README: Running Pre-processing Scripts

General Notes:

* The general processing pipeline is: split ⇒ smooth ⇒ run analysis
* There are three kinds of data that need to be split: keystroke, shimmer and empatica
  + All follow same pipeline, but different code
* For the most part, following the prompts from the code will give you the right output
* Below are the steps to run the script; best to do them in order!

Shimmer:

1. Copy ALL shimmer folders at once and put into appropriate raw/subj folder
   1. The zip file should say “(something)-selected.zip”
2. Run **SplitTrials\_Shim1** >> This runs over ALL subjects
   1. Select your “raw\_?” folder
   2. Watch it do its magic
   3. Output: your new split files will end up in a folder called “shimmer/ShimmerSplit”
3. Run **R\_vector\_and\_Plots2** >> This runs for EACH subject
   1. Select data/shimmer/subj#/ShimmerSplit
      1. Do it for each subject
   2. Output: there will be a folder called “Vector” for the CSVs for all the vector data, and another folder called “Otherplots” that plot everything
4. Run **ResampleShim3** >> This runs for EACH subject
   1. Select data/shimmer/subj#/Vector
      1. Do it for each subject
   2. Output: a folder called “Resampled for XCorr” which contains a bunch of csv with resampled vector data
5. Run **ShimmerEpochAnalysis\_acc4** >> This runs for ALL subjects
   1. Select data/shimmer
   2. Output: A folder called ShimEpochAnalysis inside the subject folders containing one CSV per body part

Empatica

1. Copy the entire empatica folder into the appropriate “raw” folder
2. Run **SplitTrials\_Empa1**  >> This runs over ALL subjects
   1. Select your “raw\_?” folder
   2. Output: within the raw/subj# folder, a folder called “EmpaticaSplit”
3. Create a folder inside data called “smoothed\_?”, where ? corresponds to the run name
4. Run **SmoothResample2** >> This runs over ALL subjects
   1. Select your “raw\_?” folder
   2. Select your “smoothed\_?” folder (as prompted)
   3. Output: smoothed data into a “smoothed\_?” folder

Keystroke

1. Copy text file into the appropriate “raw” folder
2. Create a keystroke folder for the appropriate experiment round, and within that, create a Splitdata folder
3. Run **TrialSplitting\_keystroke** >> This runs over EACH subject individually
   1. Select your “raw\_?” folder
   2. Select the Splitdata folder (inside keystroke folder)
   3. Enter the subject name (“subj1” etc)
   4. Output: folders within keystroke/Splitdata for each subject, and within each subject folder, 5 text files for each round
4. Run **KeystrokeAnalysis\_new** >> runs for EACH subject
   1. Multi-select the files within keystroke/Splidata/subj#
   2. Select a destination folder (as prompted) >> select the WHOLE keystroke folder
   3. Enter in the subject number (to name the folder, as prompted)
   4. Output: some figures and csvs written into this subject folder

Things needed to be fixed:

* Splitting cut offs (need to adjust to 32 mins for the first two phases, and 25 mins for the last round)
* Just make things do more work so we do less work

Things to add to the code:

* Epoch data for keystroke (started already)
* ShimmerEpochAnalysis code for velocity and displacement
* Shimmer filtering code