

Unit test outputs

```
paul@oikos-dev: ~/code/desa/developer

(des-a-dev) paul@oikos-dev:~/code/desa/developer$ python -m pytest
===== test session starts =====
platform linux -- Python 3.8.10, pytest-7.2.0, pluggy-1.0.0
rootdir: /home/paul/code/desa/developer
collected 8 items

tests/test_aaa_flask_app.py .           [ 12%]
tests/test_add_api.py ..                [ 37%]
tests/test_hello_api.py .              [ 50%]
tests/test_time_api.py ..              [ 75%]
tests/test_weather_api.py ..           [100%]

===== 8 passed in 1.12s =====
(des-a-dev) paul@oikos-dev:~/code/desa/developer$
```

Test API with cURL GET commands

```
paul@oikos-dev: ~

llo
{"result":"Hello"}
paul@oikos-dev:~$ curl "http://kube-worker1.lab.newpathexchange.com:30080/api/add?num1=3.5&num2=4.6"
{"result":"8.1"}
paul@oikos-dev:~$ curl "http://kube-worker1.lab.newpathexchange.com:30080/api/time?days=45"
{"result":"2023-02-04 03:17:29.576359"}
paul@oikos-dev:~$ curl "http://kube-worker1.lab.newpathexchange.com:30080/api/weather?uszip=21207"
{"result":{"coord":{"lon":-76.7341,"lat":39.3296},"weather":[{"id":801,"main":"Clouds","description":"few clouds","icon":"02n"}],"base":{"stations":"","main":{"temp":270.79,"feels_like":270.79,"temp_min":268.6,"temp_max":272.97,"pressure":1031,"humidity":77},"visibility":10000,"wind":{"speed":0.89,"deg":292,"gust":1.34},"clouds":{"all":20},"dt":1671592466,"sys":{"type":2,"id":2000972,"country":"US","sunrise":1671538965,"sunset":1671572780,"timezone":-18000,"id":0,"name":"Gwynn Oak","cod":200}}}}
```

Test API with cURL POST commands

```
paul@oikos-dev: ~  
paul@oikos-dev:~$ curl -H "Content-type: application/json" -d '{"num1": 3.5, "num2": 4.6}' http://kube-worker1.lab.newpathexchange.com:30080/api/add  
{"result":"8.1"}  
paul@oikos-dev:~$ curl -H "Content-type: application/json" -d '{"days": 45}' http://kube-worker1.lab.newpathexchange.com:30080/api/time  
{"result":"2023-02-04 03:26:19.965108"}  
paul@oikos-dev:~$ curl -H "Content-type: application/json" -d '{"uszip": 21207}' http://kube-worker1.lab.newpathexchange.com:30080/api/weather  
{"code":422,"errors":{"json":{"uszip":["Not a valid string."]},"status":"Unprocessable Entity"}  
paul@oikos-dev:~$
```

Swagger UI

