

SounderTransit

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Overall Problem

Target audience - people with limited English proficiency

Oct-21-18 2.50
Adult All Day/Round Trip

Between: University of Washington
And: International District/Chinato

343120 -337

\$ 5.00

 SOUNDTRANSIT

How to Ride Link

Tickets & Fare



The cost of riding **Link** is based on distance traveled.



Buy ticket or ORCA card and load ORCA card at ticket machines.



Tap ORCA card at yellow card reader before and after your ride.



Have fare ready for inspection within the Fare-Paid Zone. A valid ticket or ORCA card tap is proof of payment.

How to use ORCA



Use ORCA for easy transfers between buses, trains, streetcars and ferries. A Monthly Pass or E-pass can be loaded onto the card.

Adult ORCA cards can be purchased/reloaded at Link ticket machines, Month, Senior, Disabled and Low-income Link only enhanced fare ORCA cards can be purchased through customer service at a Transit Office. For locations and more information visit orcadcard.com.

Transfers

Tap your ORCA card twice according to the distance you travel. The first tap defines the starting point, and the second tap covers the difference if your trip is higher than your pass fare.

The full transfer value is held on the card and can be used to the next bus or train if used within two hours.

Paper transfers are not accepted on any Sound Transit services. Link paper tickets do not transfer to buses, other trains, streetcars or ferries.

Rider Information

If you have questions about Sound Transit fares, buses or trains, call 1-888-889-4368, TTY Relay: 711 or visit us online at soundtransit.org.

Accessibility

Sound Transit makes accessibility easy for riders with special needs:

- Link train features level boarding, so ramps or lifts are not needed.
- Doors open in front of each 10-foot-by-6-foot square of ribbed tactile pavers.
- Each train has two wheelchair priority areas.
- Set the brakes on your mobility device.

Paratransit Service

King County Metro provides paratransit service. For more information, call Metro's Accessible Services at 1-866-205-5001, TTY Relay: 1-877-349-4286.

 SOUNDTRANSIT

Rider



No Smoking



Proof of payment required before entering the Fare-Paid Zone. Failure may result in a \$5 fine.

Passengers

- Never eat, drink, smoke or store under the seat or overhead rack.
- Give seats to disabled riders and senior citizens.
- Service animals and pets are small container animals.
- Turn audio volume down on the train.
- Shirts and shoes must be worn on the train.
- Do not lie down, sit with feet up or place personal items on the seats.
- Do not harass other riders.
- Speak quietly with other riders.
- Keep your cell phone vibrate.
- Do not litter.
- No hazardous, explosive or corrosive materials.
- No weapons or firearms.
- No soliciting.
- No tailgating.
- Do not leave bags unattended.

For Your Safety

- Never race a train.
- Look both ways before crossing.
- Trains are very quiet; you may not hear them coming.
- Do not stand near the platform edge.
- Stand back when the doors open on the platform.
- Do not try to stop the train after the doors have closed.
- Allow others to exit before boarding.

