DAILY ASSESSMENT FORMAT

Date:	10th June 2020	Name:	Poojary Sushant
Course:	Kicad on Udemy	USN:	4AL18EC400
Topic:	A hands –on tour of kiCAD with a simple project: schematic Design	Semester & Section:	6th sem 'B"
Github Repository:	Sushant7026		

FORENOON SESSION DETAILS

Image of session

Report –
Silk-screen and copper pour:

Silkscreen is usually white and human readable letters and used to identify components, test points, PCB and PCBA part numbers, warning symbols, company logos, date codes and manufacturer marks.Silk-screening requires specially formulated inks.

Three methods available for applying the Silk screen to the PCB:

- Manual screen-printing can be utilized when line widths are greater than 7 mil (0.007") and the registration tolerance is 5 mil.
- LPI (Liquid Photo Imaging) provides more accuracy and legibility than manual screening and is employed when line widths are greater than 4mil.
- DLP (Direct Legend Printing) is the most accurate and legible of the 3 processes but also has the highest cost for consumables.

Copper pour refers to an area on a printed circuit board filled with copper.

- The feature of copper pour is the back off (or stand-off) - a certain distance between the copper pour and any tracks or pads not belonging to the same electrical net.

- PCB designers today almost invariably use completely solid areas of copper pour that completely cover the remaining area outside those tracks, pads, and stand-off regions.

Steps to Create your Component Footprint:

Creating your footprint in Altium consists of 4 steps:

1.Create the pads

2.Define component height and area

3.Add silk screen information

4.Save the footprint

Let's step through the process to see how easy it can be to create your component footprint.

Here's how to create your footprint in Altium Designer in 4 easy steps:

Step 1: Create the Pads

You will need the landing pattern for your part, which can be found towards the end of the component data sheet. For this example, let's use the popular PIC24FJ64GA004 microcontroller. This component is packaged in a 44-lead plastic thin quad flatpack.In Altium Designer, under File → New → Library → PCB Library. This will add a new PCB footprint library to your project. You'll also need to add new

components to your PCB Library file. When you create a new PCB Library file, the library will create a blank footprint (named PCBCOMPONENT_1) by default**.**

Step 2: Define Component Height and Area

In this step, we need to define the height and area occupied by the component. We also need to define the component type. To access this information, select your new component footprint from the Footprints list, and click the Edit button. From here, you'll be able to enter these three pieces of information.By default, the component type will be set to Standard; this is the value we would want for this component. Other components, such as mechanical elements and no-BOM components, will not be standard components and should be assigned the appropriate component type
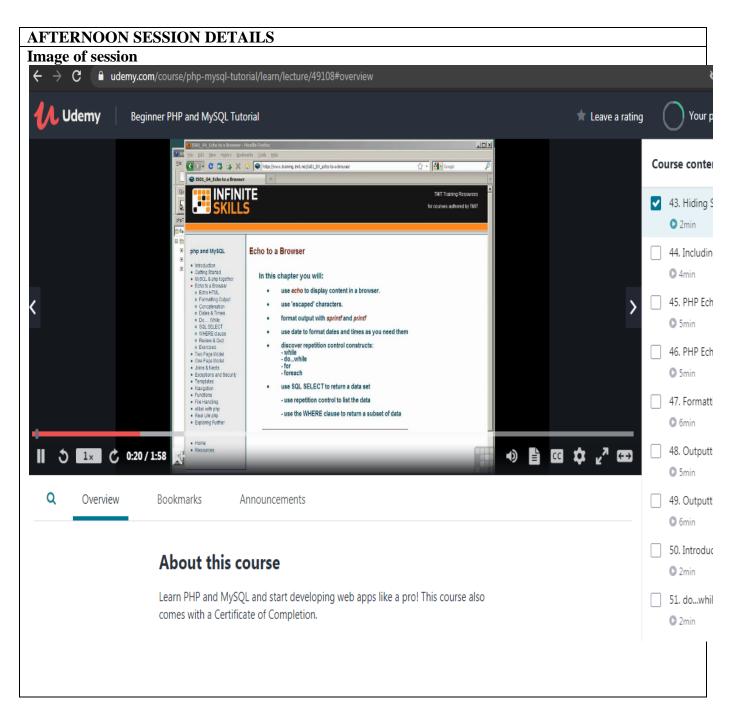
Step 3: Add Silk Screen Information

