

## Introduction

A student has approached U[Tech] with an app idea that will improve upon campus student-life by enabling students to avoid the hassle of dealing with overcrowded locations around campus.

Waiting sucks. Nobody likes walking into an overly-crowded place, whether it's a gym, library, or dining hall. It is an inconvenience when Kelvin Smith Library has no seats, the dining halls are packed and every table is taken, and there's no room in the gym to do your workout. When these places are busy, students cannot accomplish the tasks that made them visit in the first place. At the moment, CWRU does not have a good way to gauge how busy campus buildings are without going to one yourself. Because of this, students often end up wasting time.

Is there a good solution?

Introducing *CWRUded* (pronounced "crowded")! *CWRUded* is a service that allows its users to see how busy campus buildings are in real-time, saving them time and frustration. The service will report the real-time "busyness" for various locations around campus. It does this by estimating how many people are in a general location at any point in time.

*CWRUded* users will be able to "know before they go." The service aims to improve upon student-life by allowing students to plan ahead of time. It will eliminate the inconvenience of arriving to a campus building only to find that it is packed. *CWRUded* will save students' time and frustration.

*CWRUded* estimates how many people are in a general location. It does so by passively listening to network signals given off by wireless devices. Sensors will aggregate a set of distinct devices that have been recently active on the wireless network. If signals from a device have not been recently detected, then the service suspects that the device has left the building. Device specific data is anonymized as soon as it is collected which helps anonymize your movements around campus. From these results, we can derive an estimate for how busy a certain location is in real time.

## Questions

Is this service something you would like CWRU to have?

Would you use this service?

Do you think other students would enjoy having and using this service on campus?

Do you feel comfortable having this service on campus?

Based on your personal experience, do you think you would use a website to see how busy locations on campus are?

Based on your personal experience, do you think you would use a IOS application to see how busy locations on campus are?

Based on your personal experience, do you think you would use an Android application to see how busy locations on campus are?

Would you like to hear more information about this service?

Comments and concerns?