**Scripts:**

* [Set\_up\_experiments](https://www.dropbox.com/scl/fi/g8n64nbb3mb5kkvqvrjl6/set_up_experiment.zip?rlkey=7fu05k6oszl1a0xt5275rh8p2&dl=0)

**Set up internal test:**

1. install pip2 and pip2 packages
2. metadata with Core\_ID, Binomial\_Species, & Image columns
3. run python2 divideCSV.py -c filename.csv
   1. before: cd set\_up\_experiment
4. the test images need to be circled?
5. download images:
   1. python3 set\_up\_experiment/downloadImages.py -i /set\_up\_experiment/Aquilegia\_barnebyi/Aquilegia\_barnebyi.csv -o set\_up\_experiment/Aquilegia\_barnebyi/
6. resize images
   1. python2 set\_up\_experiment/resize\_images.py -i set\_up\_experiment/Aquilegia\_barnebyi/experiment\_images
7. upload images to S3's corresponding and make them public
   1. huhcurio@gmail.com
   2. upload to crowdcurio-experiment-images
   3. make sure the images are public
8. get AWS URLs
   1. python2 set\_up\_experiment/getAWS-URL.py -c set\_up\_experiment/Aquilegia\_barnebyi/Aquilegia\_barnebyi.csv -i set\_up\_experiment/Aquilegia\_barnebyi/experiment\_images
9. run queue creator
   1. python2 set\_up\_experiment/queueCreator.py -c set\_up\_experiment/Aquilegia\_barnebyi/awsURIOutput.csv
   2. replace images in the experiment creation script
10. run label creator with name of species
    1. upload label images (use folder name label\_images under each species’ folder)
    2. python2 set\_up\_experiment/labelsGenerator.py -s aquilegia\_barnebyi
    3. replace labels in the experiment creation script
11. python2 set\_up\_experiment/create-thoreaus-exp.py (do not run this if you want to include tests)

To monitor experiments: <http://crowdcurio.cs.uwaterloo.ca/experiments/953/monitor/>

To find experiment IDs: <http://crowdcurio.cs.uwaterloo.ca/api/experiment>

**Set up test solutions (these steps generate solutions to the tests, which can be placed in create-thoreaus-exp.py before running step 11 of the previous section):**

1. Upload two selected test images for each Amazon S3 to the corresponding species/test\_images directory
   * E.g., in the crowdcurio-experiment-images/Aquilegia\_barnebyi/test\_images/ folder
   * Make sure the uploaded images are public
2. Copy each of the two test images’ URLs and past them to the create-thoreaus-test-exp.py under images:

images = [

{

'name': 'test1',

'url': 'https://crowdcurio-experiment-images.s3.amazonaws.com/Aquilegia\_barnebyi/test\_images/Aquilegia\_barnebyi.2809634.jpg',

'genre': 'aquilegia\_barnebyi',

'learnmorelink': '',

},

{

'name': 'test2',

'url': 'https://crowdcurio-experiment-images.s3.amazonaws.com/Aquilegia\_barnebyi/test\_images/Aquilegia\_barnebyi.2809513.jpg',

'genre': 'aquilegia\_barnebyi',

'learnmorelink': '',

},

]

1. Run create-thoreaus-test-exp.py using the command line python2 create-thoreaus-test-exp.py
   * A experiment ID number should be generated
2. Complete the experiment at [http://crowdcurio.cs.uwaterloo.ca/experiments/#](http://crowdcurio.cs.uwaterloo.ca/experiments/) where # is the generated experiment ID number from the previous ste[http://crowdcurio.cs.uwaterloo.ca/experiments/#](http://crowdcurio.cs.uwaterloo.ca/experiments/)p
3. After finishing the experiment (which should contain 2 images) run python2 downloadData.py -e # -s species
4. Copy the content from fetchedData-species-#/generatedSolution-species-#.txt then paste in create-thoreaus-exp.py under training2:

"training2":{#assessment training

"type": "A", # Assignment

"pay": 0.00, # Pay for Training

"metadata":{

"instructions": "Pass the test!.",

},

"configuration": {

"mode": "counting",

"tasks": [ {'genre': 'leandra\_acutiflora', 'url': 'https://s3.amazonaws.com/crowdcurio-experiment-images/Brazilian\_tests/Leandra\_acutiflora.RB00695958.jpg', 'abc': {'a': -3, 'c': -3000, 'b': 203}, 'coordinates': [{'y': '598', 'x': '853', 'label': 'flower'}, {'y': '553', 'x': '948', 'label': 'bud'}, {'y': '718', 'x': '703', 'label': 'bud'}, {'y': '753', 'x': '838', 'label': 'bud'}, {'y': '767', 'x': '812', 'label': 'bud'}, {'y': '843', 'x': '808', 'label': 'bud'}, {'y': '692', 'x': '923', 'label': 'bud'}, {'y': '398', 'x': '1223', 'label': 'flower'}, {'y': '928', 'x': '1198', 'label': 'bud'}, {'y': '3332', 'x': '2758', 'label': 'flower'}]}, {'genre': 'leandra\_acutiflora', 'url': 'https://s3.amazonaws.com/crowdcurio-experiment-images/Brazilian\_tests/Leandra\_acutiflora.RB00335975.jpg', 'abc': {'a': 0, 'c': -2991, 'b': 201}, 'coordinates': [{'y': '1640', 'x': '2215', 'label': 'fruit'}, {'y': '1620', 'x': '2230', 'label': 'bud'}, {'y': '1720', 'x': '2250', 'label': 'flower'}, {'y': '1745', 'x': '2135', 'label': 'fruit'}, {'y': '1765', 'x': '2125', 'label': 'bud'}, {'y': '1860', 'x': '2160', 'label': 'bud'}, {'y': '1855', 'x': '2120', 'label': 'bud'}, {'y': '1870', 'x': '2095', 'label': 'bud'}, {'y': '1875', 'x': '2150', 'label': 'bud'}, {'y': '1900', 'x': '2140', 'label': 'bud'}, {'y': '1984', 'x': '2136', 'label': 'bud'}, {'y': '2020', 'x': '2080', 'label': 'bud'}, {'y': '2700', 'x': '1675', 'label': 'fruit'}, {'y': '2650', 'x': '1620', 'label': 'fruit'}, {'y': '2795', 'x': '1730', 'label': 'fruit'}, {'y': '2820', 'x': '1695', 'label': 'fruit'}, {'y': '2920', 'x': '1645', 'label': 'fruit'}, {'y': '1240', 'x': '1890', 'label': 'fruit'}, {'y': '1270', 'x': '1900', 'label': 'fruit'}, {'y': '1968', 'x': '1968', 'label': 'bud'}]}, ],

…

},

1. Make sure the workflow in create-thoreaus-exp.py includes the below content

config = {

"workflow": [ "consent", "training1","training2", "task" ],

…

}

1. Now, if you run create-thoreaus-exp.py, the created experiment will contain 2 tests.
   * If a crowdworker passes the first test, they can start the actual tasks right away, otherwise, they will need to work on a second test, if they fail 3 times, they will not be able to work on the tasks

Starting/stopping a HIT:

* Go to <http://crowdcurio.cs.uwaterloo.ca/experiments/exp#/monitor/>
  + Note that we have to use “http” instead of “https”
* Use the button on the webpage to start/stop HITs
  + remember to write down all HIT numbers for each experiment
  + The corresponding HIT number is shown after each time a HIT has been started

Downloading data:

* run python2 downloadData.py -e exp# -s species

Paying crowdworkers:

* python2 pay-script-multiple-hit-IDs.py -e exp# -t “hit#s” (can include multiple hit IDs)
* python2 /Users/cdavis/Desktop/set\_up\_experiment/step2/set\_up\_experiment/pay-script-multiple-hit-IDs.py -e 966 -t "3GVPRXWRQ0ETPMV3SICRR063Z6CI7B 3L1EFR8WXCPDTEH6674Q2ZKHE43F9O 3GL25Y685ME90KRLVAEHDSQ8I84XMU"