Wordy Instruction at Station

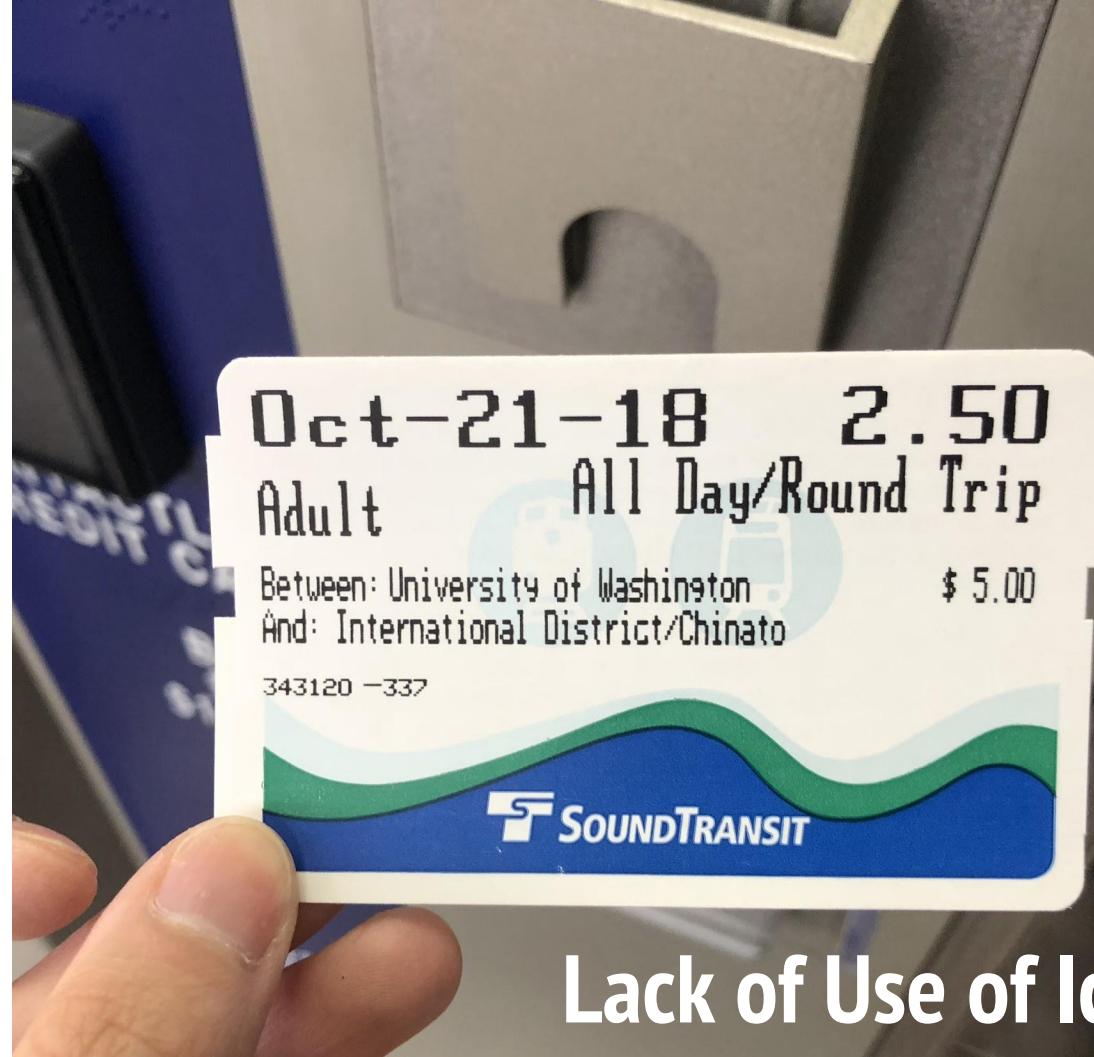


Confusing Payment System



Bus and Link on the same platform

N

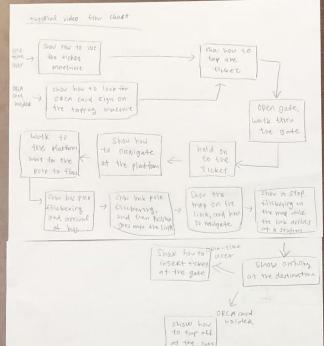


Lack of Use of Icons



Unclear Indication of Link Direction & Current Location

Initial Paper Prototype [Overview]



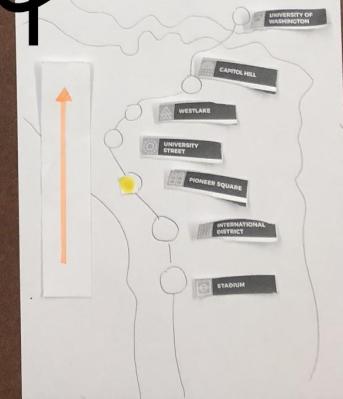
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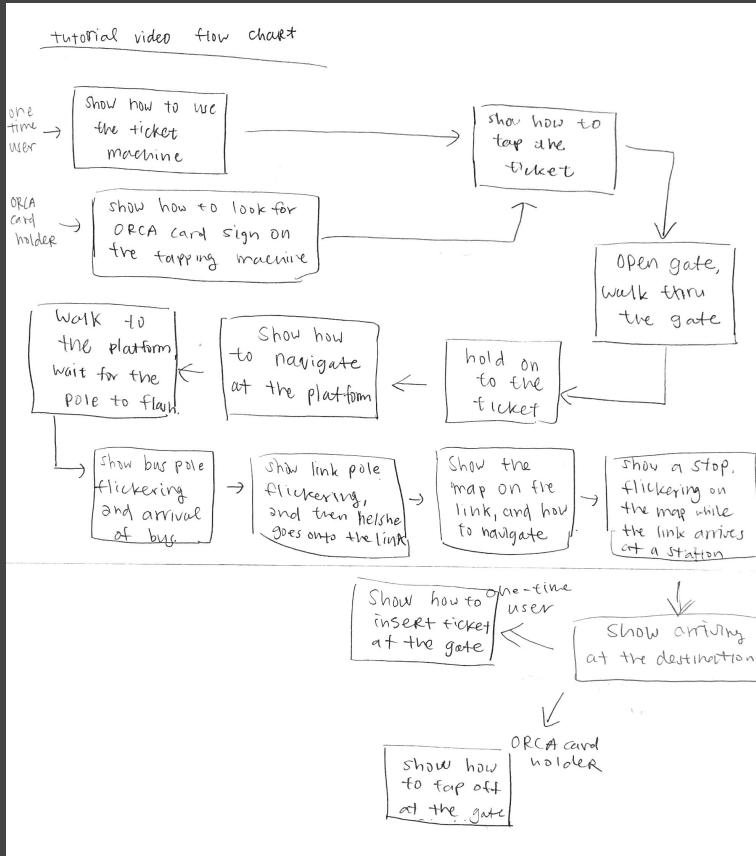
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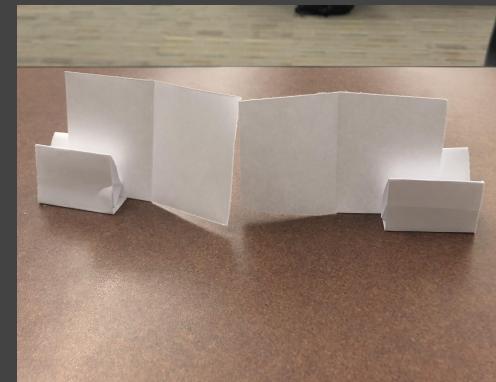
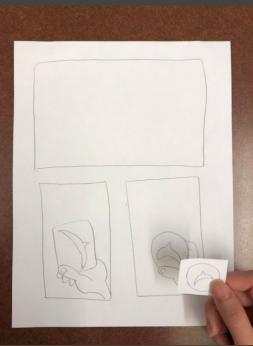
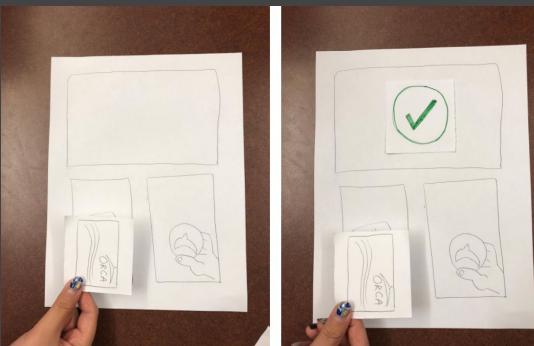
Task 1

Help Rider Understand Payment System Without Using English

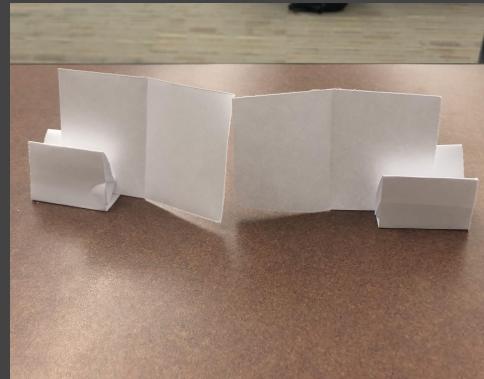
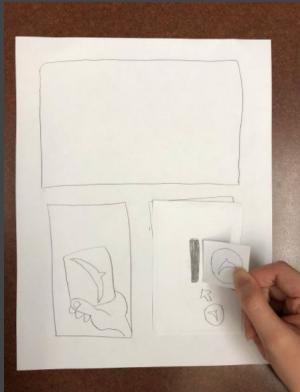
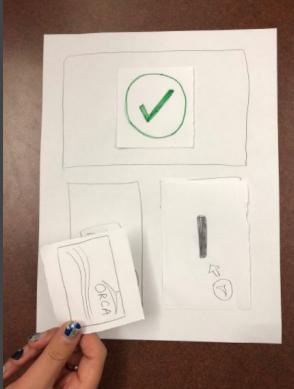
Instructional Video Flowchart