For this step, we add the silk screen layer image and pin 1 marking. We will follow the suggestion from the data sheet and indicate only where the corners should be. To make a corner, we create a 0.08 mm line which you get by selecting the line icon on the PCB Lib Placement toolbar, duplicate it (by copy and paste) and link them. Here, make sure the silk screen information is assigned to the correct layer. Here, we want to place this on the Top Overlay layer. This can be done by selecting the silk screen lines from the Properties panel.

Step 4: Save the Footprint

The final step is to create your component is to name and save it so you can add it to your component , which also includes the schematic symbol. Tip: You will want to make the name unique and searchable so you can easily locate it.

Date:	10th June 2020	Name:	Poojary Sushant
Course:	MySql	USN:	4AL18EC400
Topic:	Hiding a sensitive data,php ecgo and quotes,formatting using sprint,intro to user defined variables	Semester & Section:	6th & 'B,
GitHub Repository :	Sushant7026		

AFTERNOON SESSION DETAILS

Image of session

Report –
Hiding a sensitive data:

When thinking about security within a MySQL installation, you should consider a wide range of possible procedures / best practices and how they affect the security of your MySQL server and related applications. MySQL provides many tools / features / plugins in order to protect your data including some advanced features like Transparent Data Encryption aka TDE, Audit, Data Masking & De-Identification, Firewall, Password Management, Password Validation Plugin, etc…
In order to mitigate the effects of data breaches, and therefore the associated risks for your organization's brand and reputation, popular regulations or standards including GDPR, PCI DSS, HIPAA,… recommand (among others things) data masking and de-identification.

PHP double quotes vs single quotes
Strings in PHP can be specified in four different ways: single quoted, double quoted, heredoc syntax and (since PHP 5.3.0) nowdoc syntax, the first two of them being by far the most frequently used.

It is important to know the difference between using single quotes and double quotes. In this post we will see the difference between them and which should be used when.

Single quoted strings are the easiest way to specify string. This method in used when we want to the string to be exactly as it is written. When string is specified in single quotes PHP will not evaluate it or interpret escape characters except single quote with backslash (') and backslash(\) which has to be escaped.

PHP sprintf() Function

Definition and Usage

The sprintf() function writes a formatted string to a variable.

The arg1, arg2, ++ parameters will be inserted at percent (%) signs in the main string. This function works "step-by-step". At the first % sign, arg1 is inserted, at the second % sign, arg2 is inserted, etc.

 If there are more % signs than arguments, you must use placeholders. A placeholder is inserted after the % sign, and consists of the argument- number and "\$". See example two.

 Related functions: printf(), vprintf(), vsprintf(), fprintf() and vfprintf()

Syntax

sprintf(*format,arg1,arg2,arg++)*

Replace the percent (%) sign by a variable passed as an argument: $number = 9; $str = "Beijing"; ...
Using the format value %f: $number = 123; $txt = sprintf("%f",$number); ...
Use of placeholders: $number = 123; ...A demonstration of string specifiers: $str1 = "Hello";

Introduction to User Defined Variables:

MySQL supports user defined variables to have some data that can be used later part of your query. You can save a value to a variable using a SELECT statement and later you can access its value.

Unlike other RDBMSs, you do not need to declare the data type for a variable. The data type is automatically assumed when you assign a value. A value can be assigned to a variable using a SET command as shown below

SET @server_type:='MySQL';

When you above command is executed, the value, MySQL is assigned to the variable called @server_type. Now you can use this variable in the later part of the code. Suppose if you want to display the value, you can use SELECT statement