**DAILY ASSESSMENT FORMAT**

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| **Date:** | **29/05/2020** | **Name:** | **PRIYA P RAO** |
| **Course:** | **Logic Design** | **USN:** | **4AL18EC041** |
| **Topic:** | **Applications of Programmable Logic Controllers.** | **Semester & Section:** | **4th sem ‘A’ section.** |
| **Github Repository:** | **Priya-Rao** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session**  **C:\Users\Pawan\Desktop\qwe1.PNG** |
| **In today’s session, I have learnt about**  **Relays to Bits.**  **Here we are titling relays two bits basically making the transition from using relays to using bits in memory.**  **And I have also studied about a brief bit of history which is needed to build a background for some of the terminology and symbols used in programming programmable logic controllers.**  **The original relay was first invented by Edward Davi in the 1800’s.**  **C:\Users\Pawan\Downloads\CamScanner 05-29-2020 19.07.31_1.jpg**  **Adding a relay diagram into an actual application gives an actual circuit. We normally refer to that portion of the circuit with the operator or the public interface. We could say that there are 3 public interface to the circuit:**   * **Single Pole Single Through Switch (SPST)** * **It is controlled by the operator.** * **When switch is closed – it energizes the relay.** * **When switch is open – it de-energizes the relay.** * **Red indicator** * **The battery powers the red light when the relay is de-energized.** * **Green indicator** * **It will illuminate when the relay is energized.**   **There are 2 power source for the circuit:**   * **Alternating current** * **Direct current**   **For relay coil power we use an alternating current supply but the relay contacts are actually controlling current from a DC source.**  **Here the battery is made up of 4 cells.**  **Direct current takes 115 volts and rectifies it into DC filter and it regulates at some specific DC voltage like 24 volt DC, 15 volt DC, 12 volt DC, 5 volt DC.**  **It operates at specific current level to contact the other devices.**  **Contact circuit is a single pole double throw relay.**  **Working:**   * **When switch is closed the current will flow through the coil.** * **Magnetic field pulls the armature down opening the normally closed contact and closing the normally open.** * **With the closed switch, green light is ON.** * **Therefore, the normally open normally close contacts define the state of relay.** * **Normally closed contacts are true or they conduct electricity when the relay is de-energized.**   **C:\Users\Pawan\Downloads\CamScanner 05-29-2020 19.07.31_3.jpg**  **The above circuit diagram has few components namely:**   * **Single Pole Single Throw Switch.** * **Alternating current supply.** * **Contact relay coil.**   **What happens when switch is closed?**  **The alternating current voltage source will alternate in one polarity than the other 60 times a second. That means there are 60 runs per second. So the relay doesn’t have time for de-energizing.**  **C:\Users\Pawan\Downloads\CamScanner 05-29-2020 19.07.31_2.jpg**  **The above circuit diagram has few components namely:**   * **Start stop circuit.** * **Push buttons.** * **Normally closed normally open circuit.** * **Relay coil.**   **By passing the normally open push buttons is a relay contact.**   * **For start – we have normally open push buttons.** * **For stop – we have normally closed push buttons.**   **Contact relay and relay contact are parallel with normally open push button. The dashed line in the above circuit shows that there is a mechanical link between the contact relay and relay contact.**   * **Contact is open when the relay is de-energized.** * **Contact is closed when the relay is energized.** |

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| **Date:** | **29/05/2020** | **Name:** | **PRIYA P RAO** |
| **Course:** | **Python** | **USN:** | **4AL18EC041** |
| **Topic:** | **Python for image and video processing with OpenCV.** | **Semester & Section:** | **4th sem ‘A’ section** |
| **Github Repository:** | **Priya-Rao** |  |  |

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| **AFTERNOON SESSION DETAILS** |
| **Image of session**  **C:\Users\Pawan\Desktop\qwe2.PNG** |
| **Python for image and video processing with OpenCV.**  **In this session I have learnt about**   * **Introduction to image and video processing with OpenCV.** * **Installing the library.** * **Loading display, resizing and writing images.** * **Batch image resizing.** * **Face detector.** * **Capturing videos.**   **Here I have learnt about computer vision with python.**   * **Computer vision is the field that deals with acquiring and processing images and it makes decision based on the images.** * **When an image is passed to the computer and the computer tries to understand it.** * **It can do certain things such as it can tell us how many faces are there in the image, what color dominates the image and so on.** * **Here we use python to load image and process them.** * **It do things like phase and motion detection.** * **Vision includes both image and video because videos are simply stacks of images that show very fast.** * **We can do computer vision with Python using OpenCV.** * **OpenCV stands for Open Source Computer Vision.** * **It is a library used not only in Python but also in other programming languages.** |