D3: Data Analysis + Problem Identification

PROJECT NAME: Making navigation apps efficient | TRANSPORTATION |GOOGLE MAPS|

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PART 1: DATA PRESENTATION IN DIAGRAM FORM

Diagram 1: Affinity Diagram-1
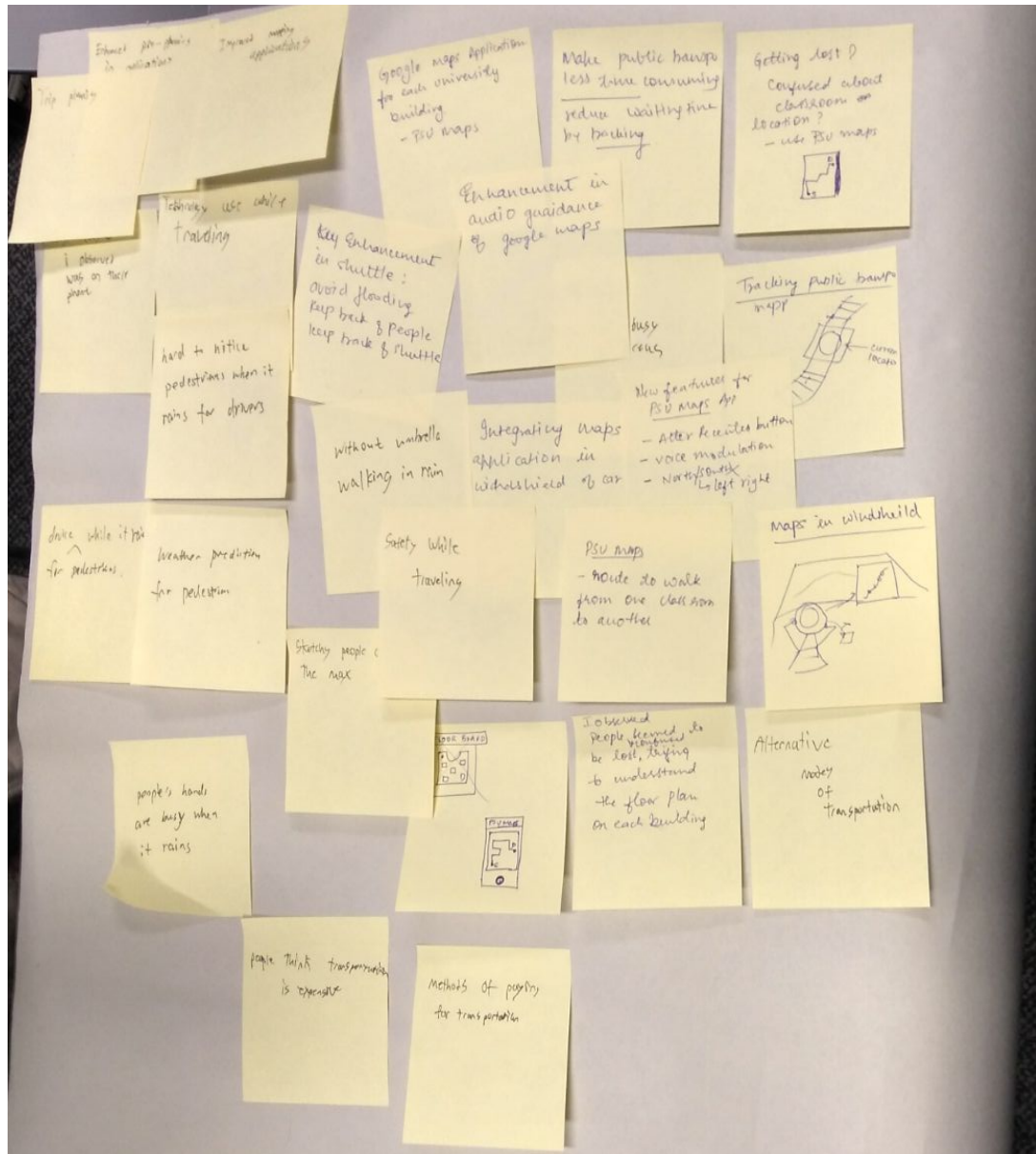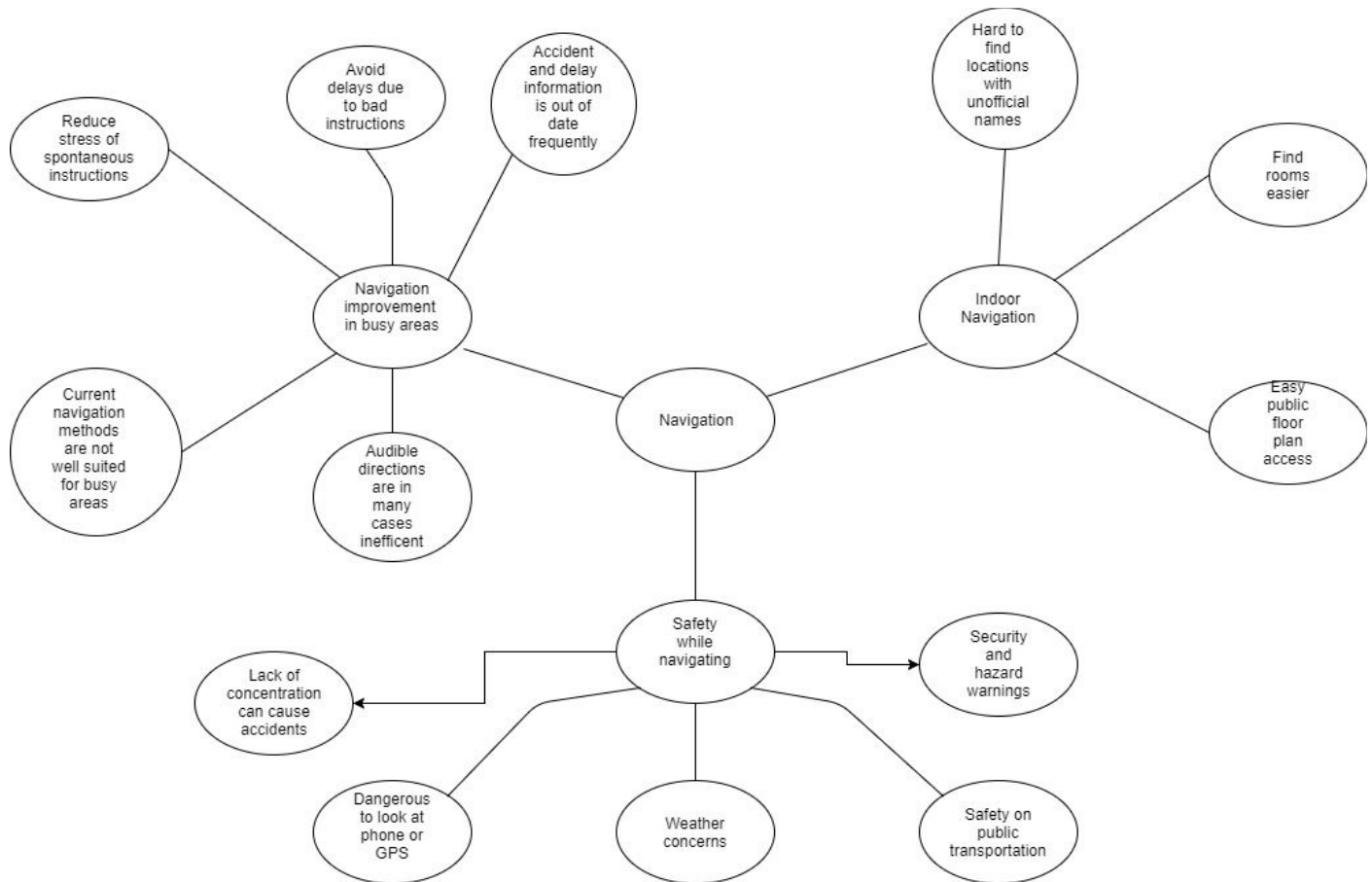
Diagram-2: Updated version of our affinity diagram.

