EMERGING TECHNOLOGIES I

MIS 284N | Fall 2021

Project Milestone 7

Overview: In this final milestone, you will complete your addition to the entire project. Examples from previous years that we liked:

- [Microbit] When the user is "in trouble", send SOS beacon from Microbit to … someone who's listening.

- [Android] Recommend helpful nearby activities to the user based on the step goal and weather.

- [Android] Send a text to a workout buddy when you successfully achieve the goal steps; send a text to a workout buddy when you're close but need some encouragement.

- [Microbit] Use the accelerometer on the microbic to compute whether the user is walking uphill or downhill and give credit for calories burned based on the difficulty of the activity.

- [Android] Create charts of historical goal achievement, future goals, etc.; keep track of a "streak" of goal achievement; build in badges.

What to submit

Via Canvas, submit a writeup of not more than two pages that answers the following questions:

(1) Briefly (one paragraph or so) describe your selected final milestone. Why did you choose it?

(2) Draw a block architecture diagram that depicts your entire system. Consider depicting hardware, software, algorithms, data, and communication. Be sure to clearly include your final milestone.

(3) State what you believe is the most significant remaining limitation of your entire system. (Please choose something other than the microbit's (in)ability to accurately count steps.) What are the ramifications of this limitation? Give at least two ideas that you might try to use to overcome the limitation were you to continue the project.

(4) Did you rely on any external sources to complete your milestone? If so, cite them.

During TA office hours (or, at least, no later than TA office hours) on Thursday, December 9, demonstrate your final project.