Entrance



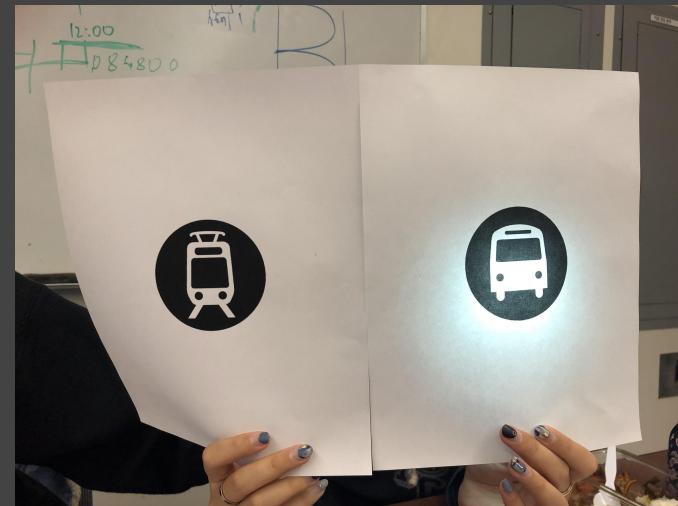
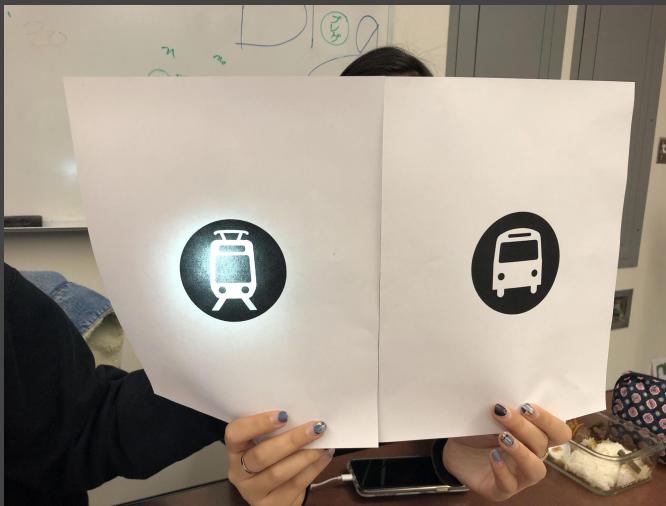
Exit



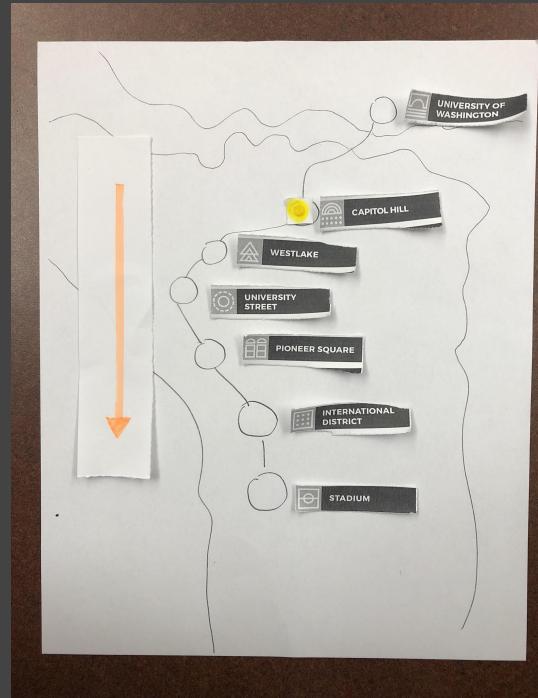
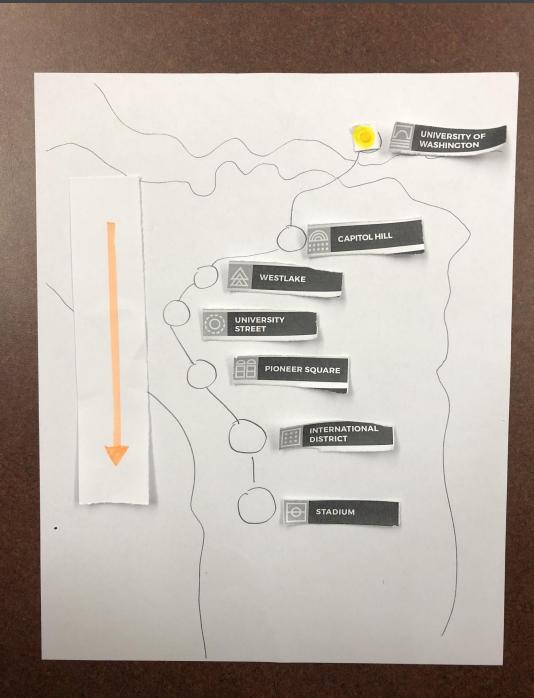
Task 2

