**Filter Module (Mark Broken Solar Panels) –**

Locate broken solar panels via their IR light. It outputs a json file containing file names of broken solar panels, and optionally, a directory with all the marked images.

**GUI 3 Most Damaged (GUI to sort panels by damage) –**

Currently this script takes the images of damaged panels and copies them over to a new directory. The user can then check the images in the new directory and determine which are the top 3 most damaged, either manually, or by using a GUI (which will be developed later). The paths of the damaged panels are taken from an input JSON file (which contains the full path of each image).

**GUI Broken Panel Filter (GUI to further filter broken solar panels) –**

This is the "tinder" app for broken solar panels. It displays one image at a time, and the user either `"swipes right"` on the `truly damaged` solar panel photos. Likewise, you `"swipe left"` on undamaged solar panels. If the user makes a mistake, they can press the up arrow key to `go back`.

**Mark Damaged (GUI to get location of damaged IR panels) –**

Mark the IR points (broken panels) on the images. Takes the xy coordinates of the images and maps them to GPS coordinates (outputs GPS coords)

**Orchestrator (Create Orchestration Program)–**

This is the orchestration GUI that will be running all of the modules for task 1.

The orchestrator will unlock buttons for different modules depending on where the last part of the workflow that has been completed.

**Plot POIs (Plot POIs on map of area) –**

Place two JSON files as follows. Filenames are relative to the script!

**Projection Module –**

This module is intended to be used as an API for any program that needs to get the GPS coordinates of a pixel in an image taken by the drone