

Submission Date	1/17/2019
Project Name	Humber Campus Navigator
Student Name	Anoopjot Kaur Dhallu, Bettin Jacob, Ishan Khuttan
Project repository	https://github.com/HumberCampusNavigator/Capstone.git
Sensor/effector choice	TMP36-Temperature Sensor (0x30), ATtiny85, LSM9DS0 9-AXIS Accelerometer, TFT Color Display Screen ST7735.
The database will store	The temperature readings from LSM9DS0 9-Axis Accelerometer.
The mobile device functionality will include	The main function of the App is to Navigate within the campus, other functions involve calling security, it has a contact list of all major schools/departments.
I will be collaborating with the following company/department	Humber College Facilities and FYI
My group in the winter semester will include	Anoopjot Kaur Dhallu, Bettin Jacob, Ishan Khuttan
50 word problem statement	For students it is really hard to navigate within the campus. We are designing an application which helps students to navigate within the campus from any point to any point in short time and less distance.
100 words of background	When we were new to college, we used to roam inside the campus to find anything within the campus. It was really tiresome. Even in last semester it was difficult for us to find the location of NB part of the college.
Current product APA citation	Jana S., & Chattopadhyay M.(2015). <i>An event-driven university campus navigation system on android platform</i> . Retrieved from https://ieeexplore.ieee.org/document/7083850/
Existing research IEEE paper APA citation	González-Guerrero, M., Jiménez, J.J., Hernando, C., Álvarez, M. and Guerrero, H. (2013). <i>Dosimeter for The Two Towers in SEOSAT-INGENIO Based on the TMP36 Temperature Sensor</i> . Retrieved from https://ieeexplore.ieee.org/document/6516099/
Brief description of planned purchases	Raspberry pi kit, TMP36, ATtiny85, 1.8TFT Colour Display ST7735, LSM9DS0 9-Axis Accelerometer.
Solution description	We have two solutions in mind. 1. Real time Navigation - with location sensors installed in various locations of campus, through a mobile app, we can give a real time navigation guidance for users. But this will be expensive. 2. Offline Navigation - With QR code stuck to all the class room doors of the campus, user can just scan the QR code where he stands and select a location anywhere on campus and the app will give the easiest path to that location.