CET 4925 Course Project -- Parts & Supplies

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This handout is to help you get started with the preparation and ordering of some necessary parts, devices, supplies for your course project. NOTE: It is extremely important to get the parts <u>as EARLY as possible</u> for a successful project! Otherwise you will find yourselves have no enough time to finish the project before the final demonstration date.

Note: The final complete list of parts/supplies you need for your project really depends on the nature of your project. Please feel free to consult with me anytime for any help you may need.

IoT Computing Platform

• Particle Photon (do NOT forget headers or breakout board!)

Note: Photon is recommended in our class due to its cost and performance. But if you want to use RPi Zero W, Banana Pi, Chip, or other board, please let me know.

 $Where\ to\ buy:\ See ed Studio,\ Adafruit,\ Sparkfun,\ MicroCenter,\ Amazon,\ New Egg,\ Mouser,\ ...$

<u>A kit</u> including a board and some other components are recommended!

• MicroUSB cable: Yes, you have to buy the cables separately if you do not get a kit. **NOTE**: NOT the microUSB charging cable!!

Where to buy: Bestbuy, MicroCenter, Staples, Amazon, seeedstudio, Adafruit,

Electronic/electrical Components

• Sensors (A sensor kit is recommended!)

Note: You can definitely use some sensors you had in some other courses. Or come to me, I may provide some sensors to you.

Where to buy: seeedstudio.com, adafruit.com, sparkfun.com, dfrobot.com

- LCD display, buzzer (~\$15)
 - Where to buy: Seeedstudio, Adafruit.com, Sparkfun, dfrobot, Amazon, pololu.com, mouser.com, digikey.com, jameco.com
- Battery (LiPo or regular), battery charger, battery holder, connectors (~\$10) Where to buy: Seeedstudio, Adafruit.com, Sparkfun, dfrobot, Amazon, MicroCenter, pololu.com, jameco.com, elexp.com, mouser.com, ...
- Prototype board, breadboard (small size) (~\$5)
 Where to buy: Seeedstudio, Adafruit.com, Sparkfun, dfrobot, Amazon, MicroCenter, pololu. com, jameco.com, elexp.com, mouser.com,...
- Jumper wires, switch, push buttons, resistors, LEDs (~\$5)
 Where to buy: Seeedstudio, Adafruit.com, Sparkfun, dfrobot, Amazon, MicroCenter, pololu. com, jameco.com, elexp.com, mouser.com,...

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Note: 1. You can ALWAYS try Amazon!

- 2. If it is possible, try to use in-town vendors for fast shipping.
- 3. Additional parts and supplies may be needed depending upon the nature and complexity of your project. If you have any question, just feel free to let me know.

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