Help Rider Navigate to Their Destination

Pole Indication of Bus and Link



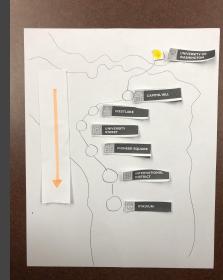
Map & Icons



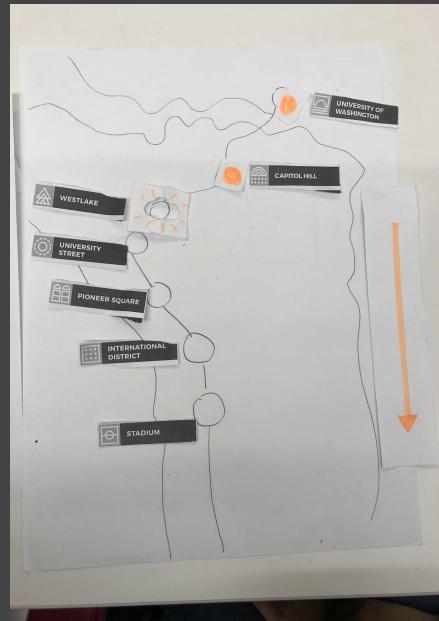
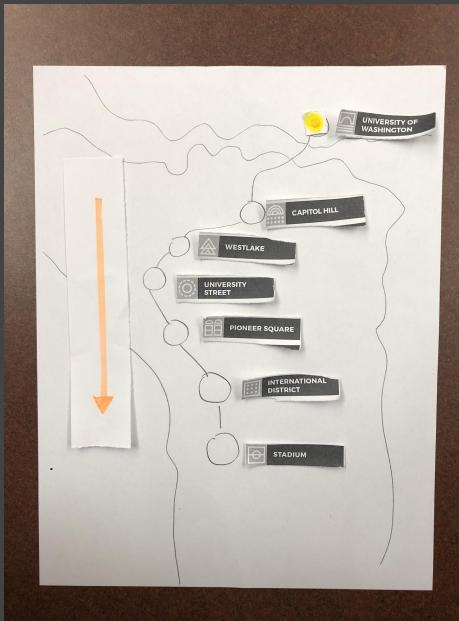
Testing Process & Results

Heuristic Evaluation

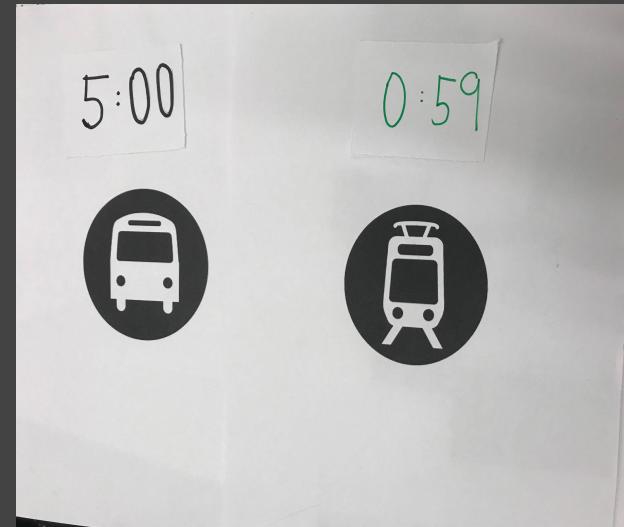
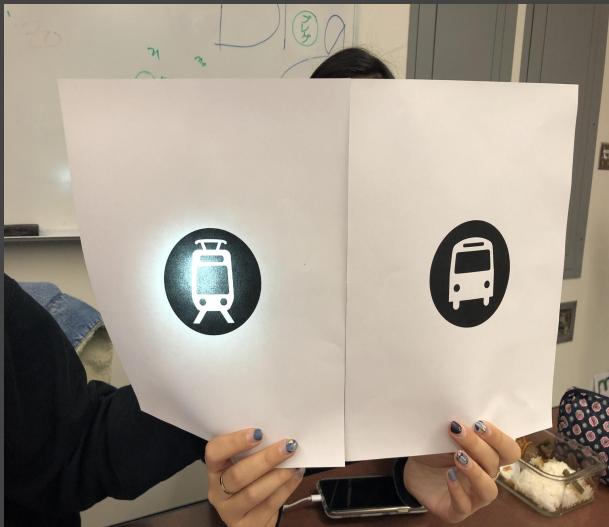
- **Visibility of System Status**
 - current station or next station?
 - Users may not know blinking light means the transportation is arriving soon
- **Match Between System and Real World**
 - Hard to relate station icons to the actual stations



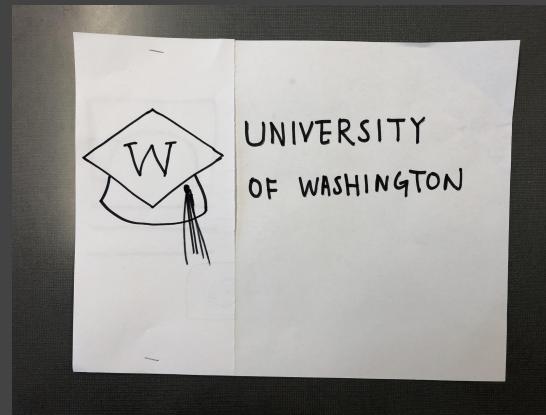
Heuristic Evaluation - Refinements



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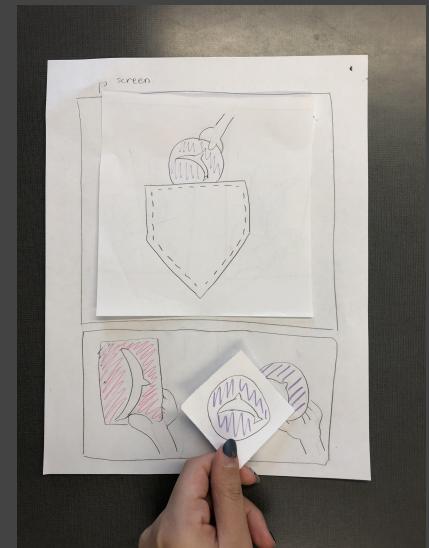
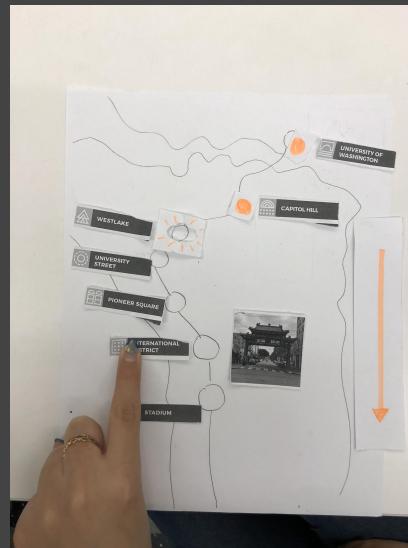


