**DAILY ASSESSMENT FORMAT**

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| **Date:** | **11/06/2020** | **Name:** | **PRIYA P RAO** |
| **Course:** | **PCB Design** | **USN:** | **4AL18EC041** |
| **Topic:** | **A hands-on tour of KiCad with a simple project: layout** | **Semester & Section:** | **4th sem ‘A’ section.** |
| **Github Repository:** | **Priya-Rao** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session**  **C:\Users\Pawan\Desktop\today3.PNG**  **C:\Users\Pawan\Desktop\today4.PNG** |
| **In today’s session I have learnt about:**  **PCBnew is KiCad’s layout editor. It is a drawing program that is specifically designed for drawing printed circuit boards.**  **This is the list for designing circuit boards in PCB:**   * **Components, like resistors and integrated circuits,** * **Wires (or traces, as we will call them), that connect the components,** * **A board made of fibreglass or similar material, with a particular shape,** * **Graphics, like text or drawings, printed on the board,** * **Holes, large or small.** * **Components, wires, and graphics may appear on one, or two sides of the board. Wires can also appear in many layers that are sandwiched between the top and bottom layer to allow for more complicated circuits.** * **We use the layout editor to design a PCB with all of these elements. With KiCad’s PCBnew, WE can design PCBs that are very simple.**   **The user interface:**  **Pcbnew: The objective is to become familiar with its user interface and the functionality that is absolutely necessary for our very simple first project.**   * **To start Pcbnew, we need to go back to the KiCad main application, and click on the Pcbnew button, as in the example You can also start Pcbnew through the menu. Click on Tools, and then 'Run Pcbnew', or through a keyboard shortcut.** * **Pcbnew will start, and we will see the main window.** * **Compared to Eeschema, Pcbnew may seem more complex and even intimidating, but rest assured, it isn’t.**   **The layout sheet:**   * **Similarly to Eeschema, in Pcbnew we design our PCBs inside the designated sheet area. It does look very similar to the schematic sheet. We can also edit the layout template in Pcbnew in the same way we did in Eeschema. That is, by editing the page layout description file using the Pl\_editor application.** * **We can also load an existing custom layout exactly as we did in Eeschema. In Pcbnew, click on the File menu, then click on Page Settings. At the bottom right side of the window, we will see the 'Page layout description file' text field. Use the 'Browse' button to find and select the template we created.** |

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| **Date:** | **11/06/2020** | **Name:** | **PRIYA P RAO** |
| **Course:** | **JAVA** | **USN:** | **4AL18EC041** |
| **Semester & Section:** | **4th sem ‘A’ section** | | |
| **Github Repository:** | **Priya-Rao** |  |  |

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| **AFTERNOON SESSION DETAILS** |
| **Image of session**  **C:\Users\Pawan\Desktop\today1.PNG**  **C:\Users\Pawan\Desktop\today2.PNG** |
| **In today’s session I have learnt about:**   * **The to String Method: The method is used to get a String object representing the value of the Number Object.** * **Inheritance: Inheritance in Java is a mechanism in which one object acquires all the properties and behaviors of a parent object.** * **Packages: A java package is a group of similar types of classes, interfaces and sub-packages. Package in java can be categorized in two form, built-in package and user-defined package.** * **Interfaces: Another way to achieve abstraction in Java, is with interfaces. An interface is a completely "abstract class" that is used to group related methods.** * **Public, Private, Protected: Public means you can access it anywhere while Private means you can only access it inside its own class. Just to note all private, protected or public modifier are not applicable to local variables in Java. A local variable can only be final in java** * **Polymorphism: Any Java object that can pass more than one IS-A test is considered to be polymorphic** * **Encapsulation and the API Docs: Encapsulation in Java is a mechanism of wrapping the data and code acting on the data together as a single unit.** * **Casting Numerical Values: In Java, there are two types of casting:** * **Widening Casting - converting a smaller type to a larger type size. byte -> short -> char -> int -> long -> float -> double.** * **Narrowing Casting - converting a larger type to a smaller size type. double -> float -> long -> int -> char -> short -> byte.** * **Upcasting and Downcasting: Upcasting is casting to a parent type in simple words casting individual type to one common type while downcasting is casting common type to individual type.** * **Using Generics: Java Generic methods and generic classes enable programmers to specify, with a single method declaration, a set of related methods, or with a single class declaration, a set of related types, respectively.** |