



### 1 Online / Offline content

- The online content of Spoken Tutorials can be accessed from : http://spoken-tutorial.org/tutorial-search/
- 2. You can also download the Spoken Tutorials for offline learning from : http://spoken-tutorial.org/cdcontent/
- 3. From this link download the FOSS categories in the language you wish to learn.
- 4. The Spoken Tutorial content will be downloaded as a zip file on your machine.
- 5. Extract the contents of the zip file & access them.

#### 2 The procedure to practise

- 1. You have been given a set of spoken tutorials and files.
- 2. You will typically do one tutorial at a time.
- 3. You may listen to a spoken tutorial and reproduce all the steps shown in the video.
- 4. If you find it difficult to do the above, you may consider listening to the *whole* tutorial once and then practise during the second hearing.

## 3 KiCad

- Click on "Select FOSS" or "All FOSS Categories" drop-down and choose "KiCad".
- 2. Click on "Select Language" or "All Languages" drop-down and choose the language (English, Hindi, Marathi ...) in which you wish to learn.
- 3. Click on "Submit" button.
- 4. You will see a list of tutorials based on your selection.
- 5. Start with the first tutorial in the displayed list.

## 4 First tutorial: Designing circuit schematic in KiCad

1. Locate the topic "Designing circuit schematic in KiCad" and click on it.

- 2. To view the tutorial, click on the video player icon on the right of the selected topic.
- 3. The Outline of the tutorial and the Pre-requisite will be visible on the right of the player.
- 4. The links for Assignment and Code Files will be available below the player.
- 5. Click on the player and view the tutorial.
- 6. At 7:09, click on Place a component button before proceeding further.
- 7. At 10:38, pause the video and complete the schematic as shown in the video.

#### 4.1 Instructions to practise

- (a) Create a folder on the "Desktop" with your "Name-RollNo-Component". (Eg. "kicad-04-rupak").
- (b) Give a unique name to the files you save, so as to recognize it next time.(Eg. "Practice-1-rupak").
- (c) Remember to save all your work in your folder.
- (d) This will ensure that your files don't get over-written by someone else.
- (e) Save your work from time to time, instead of saving it at the end of the task.

## 4.2 Common instructions for Assignments

- (a) Attempt the Assignments as instructed in the tutorial.
- (b) Save your work in your folder.

# 4.3 Common instructions to use Code files

- (a) Click on the link "Code files" located below the player and save it in your folder.
- (b) Extract the downloaded zip file.
- (c) You will see all the code/source files used in the particular tutorial.
- (d) Use these files as per the instructions given in the particular tutorial.
- 8. Play-pause-practise the whole tutorial.

9. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.

#### 5 Second tutorial: Electric rule checking and Netlist generation

- 1. Locate the topic "Electric rule checking and Netlist generation".
- 2. Use the schematic created in

Designing-circuit-schematic-in-KiCad tutorial, to continue with this tutorial.

- 3. At 2:04, right click and choose Field Value. Then click on Edit Field to open the Edit Value Field window.
- 4. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.
- 5. Follow all the above instructions, till you complete all the tutorials in the series.