Heuristic Evaluation - Refinements



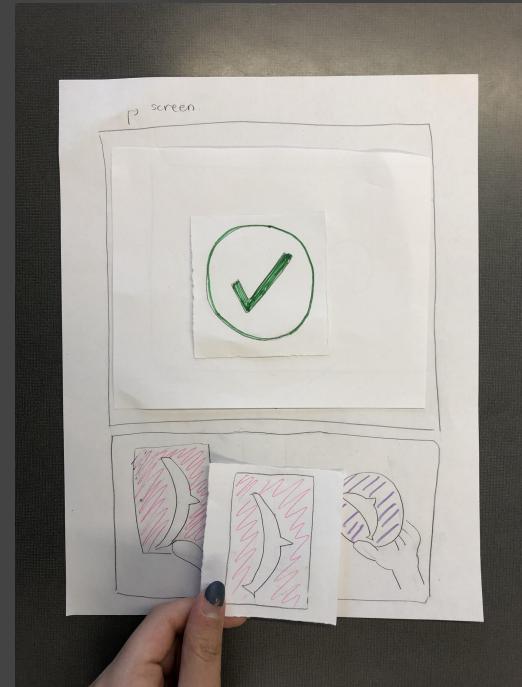
Usability Test 1 - Refinements

- Map's ability to interact
- Reminder to keep the ticket



Usability Test 2- Refinements

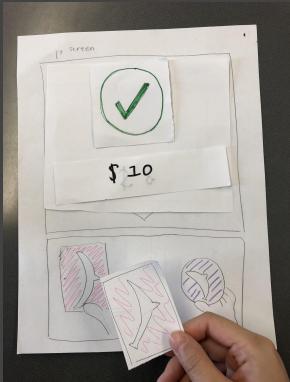
- Inflexibility in Tapping Machine
- Destination icon in the back of the ticket
 - To remind user where to get off



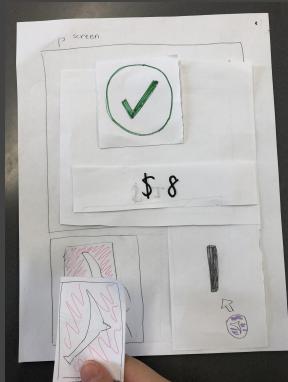
Usability Test 3- Refinements

- Synchronization with Google Map icons
- Show balance in ORCA card

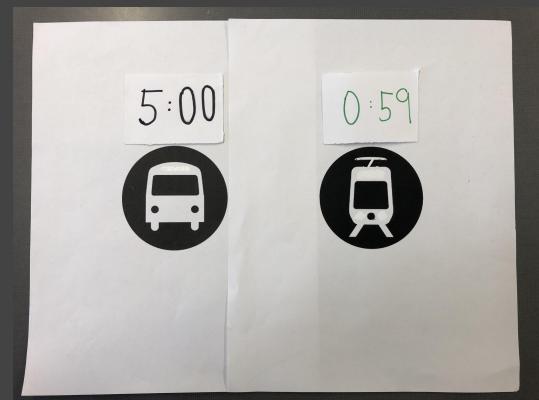
ENTER



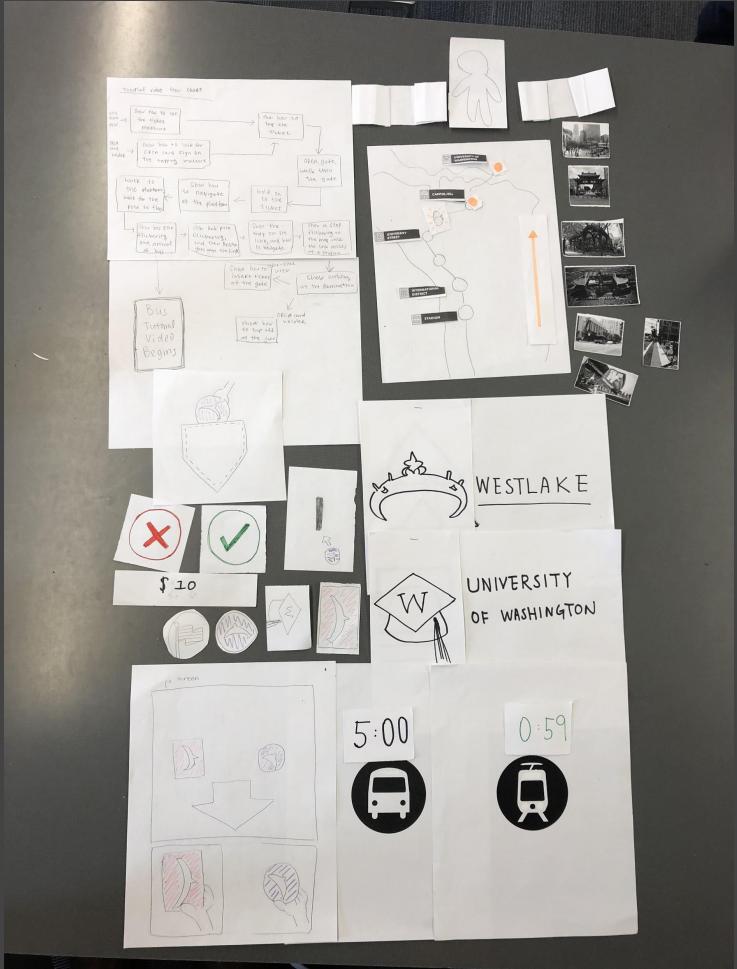
EXIT



The image shows two screenshots of a mobile application interface. The top screenshot displays a route from a starting point to a destination via a light rail line. It includes icons for walking (11), a train, and the text 'Link light rail'. The travel time is listed as '26 min' and the cost as '\$2.75'. The bottom screenshot shows another route involving a bus (48) and a walk (14), with a total travel time of '48 min' and a cost of '\$2.75'. Both routes mention stops at 'University of Washingt...' and '15th Ave NE & NE Campus Pkwy'.



