SPEECH PROJECT PHONETIC CODING APPLICATION:

Getting Started:

1. Download both MATLAB and MacTex (https://tug.org/mactex/mactex-download.html)
2. Download the data and app files (https://cmu.box.com/s/xm1p46eyb1ssdhzg6l39yqjbrevv7kmw)
3. Installing the app:
    o Open MATLAB and change the working directory to the **Decoding** folder:
        ▪ Select ⬚ . Once you're in the folder, select **Open**.
    o Navigate to the **APPS** tab and select **Install App**
        ▪ Select **App** (folder)> **Phonetic Coding.mlappinstall** > **Open**
    o The **Phonetic Coding** App is now installed in your apps. It can be found by selecting the ▼ button. (You can select the star next to the app and move it to the first row for later use.)

Coding the data:

1. Open the **Phonetic Coding** app by selecting it from the APPs menu.
2. Load Speech Data: On the app, select **File** > **Open** > **####.mat**
    o Each data file has a 4-digit ID and contains a single word list (120 words)
    o This file will load the audio and word information. If a previous phonetic transcription exists, it will also load.
3. Marking Spectrograms:
    o Each stimulus recording will display on the spectrogram with an automated speech onset marked. If onset is adjusted, the new onset is presented when the data is reloaded.
    o Select the Onset and Offset buttons to select the beginning and end of each word.
    o Audio modulation:
        ▪ **Play**—from start of audio or paused location
        ▪ **Replay**—always from start of audio
        ▪ **Scroll bar** and **Play Speed Text window** both modify the playback speed.
4. Phonetic coding:
    o Adding Code: Input using symbol buttons or computer keyboard (when no other buttons are selected)
    o Deleting Code: Use the on-screen **delete** button (backspace will not work).
    o Reveal Button:
        ▪ Selecting the **reveal** button will show the word stimuli presented to the subject
        ▪ If the reveal button is selected at any time, it will be marked on the coding data file.
5. Errors: Add notes on specific errors for each word part can be added within error text boxes.
6. Updating code and changing word numbers:
    o Entered code will only be saved (to the workspace) once the **update** button is selected or the word number is changed using the **dropdown menu** or **next/back** buttons.
    o Select **Update** at the last word before saving file.
7. Saving Coded data to file:
    o To save code, Select **File** > **Save**. This will save any coding that has completed. Make sure to select **Update** at the final word before saving.
        ▪ Data is saved as the variable, **CodingMatrix** within the ####.mat data file.
    o To close without saving, select **End > NO** (to saving data)**.**
    o If you close the app but not MATLAB and would really like to save the data, you can type the following command while replacing **fname** with the 4-digit data file you were working on (i.e. '**1023.mat**') into the Command Window:

```
CodingMatrix=CodingMat;
save(fname, 'CodingMatrix', '–append');
```