Diagram 3: Thematic Diagram-3

Diagram reflection.

For our second diagram we choose to create a thematic diagram; we choose to do this diagram due to the fact that we had many broad ideas that could fit under one major theme. Our entire group worked together to consolidate all the themes into one cohesive and well mapped diagram. While the affinity diagram seemed to be more about just throwing out ideas and data and trying to find how they fit together, the thematic diagram felt like it was more about finding a way to organize the themes depending on their level of abstraction.

If we were doing a thematic diagram again next time it would be good to break the themes down into more basic themes. The affinity diagram we did could have used more specific data about each research topic.

PART 2: PROBLEM STATEMENT

Navigation apps are inefficient and this causes potential safety hazards for all potential users. Constantly checking the phone for routes and traffic while traveling can cause distractions which is potentially dangerous. Also the audible instruction feature on these devices needs to be enhanced for quicker and more timely instructions to follow in busy areas. These apps also tend to lack any form of navigation for inside buildings.

This issue occurs while traveling using any means of transport and using any type of navigation assistance. It is important to fix these issues because they are a direct cause of safety concerns for most people.

Problem Statement: Navigation apps are inefficient outside and indoor maps tend to remain static for long periods of time and this can cause potential safety and time concerns. They also do not include navigation for within publicly accessible buildings.
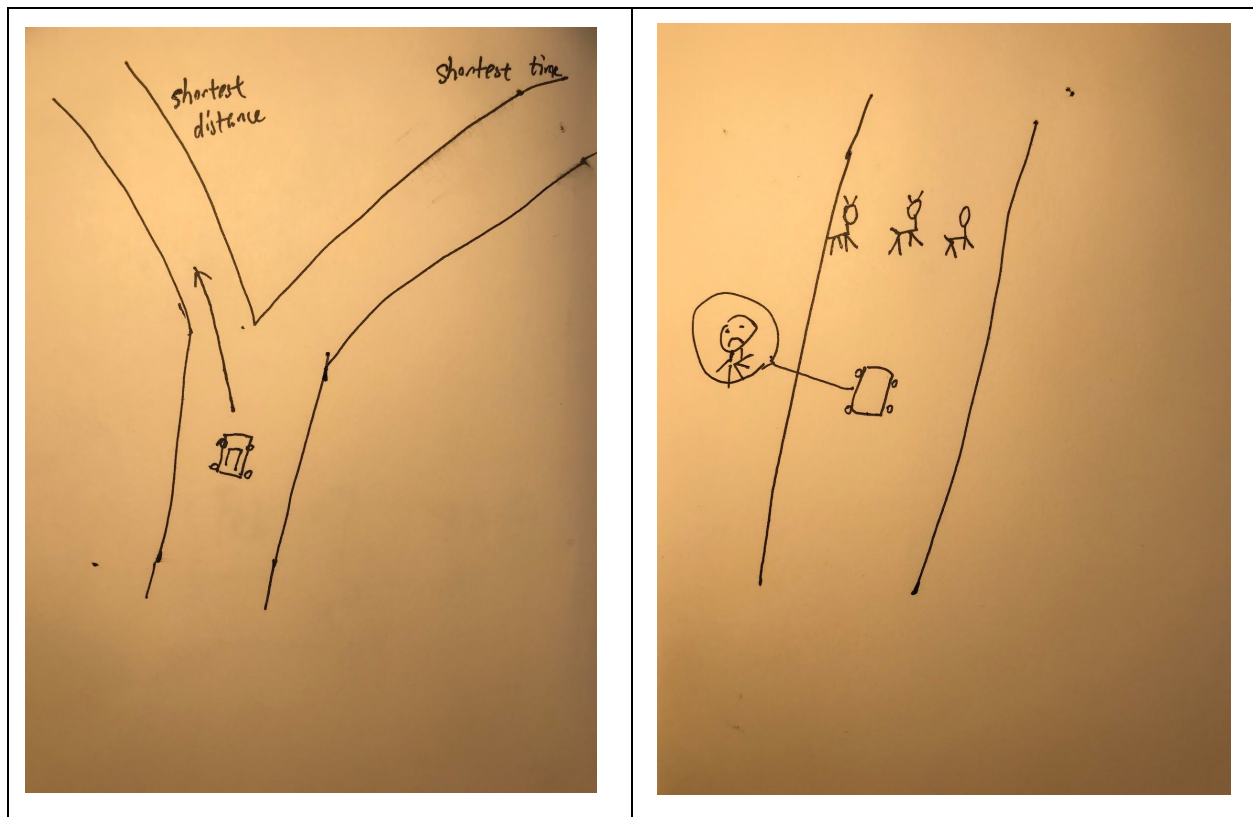
Our solution would provide an updated navigation system with more efficient audible instructions and a better warning system. The same application could also be used for map details inside a building.