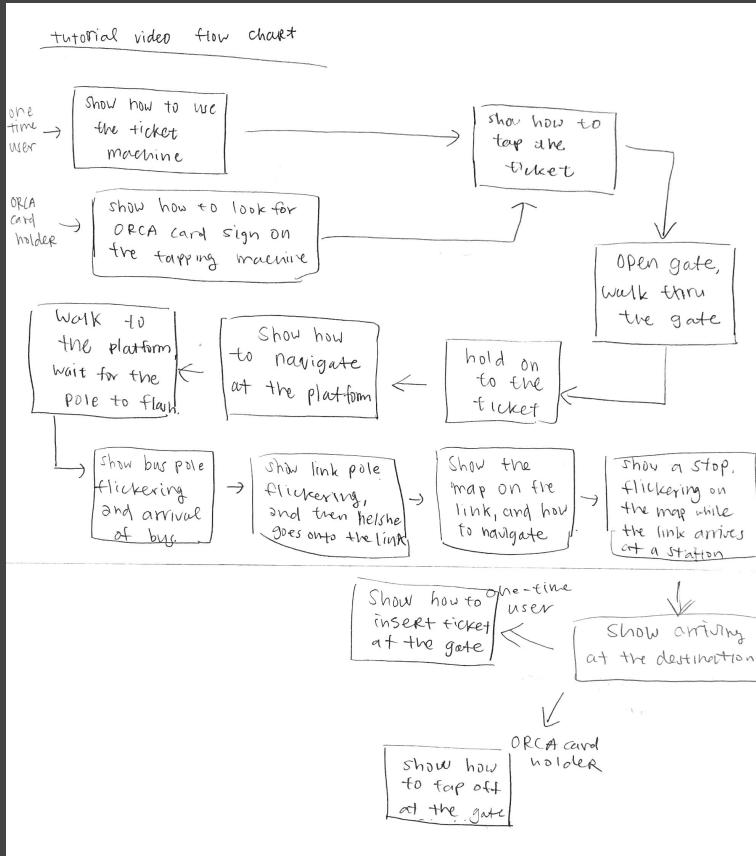
Final Paper Prototype [Overview]



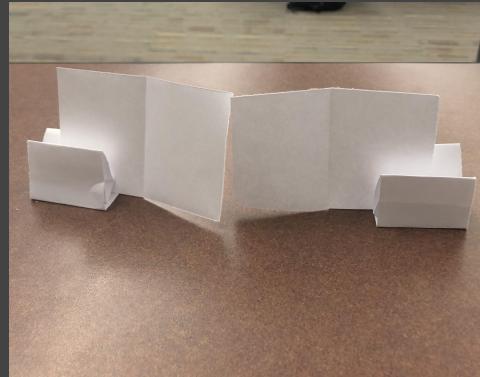
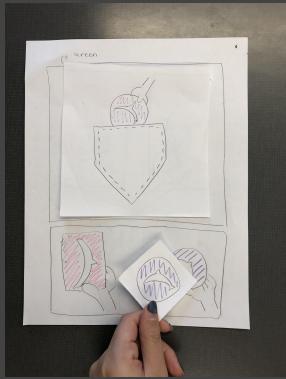
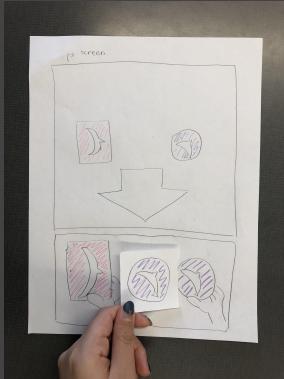
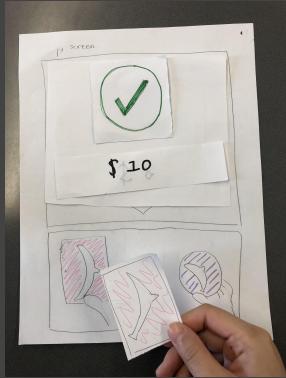
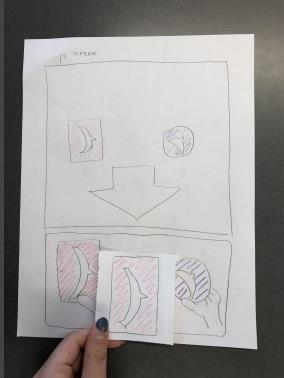
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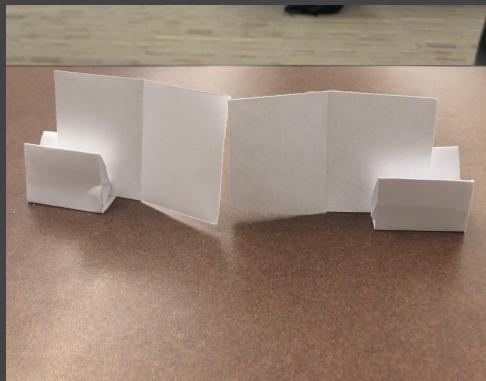
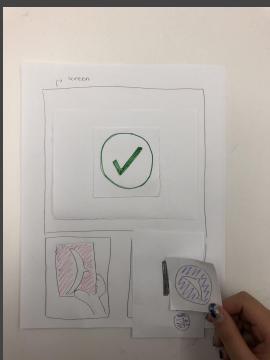
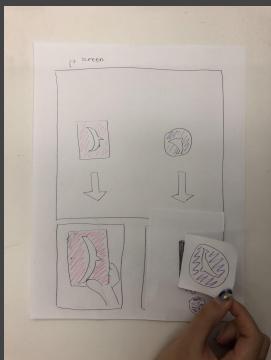
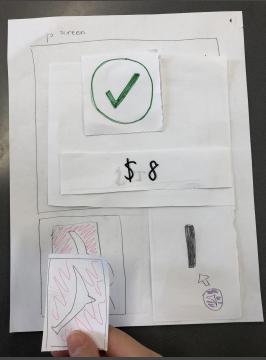
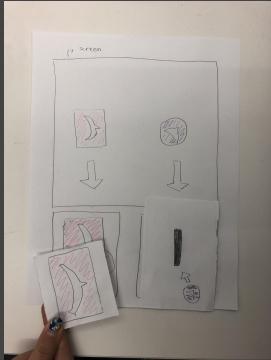
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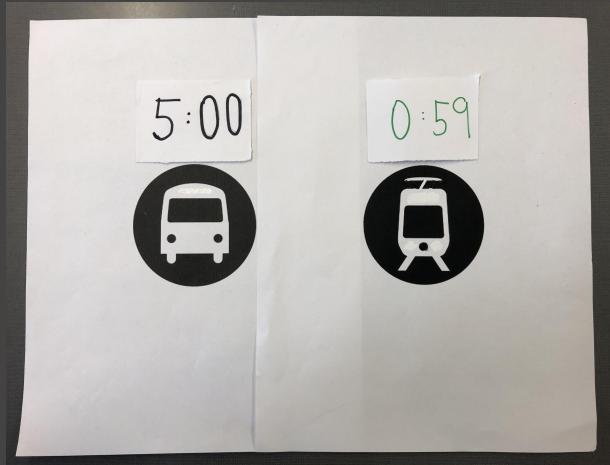
Exit



