Submission Date	2019-09-12
Project Name	IoT for NFC/RFID Reader
Student Names	Robert Dinh
Project repository	https://https://github.com/RDinh/NFCRFID
SensorsEffectors choices	PN532 NFC/RFID controller
The database will store	Student ID and Parts Crib Inventory
The mobile device functionality will include	Queuing items, signing in/out items and generating NFC/QR codes that later can be scanned at the parts crib to indicate that students have arrived
I will be collaborating with the following company/department	Humber College's Parts Crib
My group in the winter semester will include	Johnathan Luong and Colin LeDonne
50 word problem statement	the current Parts Crib has some flaws that should be addressed to help it operate more efficiently. It has lost some of its items and is unable to effectively hold students accountable for them. It also wastes a lot of paper
100 words of background	The mobile phone has been very convenient for users especially with the emergence of contactless payment. This type of technology that resolves around Near Field Communication (NFC) can be applied to modern day problems such as the Parts Crib. Having a contactless transaction of information will allow the Parts Crib to operate efficiently and effectively without requiring any extra manpower. Since students carry around their
Current product APA citation	ENAiKOON. (n.d.). ginstr apps instead of paper forms! Retrieved from h
Existing research IEEE paper APA citation	Sethia, D., Gupta, D., & Saran, H. (2018). NFC Secure Element-Based Mutual Authentication and Attestation for IoT Access Publisher: IEEE.
Brief description of planned purchases	A Canakit Raspberry Pi 3 B+ Starter kit and the Adafruit PN532 NFC/RFID controller breakout board.
Solution description	The ability to queue items, sign in/out items and genereating NFC codes with a mobile device will make the process more convenient for both the students and the Parts Crib. Students will able to select their items before they reach the parts crib and the Parts Crib will be able to view the items when they arrive once the students have tapped their phones using NFC.

ttps://www.nfc-tracker.com/		