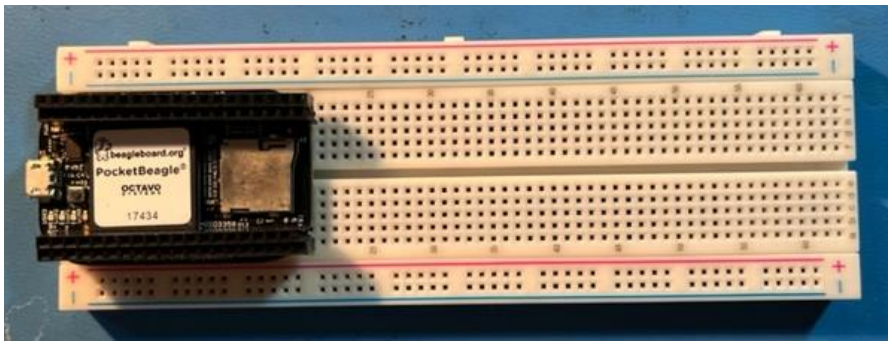
ENGI301: Assignment #2

Due: 09/12/2023 8pm

Create a zip file (**<last_name>_engi301_assignment_02.zip**) that contains a screenshot or picture (jpg or png) of each of the following items. The pictures should be named "question_1a", "question_1b", etc. The zip file should be emailed to erikwelsh@gmail.com and welsh@rice.edu before the assignment due date. Pictures should be "medium" quality (i.e. they do not need to be extremely high resolution; just enough to see everything).

NOTE: To take a screenshot, in Windows use "Snipping Tool"; in MacOS use "Shift-Command-4".

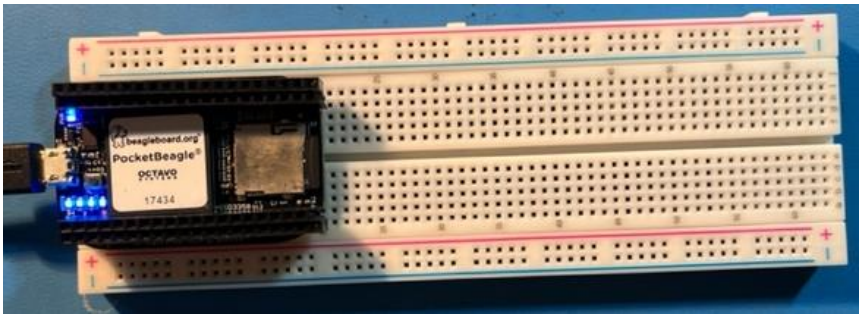
1) **Soldering**
    a. Take a picture of the PocketBeagle on the jig you created to solder the PocketBeagle
        i. This should look similar to the pictures from the lecture slides
    b. Take a picture of the bottom of the PocketBeagle to show completed soldering of the headers
    c. Place PocketBeagle on large solderless breadboard such that P1.1 is in column A, Row 1



2) **Software Installation (screenshot of software running after installation)**:
    a. **SD Card Programming (Etcher)**: https://etcher.io/
    b. **Version Control (GitHub Desktop):** https://desktop.github.com/

3) **Create as SD Card:** Only need one screenshot of the Etcher confirming SD card is programmed (burned)
    a. Download the image file "**bone-debian-10.11-iot-armhf-2022-02-03-4gb.img.xz**" from
        https://rcn-ee.com/rootfs/bb.org/testing/2022-02-03/buster-iot/
    (should be about halfway down the page – ~601MB)
    b. Use Etcher to program your SD card

    NOTE: Save the zipped file in case you need to start over. You can get rid of any unzipped files.



4) **Create accounts:** Need screenshot of web browser logged in to each of the following sites
    a. **Version Control (GitHub)**: https://github.com/ (send me your username)
    b. **Publishing (Hackster.io)**: https://www.hackster.io/ (send me your username)

5) **GitHub (You do not need to provide picture of this since it will be visible via the web):**
    a. Create a public repository: "ENGI301"
        i. Check the "Initialize the repository with a README"
    b. In the web interface, add me as a collaborator. My GitHub username is "erikwelsh"
        i. You can find this under "Settings" → "Collaborators"
    c. Clone the repository to your computer using GitHub Desktop
    d. Modify the README.md file on your computer to add a description to the repository:
        i. Line 1: "ENGI301"; this should be a <h1> tag
        ii. Line 2: "Repository for ENGI301 course work"; this should be normal text

        See: https://guides.github.com/pdfs/markdown-cheatsheet-online.pdf for syntax

    e. Stage the file; Commit the file using the commit message "Updating README.md"; Push the commit