

Submission Date	2019-1-16
Project Name	JnJ's Clockwork
Student Name	Juan Rodriguez, Johnson Dinh, Jordan Pulido
Project repository	<a href="https://github.com/JuanRodriguez19/JnJ-s-Clockwork">https://github.com/JuanRodriguez19/JnJ-s-Clockwork</a>
SensorEffector choice	HTU21D-F Humidity/Temp Sensor (0x40), DRV2605 Haptic Motor Driver (0x5A), Display Screen
The database will store	Username, Password, Timestamp, Temperature Reading, Alarms Saved By Users
The mobile device functionality will include	Alarm Clock, Timezones, Timers, Stopwatch, Temperature readings, User Information, Customization Features
I will be collaborating with the following company/department	Humber Prototype Lab
My group in the winter semester will include	Juan Rodriguez, Johnson Dinh, Jordan Pulido
50 word problem statement	As a youth, it becomes increasingly difficult to manage and maintain a proper sleeping schedule. The snooze button is used to give the user 5 more minutes to relax and properly wake up, however this is oftenly abused and the user ends up repeatedly hitting the snooze button, which often leads to time wasting.
100 words of background	This project will consist of an alarm clock application which will link up to a physical hardware element via bluetooth. The hardware being developed would contain a display where the current time, alarm settings, and local temperature readings would appear. The app is where the user would be able to customize and select what they want to appear on the display. Each sensor in the hardware portion of the project serve their own purpose in conjunction with one another. The Humidity/Temp sensor would give the current readings of the temperature and store them in the database, the Haptic sensor will vibrate the device with an alarm goes off as a time of notification. The display screen will be responsible for displaying the core information requested by the user.
Current product APA citation	Google Home. (2016). Retrieved from <a href="https://store.google.com/ca/product/google_home">https://store.google.com/ca/product/google_home</a>
Existing research IEEE paper APA citation	Scott, G. and Chin, J. (2013). A DIY approach to pervasive computing for the Internet of Things: A smart alarm clock - IEEE Conference Publication. [online] <a href="https://ieeexplore.ieee.org">ieeexplore.ieee.org</a> . Available at: <a href="https://ieeexplore.ieee.org/document/6659445">https://ieeexplore.ieee.org/document/6659445</a> [Accessed 15 Jan. 2019].
Brief description of planned purchases	Display screen for hardware element required. Materials for creation of the device. Casing for sensors and Raspberry Pi. Additional connectors to link up sensors to one another.
Solution description	The hardware device is a convenient option for those that want to maintain a solid time schedule all while being able to view current temperature readings of the area around them without having to open up external applications.