**NORTH WEST REGIONAL COLLEGE**

**DEPARTMENT OF SCIENCE TECHNOLOGY AND CREATIVE INDUSTRIES**

**WORK BASED LEARNING - WEEKLY REPORT**

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**REPORT NO:** 4 **DATE:** 27/03/2020

Please use the space below to give details of your activities for this report period. Your outline should include - in as much detail as possible, **a breakdown of activity by project**. You should aim to address areas such as perceived organisational benefits, desired outcomes and deliverables.

For each project that you are working on – you should indicate the title, progress, targets met and expected completion date.

**Summary of activities:**

A lot of progress was gained this week within the Lua language merged with Vectron API. This week I familiarised myself by calling methods I created from a separate class to my solution, also known as ***‘Scoping’***, which is one of the key techniques I learned in my visual programming module from my course. This is required for your code to work efficiently without any *‘nil errors’* when calling methods. This class with all my methods can also be called/Imported and used simultaneously without having to re-write any of that code. This is called ***‘Encapsulation’*** which I also learned within my course and now using it within the workplace (You can see this noted code Page 2). Another key skill learned this week was creating a new script and adding it to the Vectron Till Systems *Script Directory*, this gave me a proper insight on how the Vectron scripts function and how the interact with the user. At first I did struggle with this task, however, *“* [*Practice makes perfect. After a long time of practicing, our work will become natural, skill full, swift, and steady.*](https://www.azquotes.com/quote/924555?ref=practice-makes-perfect)*”[Bruce Lee 2017].*

Bruce Lee (2017) *Practice makes perfect,*Available at: *https://www.azquotes.com/quotes/topics/practice-makes-perfect.html* (Accessed: 27/03/2020).

**Comments on progress:**

This week I did struggle when creating a separate class to call functions from, due to still learning the Lua language of course. However, after some research and assistance from my mentor I managed to get it working and tested. It is now ready for use, meaning I can add a lot more methods required to get my solution up to speed. It also saves my script a lot of memory due to the reduced amount of code. In conclusion there are still some errors that need resolved.

**Planned tasks:**

* Make sale times random
* Resolve ‘Media’ not working correctly.
* Research PLU Links
* Research clocking in & clocking out functions.

-- !ScriptAPI: 1.0

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-- Copyright (c)2020 Accs Ltd

-- Script name: Mobo2GoAPI\_DemoMethods.Lua

-- Authors: Sean Carlin & Theo Huenestine

-- Date: 03/2020

-- Function: Demonstration Data Methods.

local i = 1

  local getRandomOperator = function()

    local tempOperator = true;

    local OperatorNo;

    while tempOperator == true do

        local randomOperator = math.random(1,224);

         OperatorNo = vpos.masterdata.Operator(randomOperator);

        if(OperatorNo ~= nil) then

          tempOperator = false;

        end

    end

    return OperatorNo;

 end

  local getRandomPLU = function()

 --get random plu, existing plu, sends back to calling method asking for it.

 --encapsulate plu and unitprice into a object thats get returned from random plu.

    local tempPLU = true;

    local PLUNo;

    while tempPLU == true do

        local randomPLU = math.random(7000,12265);

         PLUNo = vpos.masterdata.searchPLU(randomPLU);

          if(PLUNo ~= nil) then

           tempPLU = false;

          end

    end

    return PLUNo;

  end

  local getRandomQTY = function()

    local QTY = math.random(1,6);

    return QTY;

  end

  local getRandomTime = function()

    local Time = math.random(1000,10000);

    return Time;

  end

  local getRandomMedia = function()

    local tempMedia = true;

    local mediaNo;

    while tempMedia == true do

        local randomMedia = math.random(1,12);

         mediaNo = vpos.masterdata.Media(randomMedia);

        if(mediaNo ~= nil) then

          tempMedia = false;

        end

    end

    return mediaNo;

  end

 return {

 getRandomOperator = getRandomOperator,

 getRandomPLU = getRandomPLU,

 getRandomQTY = getRandomQTY,

 getRandomTime = getRandomTime,

 getRandomMedia = getRandomMedia

 };