

Experiment 2

Introduction to Fritzing

Introduction

Fritzing is open-source Electronic Design Automation software with an easy learning curve, that is well-suited for the needs of students, makers and hobbyists. It offers a unique real-life "breadboard" view, and a parts library with many commonly used high-level components. Fritzing makes it very easy to communicate about circuits, as well as to turn them into PCB layouts ready for production. It is particularly popular among Arduino and Raspberry Pi users, and is widely used in education and creative tinkering. It was developed at the Potsdam University of Applied Sciences.

Download and Install a copy of Fritzing

- For the latest (0.9.4 – *not* free) version go to <https://fritzing.org/download/>
- Instructions for how to get version 0.9.4 for free, by building your copy from the open-source code available on GitHub, are available here: <https://siytek.com/build-fritzing/>
- For the previous free version (0.9.3b), go to <https://eduengteam.com/2020/04/download-fritzing-free-software.html>. This version is perfectly capable of doing all we'll require.

Whichever version you get, I recommend installing it in a folder called C:\Fritzing when you extract it from the zip file. Extraction will take several minutes; it's big. It's then easy to create a shortcut on your desktop.

Exercises

1. Watch the Fritzing tutorial: *A Beginners Guide to Making Circuit & Wiring Diagrams* at <https://www.youtube.com/watch?reload=9&v=-saXw1EipX0> (21:30)
2. Duplicate the example demonstrated in the tutorial, export it and paste it into a Word document.
3. Submit the Word document by the beginning of next week's scheduled lab period.

Other Tutorials to Learn More About Fritzing:

- Fritzing – a Tutorial: <https://www.instructables.com/Fritzing-A-Tutorial/>
- Fritzing – An Introduction: <https://www.youtube.com/watch?v=Hxhd4HKrWpg> (2:08)
- From CMPE370, Computer Engineering Practicum, at Qatar University:
 - CMPE370: Fritzing Schematics: <https://www.youtube.com/watch?v=c1uAhhjbbhU> (15:45)
 - CMPE370: Fritzing PCB Design Part 1: <https://www.youtube.com/watch?v=3UF-x4K8qnw> (20:23)
 - CMPE370: Fritzing PCB Design Part 2: <https://www.youtube.com/watch?v=fY99A9zZD54> (8:50)