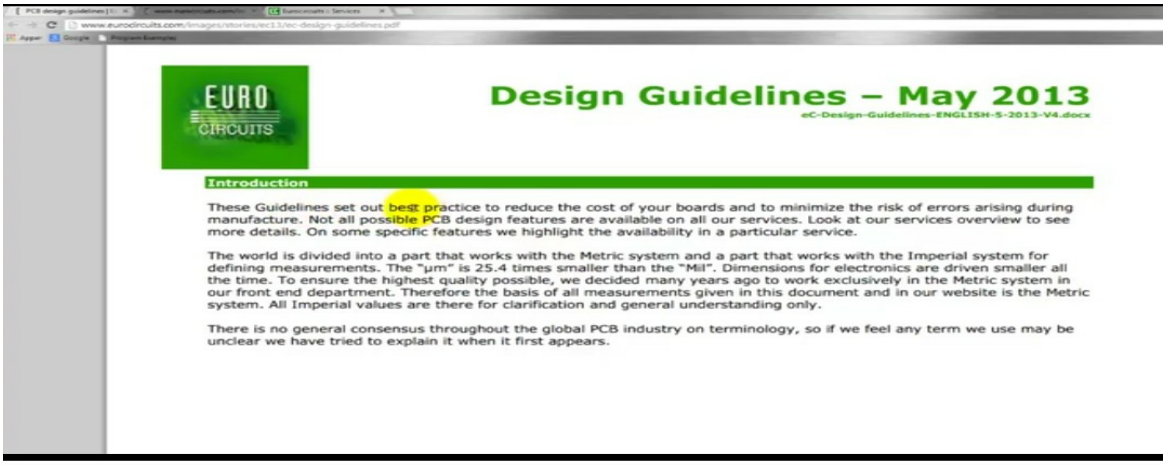
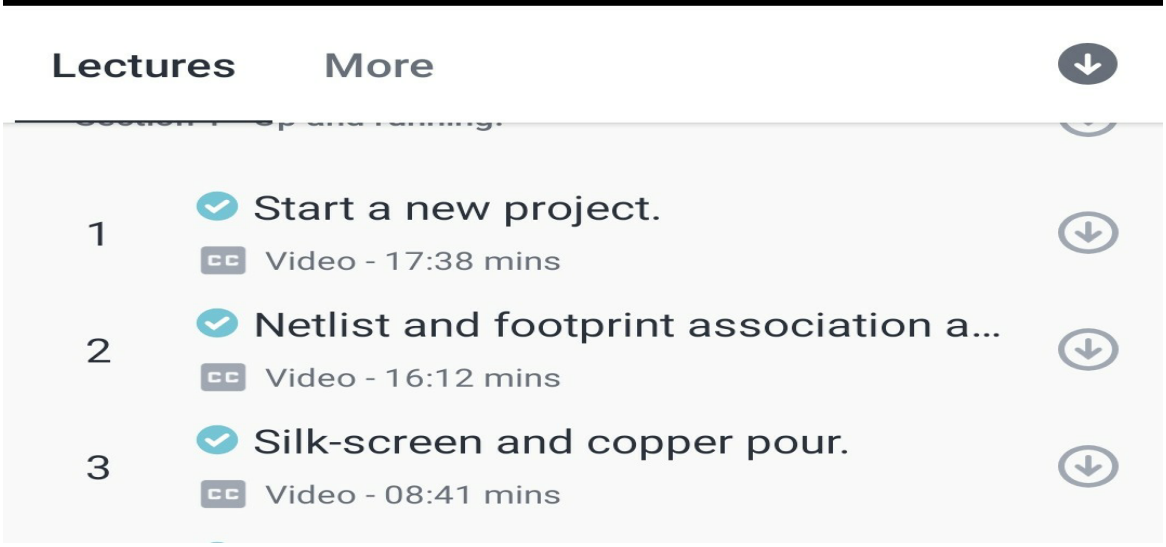
DAILY ASSESSMENT FORMAT

Date:	12-06-2020	**Name:**	K Muthu
Course:	PCB Design using Kicad	**USN:**	4al17ec038
Topic:	• Create PCB footprint component • Prepare production files	**Semester & Section:**	6 & 'A'
Github Repository:	K.Muthu-courses		

