# DAILY ASSESSMENT FORMAT

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| **Date:** | **11 -06-2020** | **Name:** | **Divyashri Bahubali Samajage** |
| **Course:** | **Kicad** | **USN:** | **4AL17EC031** |
| **Topic:** | **A hands –on tour of kicad with a simple project-layout** | **Semester & Section:** | **6th sem ‘A’** |
| **Github**  **Repository:** | **Divyashri-cource** |  |  |

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| **FORENOON SESSION DETAILS** |
| **Image of session** |

**Report – Pcbnew :**

Pcbnew is a powerful printed circuit board software tool available for the Linux, Microsoft Windows and Apple OS X operating systems. Pcbnew is used in association with the schematic capture program Eeschema to create printed circuit boards. Pcbnew manages libraries of footprints. Each footprint is a drawing of the physical component including its land pattern (the layout of pads on the circuit board).

The required footprints are automatically loaded during the reading of the Netlist. Any changes to footprint selection or annotation can be changed in the schematic and updated in pcbnew by regenerating the netlist and reading it in pcbnew again.

Several new features have been added to Pcbnew which impact the board file format. Using these new features in board designs will prevent them from being opened with previous versions of Pcbnew. • Rounded rectangle footprint pads. • Custom shape footprint pads. • Footprint pad names longer than four characters. • Keep out zones on more than a single layer. • 3D models offset saved as millimeters instead of inches. • Footprint text locking

# Netlist

If the schematic is modified (after a printed circuit board has been generated), the following steps must be repeated: • Generate a new netlist file using Eeschema. • If the changes to the schematic involve new components, the corresponding footprints must be assigned using Cvpcb. • Launch Pcbnew and re-read the modified netlist (this will also re-read the file with the footprint selections). Pcbnew will then load automatically any new footprints, add the new connections and remove redundant connections. This process is called forward annotation and is a very common procedure when a PCB is made and updated.

# DRC:

A DRC error is raised when a value smaller than the minimum value specified is encountered. The second dialog panel is: This dialog also allows to enter a ”stock” of tracks and via sizes. When routing, one can select one of these values to create a track or via, instead of using the netclass’s default value. Useful in critical cases when a small track segment must have a specific size.

# Footprints:

This option is accessed via the Postprocess/Create Cmp file menu option. However, no file will be generated unless at least one footprint has the Normal+Insert attribute activated (see Editing Footprints). One or two files will be produced, depending upon whether insertable components are present on one or both sides of the PCB. A dialogue box will display the names of the file(s) created.

# Edge cuts:

The smallest unit in pcbnew is 1 nanometer. All dimensions are stored as integer nanometers. Pcbnew can generate up to 32 layers of copper, 14 technical layers (silk screen, solder mask, component adhesive, solder paste and edge cuts) plus 4 auxiliary layers (drawings and comments) and manages in real time the hairline indication (rats nest) of missing tracks. The display of the PCB elements (tracks, pads, text, drawings…) is customizable: Pcbnew 2 / 154 • In full or outline. • With

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| **Date:** | **11-June- 2020** | **Name:** | **Divyashri Bahubali Samajage** |
| **Course:** | **PHP & MYSQL On Udemy** | **USN:** | **4AL17EC031** |
| **Topic:** | **PHP functions,Using external files and images** | **Semester**  **& Section:** | **6th & ‘A’** |
| **GitHub Repository**  **:** | **Divyashri-cource** |  |  |

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| **AFTERNOON SESSION DETAILS** |
| **Image of session** |

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| **Report –**  **Php Functions:**  The real power of PHP comes from its functions.  PHP has more than 1000 built-in functions, and in addition you can create your own custom functions.  PHP Built-in Functions  PHP has over 1000 built-in functions that can be called directly, from within a script, to perform a specific task.  Please check out our PHP reference for a complete overview of the [PHP built-in functions.](https://www.w3schools.com/php/php_ref_overview.asp) PHP User Defined Functions  Besides the built-in PHP functions, it is possible to create your own functions.   * A function is a block of statements that can be used repeatedly in a program. * A function will not execute automatically when a page loads. * A function will be executed by a call to the function.   Create a User Defined Function in PHP  A user-defined function declaration starts with the word function:  Syntax  function *functionName*() {  *code to be executed*;  }  **PHP Return Type Declarations**  PHP 7 also supports Type Declarations for the return statement. Like with the type declaration for function arguments, by enabling the strict requirement, it will throw a "Fatal Error" on a type mismatch.  To declare a type for the function return, add a colon ( : ) and the type right before the opening curly (  { )bracket when declaring the function.  In the following example we specify the return type for the function: |
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