**CWTCH – Data Analysis Process**

**Prerequisites**

* Designed to be run with Python 3.6
* Single project data file to be downloaded in JSON format

**Installing and opening Spyder IDE (if IDE not already installed)**

1. Download and install Anaconda Navigator from the following link: <https://www.continuum.io/downloads>
2. Open Anaconda Navigator and click to install ‘spyder’
3. Click to launch spyder once installed

**Summary of Analysis Scripts**

* **CWTCHDataCleaning.py**  
  *This script sorts through the JSON data file, removing any incomplete data and restructuring the data into a matrix-like format. This is then saved in CSV format to be then used in R (or similar statistical package). Note: Editable fields need to be amended at the top of the script.*
* **CWTCHConcatData.py***This script joins together multiple output CSV files from the CWTCHDataCleaning.py script. It is used when there have been multiple data files for a single project, such as when running a study with counterbalancing. It outputs a concatenated CSV file. Note: Editable fields need to be amended at the top of the script. The input directory should contain multiple sub-directories, each containing the outpu files from the CWTCHDataCleaning.py script.*
* **CWTCHDataAnalysis.py***This script summarises the data in a more appropriate format. For the Oddity task, it generates two outputs (one with all data and one with only correct data) in a summary format with one row for each condition for each subject. For the PAL task, it places the data into six time-bins for each subject and removes all PROBE data. For the Spatial task, it removes all practice data and create one row per trial per subject. Note: Editable fields need to be amended at the top of the script.*
* **CWTCHFunctions.py***This contains code for functions that are required for each of the above scripts. It should not be run or edited, but needs to be placed in the same directory as the other scripts.*