FORENOON SESSION DETAILS

Image of session



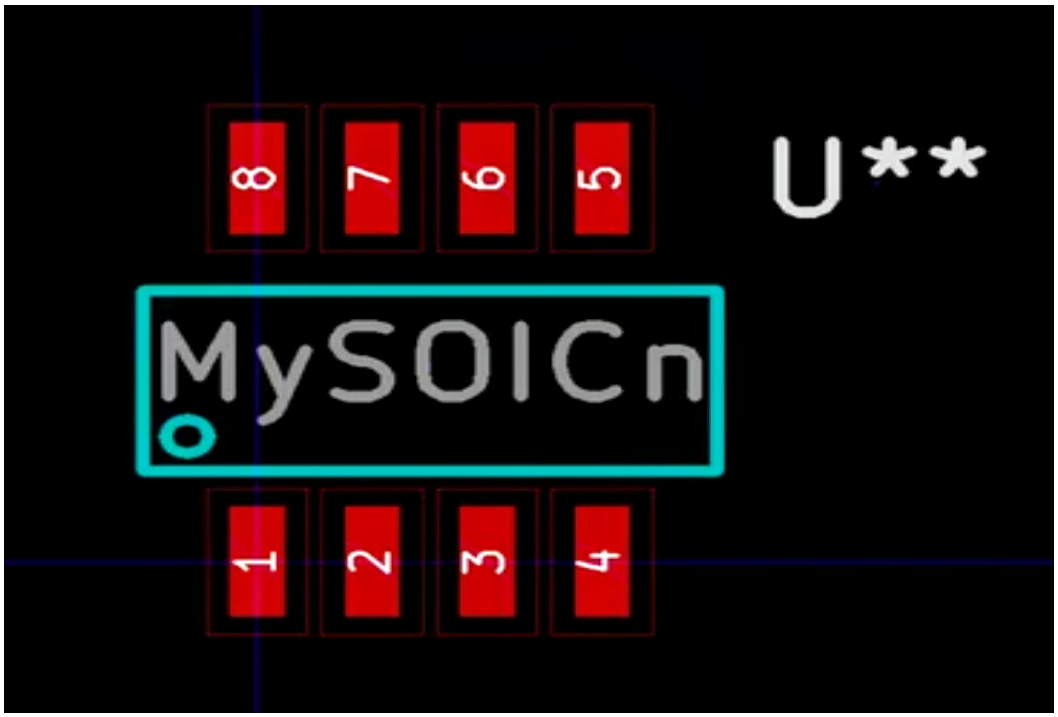


Report –

KiCad is a free and open source Electronic Design Automation (EDA) software package used to draw schematics (know as schematic capture) and for PCB design and layout.

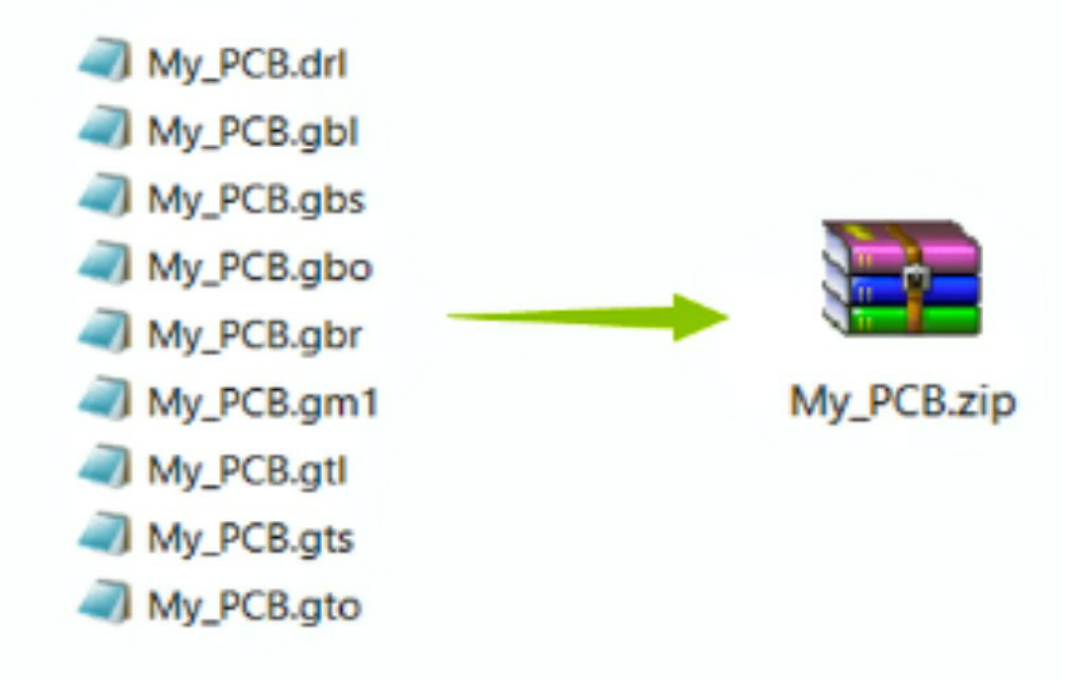
Create PCB footprint component :

