**Name: Ifeoluwa David Adese**

**Student Number: N01063518**

**Course: Hardware Production Technology (CENG 317)**

**Progress Report: Parts Crib Database + USB Barcode Scanner**

**Work Achieved So Far:**

*The USB barcode scanner can recognize any type of barcode ID and read it into any text field in less than a second. When a barcode ID is scanned into the web application’s text field, the data returned includes: username, first name, last name, email, number of items in student’s possession, list of equipment in possession, user status i.e. Admin/student etc.*

**Recent project activities with reference to the project schedule:**

*At the moment, the hardware set up section of the project is complete. I’ve done some testing on the USB barcode scanner to ensure its fast enough and the data it reads into the web application is accurate. Initially, I expected the barcode scanner to require a python script or something similar in order to carry out the basic functions I expect it to carry out, but fortunately, when connected to the raspberry Pi and tested with a text field on the web application it reads in the scanned data accurately and automatically triggers the exchange of data between the web application and the online remote database. No scripts needed. This is exactly what sped up my progress on the hardware set up aspect.*

**Current progress in meeting the objectives of the project as defined in the approved proposal:**

*In terms of meeting the project objectives, all that needs to be done right now is to further develop the web application and ensure it has all the features and functionalities to be used administratively. Because the USB barcode scanner would only be used by administrative users on the web application. So the usefulness of the hardware sort of depends on the efficiency of the web application.*

**Description of problems/opportunities encountered & modifications being made to address them:**

*For now, no serious problems encountered, neither have I taken note of any major opportunity. The only thing I might like to address, or do something about, is to create a casing for USB barcode scanner module just for protection purpose and reduce tendencies of any kind of damage. Because right now, it looks more like a “Part” than a “Product”. So I’ll consider fixing that, provided I can complete the other important areas of work to be done.*

**Financial updates on project fund + significant variances in the budget:**

*So far, the project funds remain the same as proposed. No extra cost required. The Raspberry Pi and the USB Barcode Scanner Module are still the only major parts required for this set up. So I haven’t in any way gone above or below necessary budget. The only aspect that seems to require a little more funds on a monthly basis will be the subscription for the online remote server. But it’s not considered a required hardware part for the project so, I don’t really consider that to be extra cost.*