

Situation	What?	How?	Why?	Who?
Finding an unfamiliar classroom	The student needs to reach a classroom in a building they have never visited before.	They use Google Maps to locate the building, then walk around searching for the correct entrance and asking other students or staff for help.	There is no campus-specific navigation tool that clearly shows entrances, internal paths, and classroom locations, making first-time navigation difficult	An undergraduate student with a tight schedule who has classes in different buildings each semester.
Arriving late to class	The student arrives late due to difficulties finding the correct building entrance or route.	They follow directions from an external navigation app that does not match the real campus layout, causing them to take longer routes and backtrack.	Common navigation apps treat the campus like a regular city map and fail to capture campus-specific walking logic, shortcuts, and access points.	A student attending an important lecture, exam, or presentation where punctuality is critical
Emotional stress during navigation	The student feels stressed, anxious, and distracted after struggling to find a location on campus.	Time pressure, uncertainty, and fear of arriving late increase emotional stress, which carries over into class or academic activities.	The lack of reliable, real-time guidance turns navigation into a mentally demanding task, negatively impacting the student's emotional state and concentration.	A student who is academically responsible and concerned about attendance and performance.
Avoiding opportunities due to navigation uncertainty	The student avoids events, offices, or services located in unfamiliar buildings.	They decide not to attend unless accompanied by someone else, postpone tasks, or choose familiar locations instead.	When navigation feels uncertain and time-consuming, the perceived effort of exploring new areas outweighs the perceived benefit of attending, limiting engagement with campus life.	A student who wants to participate in campus activities but is unfamiliar with certain areas of the campus.