue until a curve in the road.
- 8. Travel towards the now viewable MSC bus stop.
- 9. Turn right after the bus stop and round the corner and the MSC is near a viewable fountain to the right.

## Justin Arackel

- 1. Walk out of the Engineering Room 240
- 2. Turn right 90 degrees and walk 600 feet to the stairwell on the south end of Zachry.
- Descend the stairwell.
- 4. Turn left 90 degrees.

- 5. Walk out the doors that lay in front of you.
  - Note: The direction you now face as you walk out the south side of Zachry is south.
- 6. Walk westward towards the nearest street and then walk south.
- 7. Walk around as many building as you want continue south until you reach The Commons.
- 8. Face west and walk on Lubbock street westward.
- 9. Walk straight for a half mile.
  - Note: You have now reached Rudder Tower.
- 10. Walk around rudder tower and the MSC is on the other side of the Rudder Building.
- 11. Walk into the MSC make sure not to touch the braille map.

### Aidan Cormier

- 1. Walk out of Zach 240
- 2. Turn right 90 degrees
- 3. Walk straight to staircase
- 4. Descend staircase to the first floor
- 5. Turn left 90 degrees
- 6. Walk out the front door
- 7. Turn right 90 degrees
- 8. Walk straight until you reach the street
- 9. Turn left 90 degrees
- 10. Walk until you reach Ross Street
- 11. Turn right 90 degrees
- 12. Follow Ross Street until you reach the junction with jones street
- 13. Turn left unto Jones street
- 14. Follow Jones Street until you reach the junction with lamar street
- 15. Without changing orientation continue straight until you reach the MSC

## Kaushal Jishnu Gajula

- 1. Exit room 240
- 2. Turn right towards stairs
- 3. Go to first floor by stairs
- 4. Turn right towards exit
- 5. Exit Zachary engineering Complex
- 6. Head southwest towards Spence street
- 7. Turn left onto Spence street
- 8. Walk towards scoates hall for 0.2 mil
- 9. Turn right towards evans library
- 10. Walk for 0.2 mil towards
- 11. Head northwest towards the academic plaza
- 12. Walk towards hart hall onto military walk
- 13. Turn left and walk towards rudder plaza

#### Questions:

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

Christopher's instructions were chosen as the best set. The reasoning behind this is because the instructions used the most straight forward route to get to the MSC. The route used mostly straight paths with little turns and used the main roads and streets to minimize the chance of a follower getting lost while following these instructions. Because of the simplicity of the instructions this set would be the best option for a broad range of people who are looking for directions to the MSC from the Zachry Engineering Complex.

## In what ways were the sets of sequences that were produced different?

Different routes were used to describe the path between Zachry and the MSC. Due to both the detail and different routes used, the sequences produced were very different in their composition. Even without different routes, the sequences would still have been different because different people had written them.

## In what ways were the sets of sequences that were produced the same?

Many of the initial sequences for leaving Zachry were the same as well as the process to identify the MSC when nearing it. Though the wording of sequences were different, many of the processes involved were identical or very similar. This is because many of the methods of departure and arrival are the same whereas the routes in between are variable.

Consider whether your choice of which of these would be 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:

i. The person following them was already very familiar with campus, or had never set foot on campus.

Kaushal's instructions gave the general direction (northwest, southwest, etc.) with names of building and landmarks that Texas A&M students are very familiar with. Mihir, Aidan and Justin's instructions included street names and specified the layout of the roads and helped paint an accurate depiction of the streets which would help freshmen and prospective students navigate their way to the MSC.

ii. The person following the instructions was using a wheelchair, or the person following the instructions was interested in jogging.

The best set would change if the person was in a wheelchair because Chris's instructions called for the use of stairs. If a person needed a wheelchair they would require a route that did not use stairs but instead the elevator. The instructions would also have to include going into and out of the zachry and msc building with the accessible entrances. If the person was jogging the route chosen would be the best one because it is mostly straight and uses sidewalks and/or the road. This would allow them enough space to jog.

iii. The person was in a rush to get to the MSC, or the person was a visitor interested in getting the best overall feel of campus while traveling to the MSC. Briefly describe whether different sets of instructions might have been better options in other scenarios.

If the person was in a rush to the MSC the chosen best route would not be optimal. The reasoning is because this route was designed to be simple and straightforward with no shortcuts in between building or taking side roads in order to minimize the chance of a person getting lost. If a person was in a hurry a set of instructions involving shortcuts between buildings would be a better option. If a person was intending to get the best overall feel of campus the chosen best route could be a good option as it uses the main roads and allows the person to get a better overall feel of campus. However this route does not include any of the major places that a person could stop at and see on their way to the MSC. Another route that was catered to this person's needs would have to be made but this one would suit the person's needs only to an extent.

# 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?

- For what audience are these steps intended to direct?
- Is there a certain route that would be preferred over others?
- Should speed be the general concern of the process or should accessibility of the path taken (due to the audience in consideration) be the primary focus?
- If the primary audience of the process are visitors or freshmen, should surrounding scenery be more heavily focused, or speed as mentioned above?

## How to test the strength of concrete:

- 1. Gather concrete specimens in the dimensions of a 4x8 cylinder
- 2. Record the mass of the specimen
- 3. Apply sulfur mortar caps at least two days prior to testing
- 4. Ensure cylinders do not dry out prior to testing
- 5. Ensure the diameter of the top and bottom of cylinder differs by less than 2%
- 6. Ensure the ends of the specimen do not depart from perpendicularity by more than half a degree
- 7. Load cylinders into a compression compression-testing machine and maintain a constant pressure of 20-50 psi per second
- 8. Test the specimen until it hits maximum load capacity and breaks
- 9. Record break type
- 10. Calculate concrete strength by dividing maximum load by average cross sectional area
- 11. Record the test date, date specimens were received, specimen identification, cylinder diameter, test age, maximum load applied, compressive strength, type of fracture, any defects in the cylinders or caps, and the weight of the cylinders
- 12. Should the difference in load strengths of the two specimens differ by more than 8% for two specimens or 9.5% for 3 the test results should be put under scrutiny

## Variables:

- Test\_date date of the testing
- Date received date received
- Specimen identification identification to define the separate specimens
- Cylinder diameter diameter of the cylinder
- Test\_age age of the test

- Current\_load current load applied
- Maximum\_load maximum load applied prior to load failure of the specimen
- Compressive\_strength psi of compression-testing machine
- Fracture\_type type of the fracture
- Cylinder\_weight weight of the cylinder