

Design Thinking

- DSN2100M 350

Group Assignment

CASE SCENARIOS

Case Study #1



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Persona

- **Name:** Julie Kawaii
- **Age:** 21
- **Quote:** "Riding the OC Transpo is stressing me out! I wish the buses will actually come on time."
- **Story:** Julie is a student at Algonquin College who takes the OC Transpo to campus. The bus ride is usually taking 30-40 minutes long. The schedule for her bus is one bus comes every half an hour.
- **End goal:** Arrive to class on time when taking the bus.
- **Desired Experience:** Fast + Pleasant + comfortable
- **Frustrations:** The buses don't come on time, wait over 45 minutes in the cold, the buses break down, buses get stuck at the railway crossing when the latter malfunctions
- **Needs:** A system to tell when buses will come, warm clothes for waiting outside for long periods of time, a method to get to class on time



Empathy Map

Say:

- “I don’t like waiting for the bus, it’s so boring and takes so long.”
- “I want to know when to leave the house to take the bus.”
- “Why don’t you drive me to class, you have a car.”
- “Will the bus come now? I waited for more than 30 minutes!”

Do:

- Avoids taking the bus as much as possible
- Complains to families and friends about the late buses
- Gets angry when the buses don’t arrive
- Looks at the time several times



Empathy Map

Think:

- Need a way to tell when the bus will come
- I don't want to be late for class
- Did the bus get delayed again?
- I don't have to take the bus every day

Feel:

- Frustrated
- Rushed
- Bored
- Disappointed



Needs and Insights

Needs:

- Arrive to class on time.
- To stay safe on the road.
- Travel.
- Avoid bad weather conditions.
- Julie doesn't want to waste her time waiting for a bus.

Problem statement:

Julie Kawaii needs more alternative ways to go to school because she thinks it's a struggle to suffer to wait for the bus.

Insights:

- Drive a car.
- Ride Uber.
- Decrease the distance between school and home.
- Get a bus schedule on the official OC website.



Ideate

Definition Statement:

Julie Kawaii needs more alternative ways to go to school because she thinks it's a struggle to wait for the bus.

Ideation Methods:

How Might We and Crazy 8s

Crazy 8s:

Find a classmate on the way to carpool

Find a classmate on the way to ride Uber

Get a driver's license and rent a car

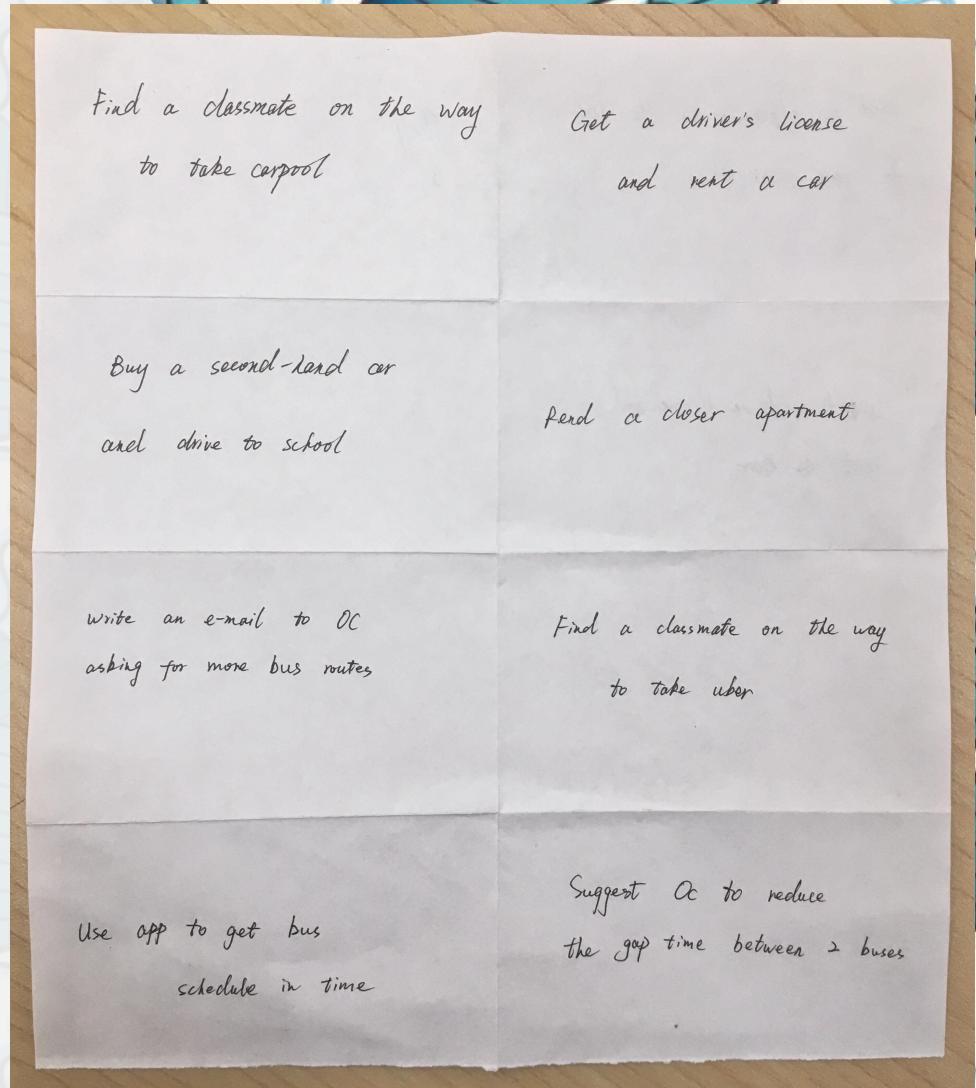
Buy a second-hand car and drive to school

