# Changing the Way You Wait

# **SUMMARY**

From our research, we discovered multiple frictions in students' current experience with the CMU transportation system.

Firstly, many users do not know where shuttle/escort stops are. Second, students don't know what escort zone to take. Third, users think that current transportation is inefficient and waiting for shuttle/ escort can be time-consuming. Finally, users expressed safety and weather concerns with the existing system.

Our design idea addresses all three of these issues in the CMU transportation system.

### BENEFITS

With CMCUBE, the bus stop becomes more visible and conspicuous.

Ubiquitous interfaces on the wall help users to learn more about the CMU shuttle/escort transportation system, the Port Authority bus system, and also queue for the shuttles home.

The queuing system allows CMU to handle bigger demand for transportation home during service cuts, and also helps drivers plan their route.

The solution also provides a safe space where students can wait for the bus and do work.

# (Q) STAKEHOLDERS



CMU Student "I want to travel home quickly and safely, and be efficient with my time."



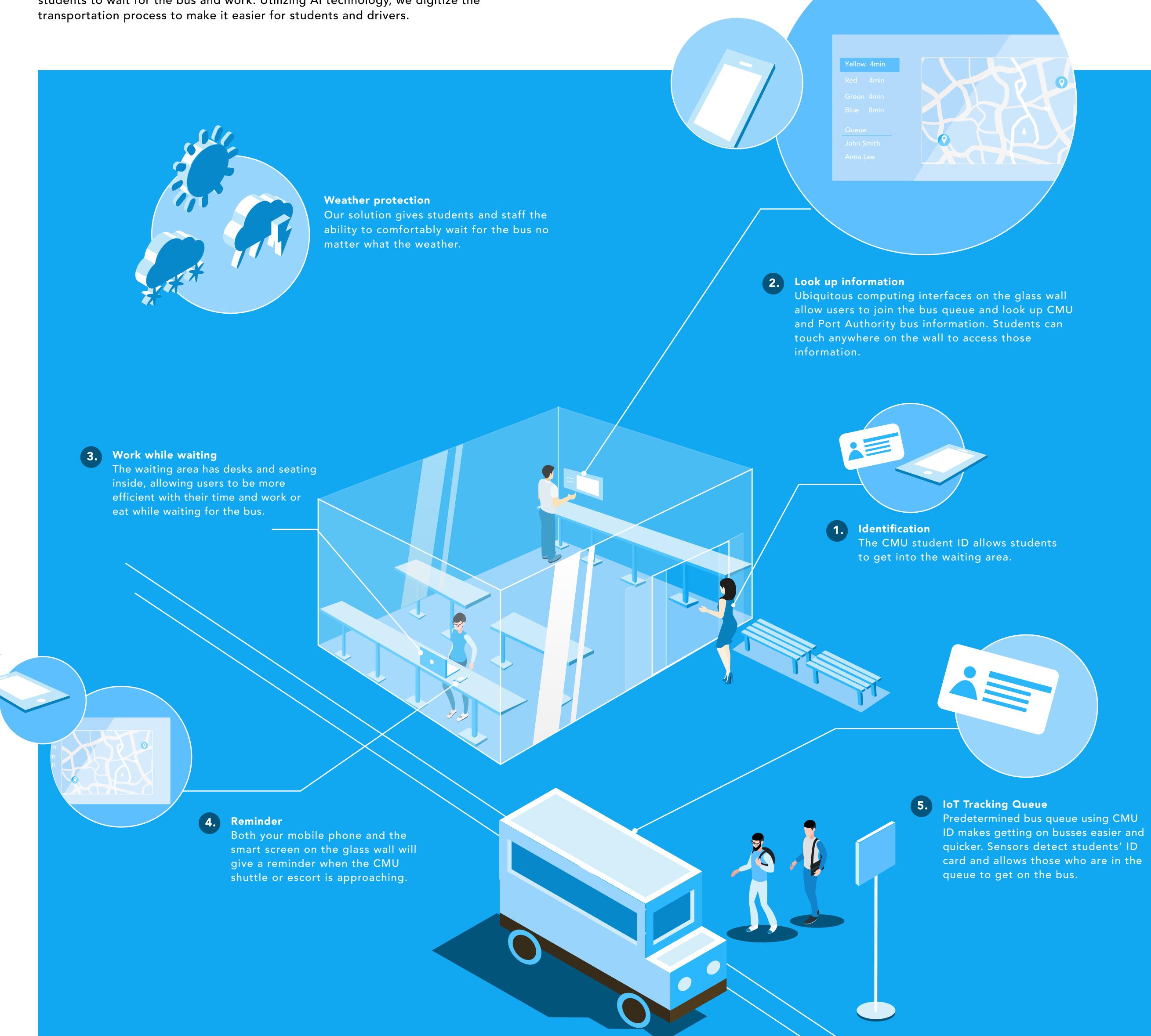
CMU Staff "I want to use public transportation to minimize travel cost and ensure safety."



CMU Shuttle/Escort Driver "I want to provide safe and quick travel to the students"



CMCUBE is a glass waiting station that creates a safe, efficient and beautiful space for students to wait for the bus and work. Utilizing AI technology, we digitize the transportation process to make it easier for students and drivers.



# ( TIMELINE

Involve CMU Arch-E/ Civ-E seniors in planning process/ creating prototypes <u>September 2018</u>

Select prototype and allocate funding October 2018

Start base/ infrastructure on 4 cubes November 2018

Install seating, scanner, television screens at each cube January 2019

Integrate queue system with shuttle and cube February 2019

Announcement and advertisement of CMCUBE <u>April 2019</u>

Final **Enhancements** March 2019

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