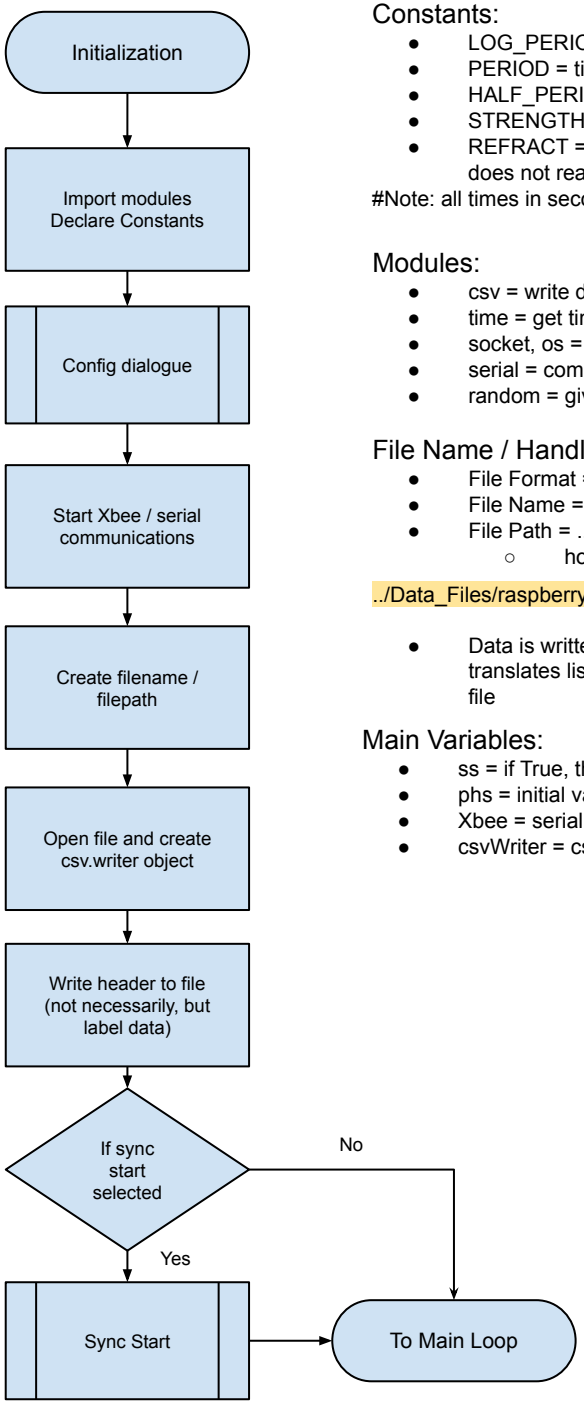


Constants:

- LOG_PERIOD = time between periodic logs
- PERIOD = time for cycle
- HALF_PERIOD = PERIOD / 2
- STRENGTH = coefficient for PRC
- REFRACT = refractory period length (PCO does not react to pulses) No used

#Note: all times in seconds

Modules:

- csv = write data to file in .csv format
- time = get time for oscillations / data logging
- socket, os = path creating / file naming
- serial = communication with xbee module
- random = give oscillator starting phase

File Name / Handling:

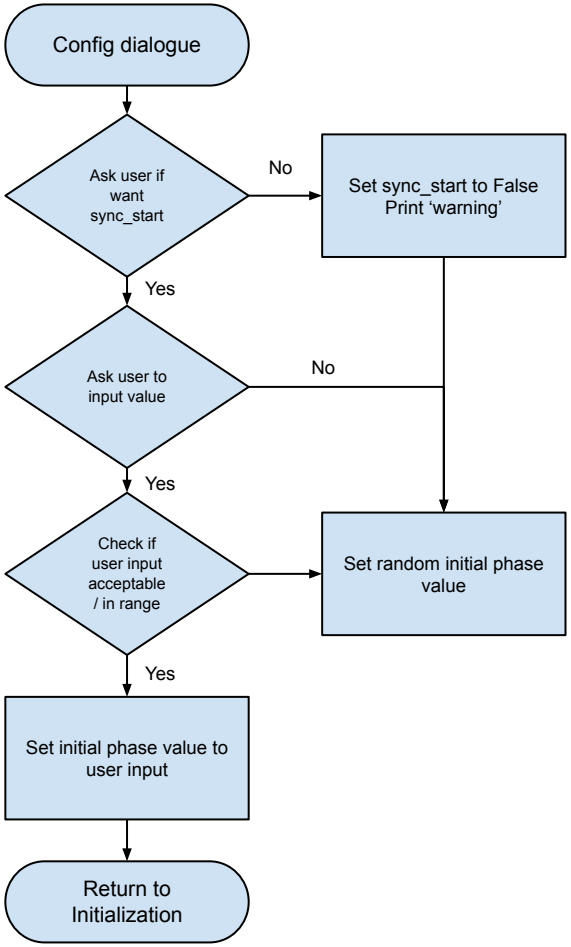
- File Format = .csv
- File Name = Based on system name and current time
- File Path = ../Data_Files/socket.gethostname()/filename
    - hostname() = system name

../Data_Files/raspberrypi1/raspberrypi1_July 23, 2020, 21_15_04.csv

- Data is written to the file via a csv.writer object, which translates lists / interables into csv format and writes them to file

Main Variables:

- ss = if True, then perform sync_start
- phs = initial value (not 'phase value')
- Xbee = serial object used for communications with Xbee module
- csvWriter = csv.writer object used to write data to file



Sync Start:

This process is not that complicated, but still has a good bit of code. Basically, the idea is to have all the oscillators to start at the same time (HOWEVER, not necessarily the phase)

The process first asks if you want the oscillator to be the master.

If you choose to make a specific oscillator the master, then it will ask you how long till starting oscillation. The master will then send a start time to the other oscillators so that all their start times will sync up

If the oscillator is not the master, then it will wait to receive a signal that tells it when the start time is.