Rent a closer apartment

Write an email to OC Transport asking for more bus routes

Suggest OC to reduce the gap time between two buses

Use apps to get bus schedule in time

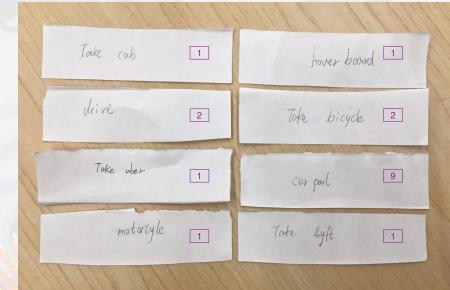
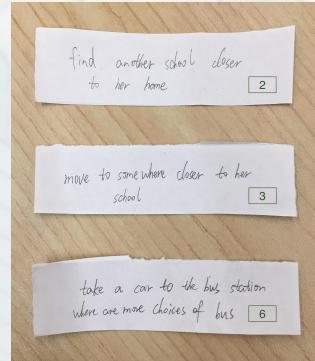
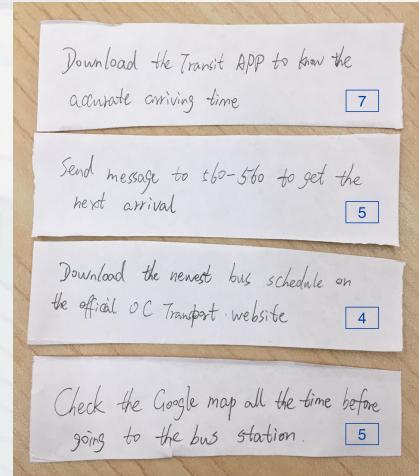


How Might We (Grouped in colors)

1. Other Kinds of Transportation
- Take Uber 1
 - Carpool 9
 - Take cab 1
 - Take Lyft 1
 - Self-driving 2
 - Ride bicycle 2
 - Ride motorcycle 1
 - Skateboard 1

2. Bus Schedule

- Download the Transit APP to know the accurate arriving time 7
- Send message to 560-560 to get the next arrival 5
- Download the newest bus schedule on the official OC website 4
- Check the Google map all the time before going to the bus station 5



3. Shorten The Distance

Find another school closer to her home 2

- Move to somewhere closer to her school 3
- Take a car to the bus station where there are more choices of bus 6

Solutions

Top 3 Voted Solutions:

- 1.Carpool
- 2.Download the Transit APP to know the accurate arrival time
- 3.Take a car to the bus station where there are more choices of bus

Why I Chose This Solution:

It's the solution with the most vote, and one of the fastest ways. By comparison, this cost is much less than other fast methods of similar speed. At the same time, using this method does not require her to make too many changes in her life. Also she would no longer have to spend more than half an hour commuting.