- **Steps in creating a PCB footprint component are,**
  - ✓ In the footprint editor, click on new footprint button.
  - ✓ Name the new footprint.
  - ✓ Add boundaries and pins.
  - ✓ The pad button allows you to add pads on the canvas.
  - ✓ Use the polygon tool to draw the silkscreen shape that will indicate the border of the custom footprint.
  - ✓ Use the text label tool to label the pins.
  - ✓ Save the footprint.
- Example on creating a new footprint component,



Prepare production files :

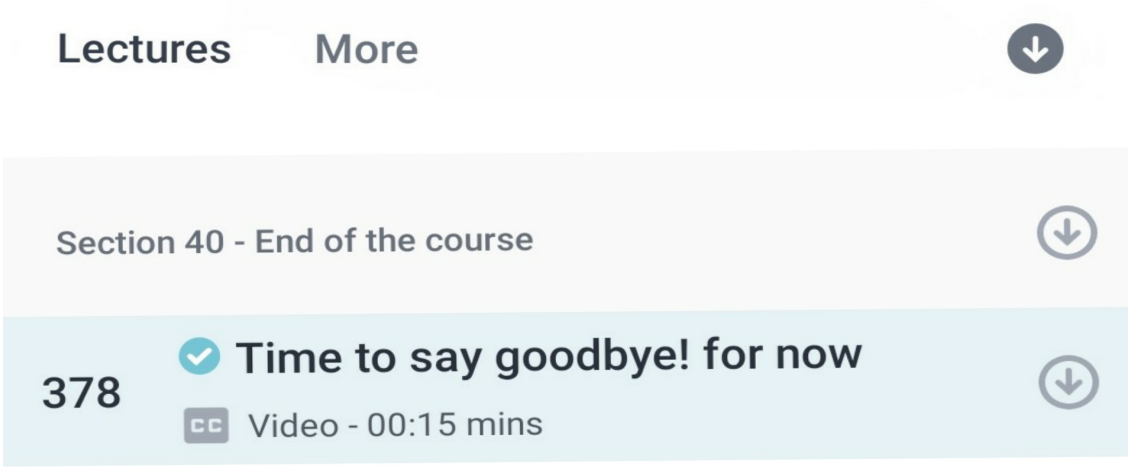
- Production files need to be generated are **Gerber** and **Drill** files.
- Steps in creating these files are,
  - ✓ Select the 'Plot' button
  - ✓ Make sure the Plot format is set to 'Gerber' and all the aforementioned layers have been selected.
  - ✓ Once our gerber files have been generated, they can be reviewed to catch any potential errors.
  - ✓ Click on File and select Load Gerber file.
  - ✓ Select all of the layers shown and click 'Open'.
  - ✓ In the same manner, click on 'File' > 'Load EXCELLON Drill File'.
  - ✓ Select the drill file(s) and click 'Open'.



Date:	**12-06-2020**	**Name:**	**K Muthu**
Course:	**Python**	**USN:**	**4al17ec038**
Topic:	Text to Speech	**Semester & Section:**	**6 & 'A'**

AFTERNOON SESSION DETAILS

Image of session



Report –

Text to Speech :

- **gTTS** is a very easy to use tool which converts the text entered, into audio which can be saved as a mp3 file.
- The gTTS API supports several languages including English, Hindi, Tamil, French, German and many more.
- The speech can be delivered in any one of the two available audio speeds, fast or slow.
- Example on text to speech,

```
# Import the required module
from gtts import gTTS
# The text that you want to convert to audio
text = 'Good Morning. How can i help you'
# Language in which you want to convert
language = 'en'
# Passing the text and language to the engine,
# here we have marked slow=False.
obj = gTTS(text=mytext, lang=language, slow=False)
# Saving the converted audio in a mp3 file named
# welcome
obj.save("welcome.mp3")
```