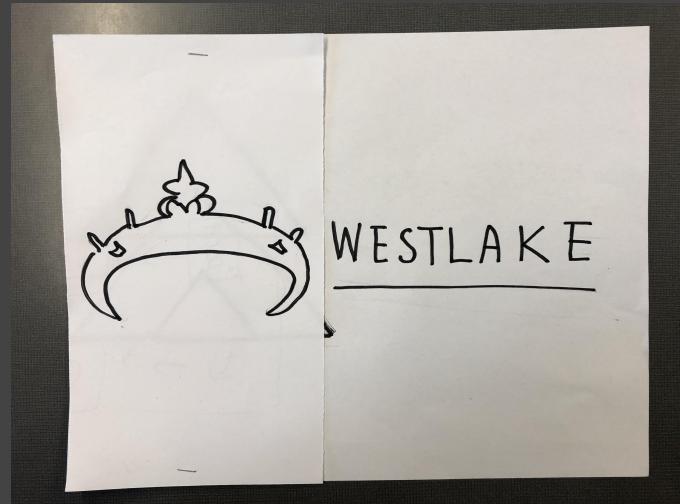
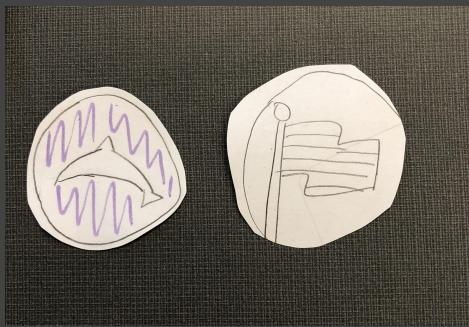
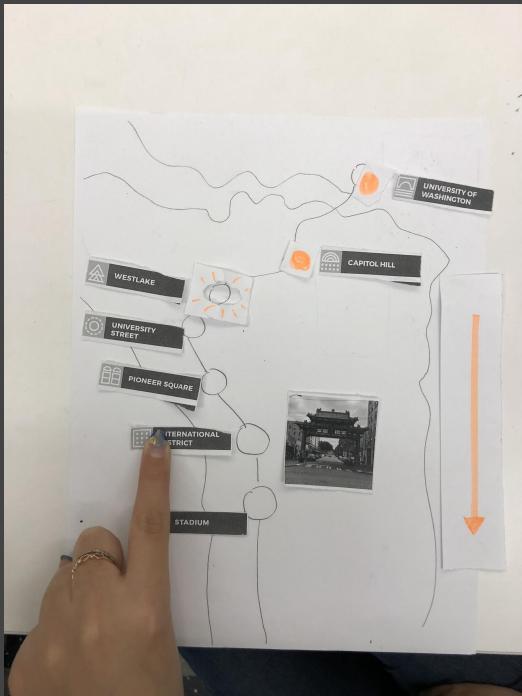
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Help Rider Navigate to Their Destination