Problem Statement :

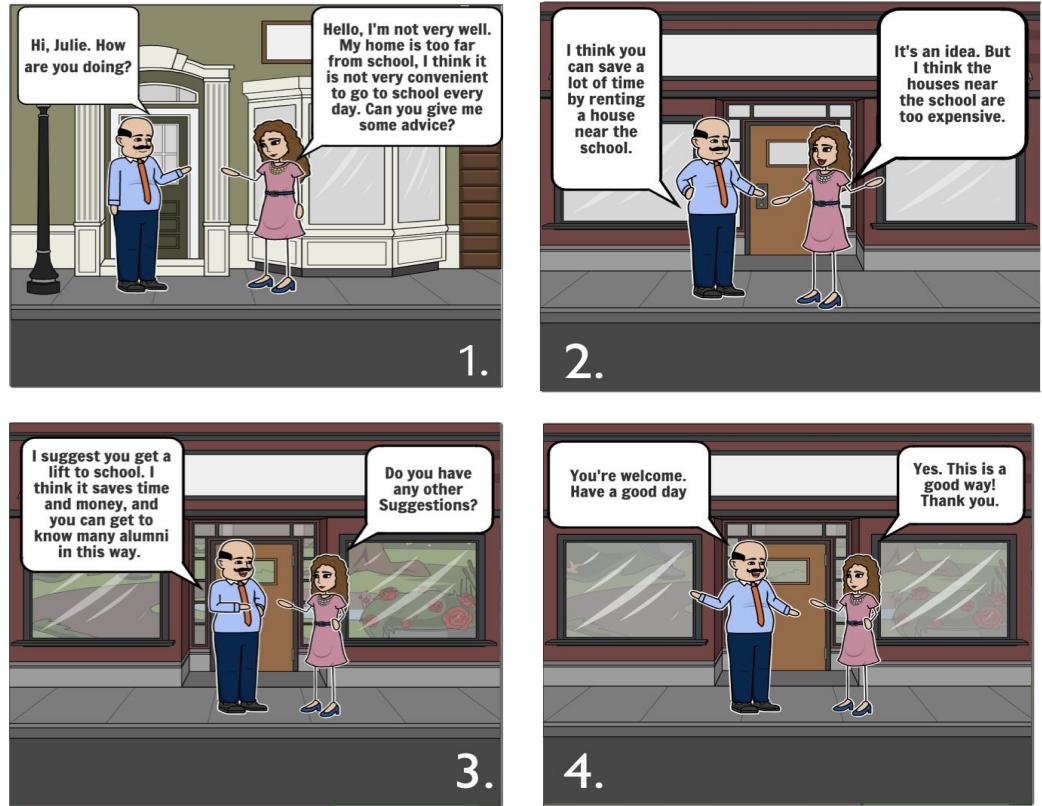
Julie's house is so far away from school that she doesn't think it's very convenient when traveling to school. She hopes her friend can give her some advice.

The Solution Idea:

Her friend thinks carpooling is the best way. It saves time and money, and Julie can get to meet new friends this way.

What is being Tested in the Prototype?

Using the storyboard method, I described that Julie feels that it is not very convenient when traveling to school everyday, so she hopes her friend can give her some advice. Her friend suggested that renting near school, but she thought the rent near the school was too expensive. Finally, they argued that carpooling is the best solution.



Prototype Description:

In the storyboard, Julie's friend suggests a ride to school and offers some benefits.

Test

Describes the strategies to test Prototype

We used a storyboard to create our prototype. The prototype is mainly about two people through posing questions, thinking of examples and comparing the advantages and disadvantages of the solutions. Then they were looking for an efficient method. We found a student, Mark, who has the same problem as Julie with saving time, travelling comfortably, and acceptable prices. Therefore, the advantages outweigh the disadvantages. Mark also agrees with this solution and then he attempts this method to go to college.



Test

Feedback

● Advantage

- Riding carpool require waiting outside
- Arrives at the college faster and saves time
- Making more friends in different majors
- People can make an appointment, so they have flexible time.
- Better and comfortable environment, people get to sit rather than stand Acceptable prices, cheaper, and faster than Uber or other transportsations



Test

Feedback

● Disadvantage

- Bad weather can affect carpool, such as snowing when the road is slippery, which is dangerous.
- If the driver gets sick, which will then lead to the cancellation of the trip, and becoming a problem for passengers.
- There are also unpredictable factors, for example, people who are late will make everyone wait and affect their schedules.



Conclusion

At the beginning of the discussion, we decided on the theme of public transportation. We exchanged our experiences on public transport. We found that after experiencing public transport, our members all chose to give up public transport and move to places where we could walk to school. So we made the decision to talk about how to go to school more effectively, which is the topic of improving traffic experience extended from public transportation. After all the research and discussion, our next steps are:

1. Short-term: finding classmates who have same schedules to ride carpool together.
2. Long-term: finding a way to go to school dependently.



Thanks for watching