PART 3: PERSONAS, PERSONA STORIES, OR MODULAR PERSONAS

Persona 1: Persona Name : Randy

   Randy forty year old single lawyer in Portland. He is originally from canada and has just recently moved to Portland for work. One day, he drives from his office to meet a very important client named Rob. Rob lives very far away from his office. For health reasons, Rob is unable to leave his house. So Randy has to drive to Robs' home for the meeting; this meeting is highly important and time sensitive; he needs to get Robs' house as soon as possible. There are two possible routes that lead to his destination and he is unfamiliar with the area. He turns to navigation assistance for help. The device tells him that the road on the left is the shortest route. But it ends up that the left road takes significantly more time than expected. Randy looks aside. He find there are few cars on the left side road. He thinks that the right road will help him save time. He is driving and needs to make a quick decision; So he chooses the shortest route as indicated by his GPS.

   In fact, there is a actually a herd of deer crossing the left road, which the navigation does not account for in its calculations. When randy notices the warning signs it is already too late to make a route change; He Will need to continue driving along the left road. He encounters deer 4 times along the road and this greatly slows down the speed of his trip. As a result he gets to his clients house very late and loses a very important client.
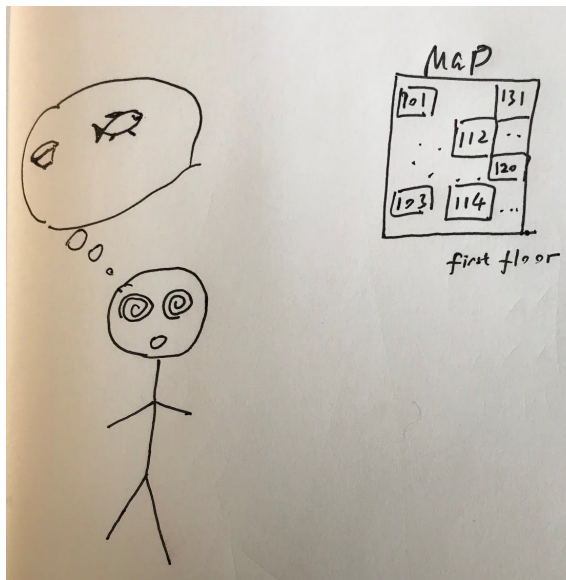

The problem I want to solve: The navigation assistance doesn't provide important information about delays

Persona 2: Persona Name : Sandy

Sandy is a twenty four year old first term graduate computer engineering student at Portland State University(PSU) who is single. So far she has enjoyed her time on the beautiful campus and her interactions with the nice people here.

Sandy is looking for the fishbowl. She needs to meet her TA George here in order to hand in a programming language assignment. Her professor Andy who is the lecturer for the Programming Languages class is currently not in Portland. All the students are required to send the hard copy of assignment to the TA George. The due date today by the end of the TA's office hours. The location of TA's office hours is at Fishbowl in Fourth Avenue building(FAB). Sandy has a Math class from 1:30 pm to 3: 30 pm at Cramer Hall. After class she walks to the FAB in a hurry so she can turn her assignment in. What's worse, she doesn't know where the Fishbowl is within the building. Is it a place where people feed golden fish? Or someplace for Cats? She uses google maps to help her locate the cat bowl. She can't find the location. It seems like it is this unofficial name for the location is recorded in google maps. She attempts to use the maps posted near the elevators; but they are out of date and also do not include unofficial names. The only thing she can do is to walk through the floors one by one looking for the TA.

Finally, she encounters her friend Helen who has been a student at PSU significantly longer than Sandy. Helen shows her the location of the fishbowl . Sandy arrives at Fishbowl at 4:10 pm. It is 10 minutes after the past the end of office hours and George is no longer there.. She sends an email with the assignment attached to explain the delay to George. George tells her not to worry. George will tell the professor about the situation; He thinks Andy will forgive her since he is very understanding and will allow Sandy to turn in the assignment.

	The Problem I want to solve: Many maps don't include in small spots in a building and tend to only include official names for locations.