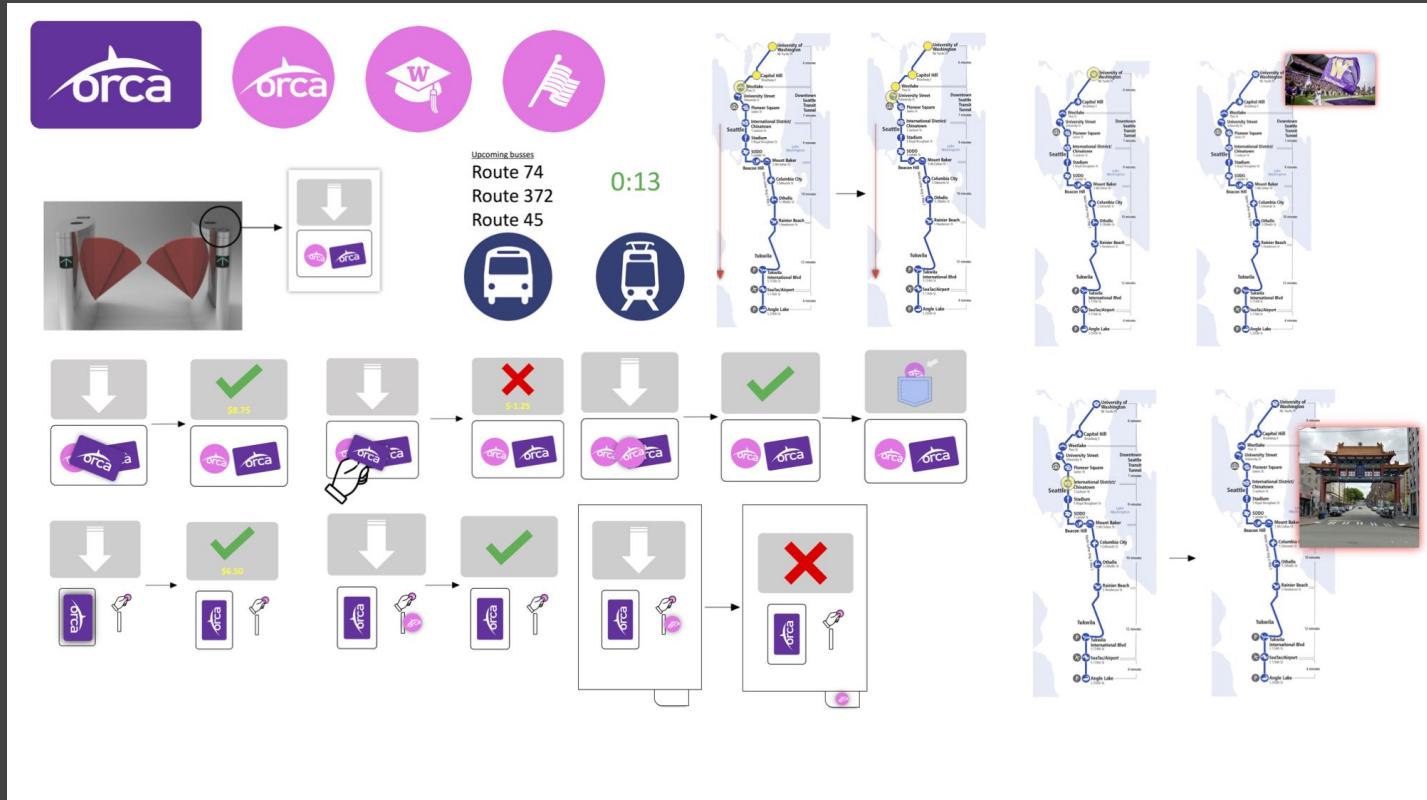
Pole Indication of Bus and Link



Map & Icons

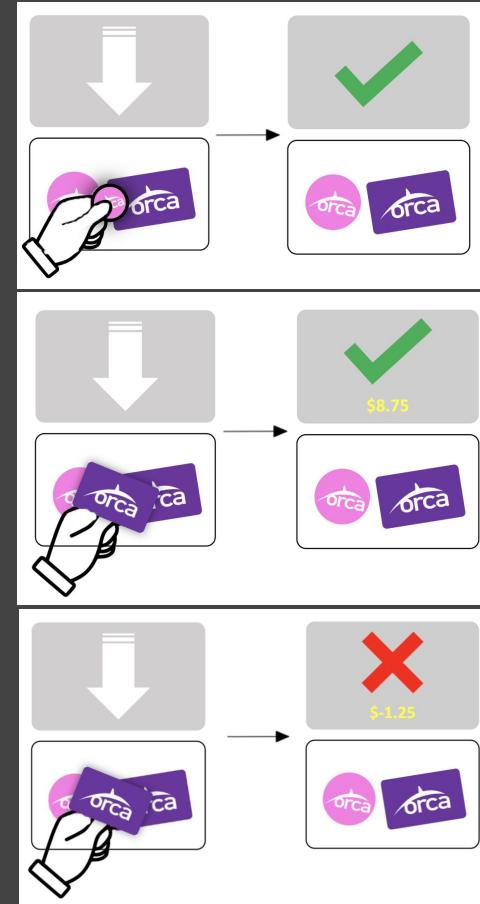
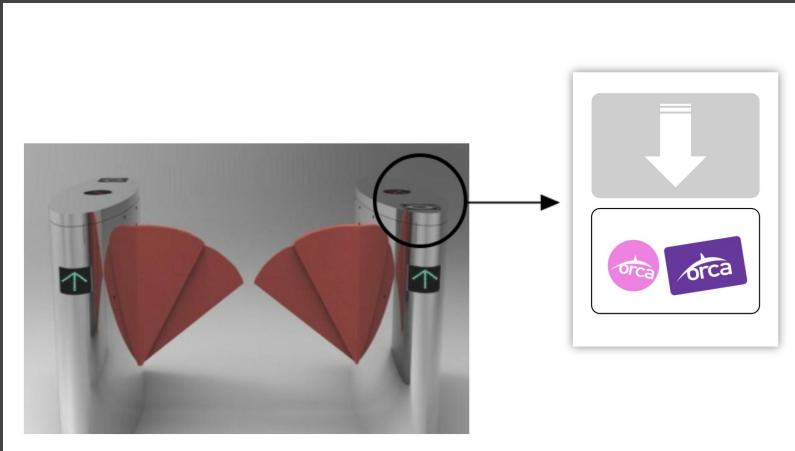


Digital Mockup



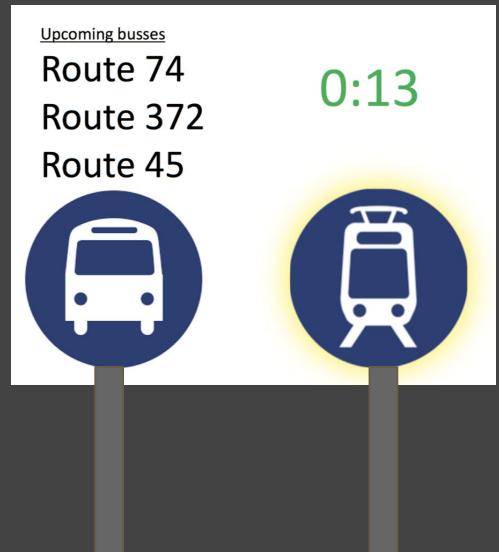
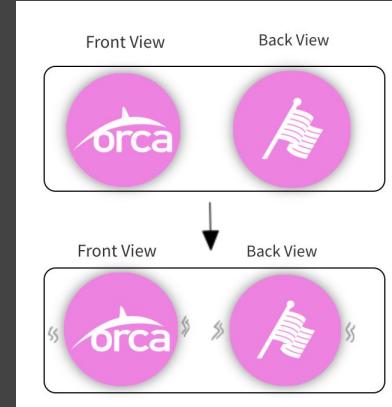
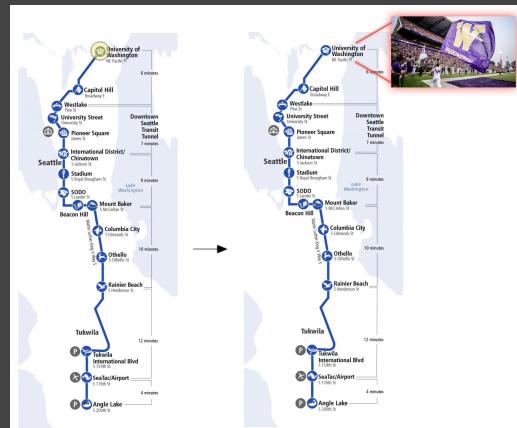
Task 1

- Tutorial Video with only graphics
- Gates & Panel



Task 2

- Responsive Map
- Vibrating Ticket
 - Icon shown in the back of the ticket
 - Vibrates when near the destination
- Pole with timer



Summary

- **Defining** a problem space early is important for exploring the solution space
- It is good to **explore** a wide variety of solutions in the initial process
- Doing usability testing as **realistic** as possible takes practice
- Getting constant **feedback** throughout the process can enable an engaging and iterative design process
- **Observing** user behavior can provide as much value as getting feedback.

Thank You

Questions?