**Tests & Results:**

These are the curl calls I used to test my API. The ones highlighted in red are the only tests that came back with unexpected results. Any URL resources that were unexpected resulted in a 404 error. This isn’t so much unexpected as something I took note of. I didn’t know what kind of error those calls would give me, but after getting the resulting 404 it makes sense that they would result in that status. I reported or fixed the issues I did find. The only thing I couldn’t quite figure out were the PUT calls that resulted in “Error 411 (Length Required).” I’ll need to go back and figure out why that error happened and how to fix it or get around it.

\*\*New User\*\*

**curl --data "name=NewName" -H "Accept: application/json" http://api-holly.appspot.com/user**

Expected: no error

**curl --data "name=NewName2&age=30" -H "Accept: application/json" http://api-holly.appspot.com/user**

Expected: no error

**curl --data "name=NewName" -H "Accept: application/json" http://api-holly.appspot.com/user**

Expected: Return with no new user entity

**curl --data "name=NewName&age=30" -H "Accept: application/json" http://api-holly.appspot.com/user**

Expected: User name already exists

\*\*Display user\*\*

**curl -H "Accept: application/json" http://api-holly.appspot.com/user**

Expected: list all user keys

**curl -H "Accept: application/json" http://api-holly.appspot.com/user/known**

Expected: user info

**curl -H "Accept: application/json" http://api-holly.appspot.com/user/unkown**

Expected: User not found error

**curl -H "Accept: application/json" http://api-holly.appspot.com/user/nonsense**

Expected: no such user or some system error

Result: 404 Not Found

The resource could not be found.

\*\*Delete User\*\*

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user**

Expected: error: need user key/id

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/4878221707313152**

Expected: no error

**curl -H "Accept: application/json" http://api-holly.appspot.com/4878221707313152**

Expected: User not found

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/4878221707313199**

Expected: Error: User not found

\*\*Put/update entry - Bike\*\*

**curl -X PUT -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: no change to entry

Got: "Error 411 (Length Required)!!1" Not sure what this means...

**curl -X PUT -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/unknown**

Expected: no entry error

Got: "Error 411 (Length Required)!!1" Not sure what this means...

**curl -X PUT -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/bike/known**

Expected: no user error

Got: "Error 411 (Length Required)!!1" Not sure what this means...

**curl -X PUT -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/bike/unknown**

Expected: no user error

Got: "Error 411 (Length Required)!!1" Not sure what this means...

**curl -X PUT --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: date changed, no other changes

**curl -X PUT --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/unknown**

Expected: no entry error

**curl -X PUT --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/bike/known**

Expected: no user error

**curl -X PUT --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/bike/unknown**

Expected: no user error

**curl -X PUT --data "bike\_type=newtype" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: bike\_type changed, no other changes

**curl -X PUT --data "distance=5" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: distance changed, no other changes

**curl -X PUT --data "distance=five" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: value error

**curl -X PUT --data "time=500" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: time changed, no other changes

**curl -X PUT --data "time=FiveHundred" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: value error

**curl -X PUT --data "kilos=true" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: kilos changed, no other changes

**curl -X PUT --data "kilos=blah" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: no changes

**curl -X PUT --data "level=10" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

expected: level changed, no other changes

{"distance": 5, "level": 10, "kilos": true, "bike\_type": "newtype", "key": 5169618595348480, "time": 500, "date": "01/01/2015"}

**curl -X PUT --data "level=Ten" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: value error

**curl -X PUT --data "date=02/02/2020&bike\_type=Road&level=10&distance=2&time=20&kilos=false" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: level changed, no other changes

Result: Kilos still equals True. Realized I did not put in code to change kilos from True to False, only to change from default False to True.

{"distance": 2, "level": 10, "kilos": true, "bike\_type": "Road", "key": 5169618595348480, "time": 20, "date": "02/02/2020"}

\*\*Put/update entry - Run\*\*

**curl -X PUT -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: no change to entry

**curl -X PUT -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/unknown**

Expected: no entry error

**curl -X PUT -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/run/known**

Expected: no user error

**curl -X PUT -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/run/unknown**

Expected: no user error

**curl -X PUT --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: date changed, no other changes

**curl -X PUT --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: no change to entry

**curl -X PUT --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/unknown**

Expected: no entry error

**curl -X PUT --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/run/known**

Expected: no user error

**curl -X PUT --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/run/unknown**

Expected: no user error

**curl -X PUT --data "path=newpath" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: path changed, no other changes

**curl -X PUT --data "distance=5" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: distance changed, no other changes

**curl -X PUT --data "distance=five" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: value error

**curl -X PUT --data "time=500" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: time changed, no other changes

**curl -X PUT --data "time=FiveHundred" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: value error

**curl -X PUT --data "kilos=true" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: kilos changed, no other changes

**curl -X PUT --data "kilos=blah" -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: no changes

**curl -X PUT --data "date=02/02/2020&path=Trail&distance=2&time=20&kilos=false" -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: all changes made

Result: Kilos still equals True. Same error as earlier with Bike entries. Did not at code from changing Kilos from True to False, only False to True.

\*\*Delete entry - Bike\*\*

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/known**

Expected: no error

**curl -H "Accept: application/json" http://api-holly.appspot.com/user/known**

Expected: entry from above no longer in 'bikes'

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/bike/known**

Expected: no user

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/known/bike/unknown**

Expected: no entry for user

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/bike/unknown**

Expected: no user

\*\*Delete entry - Run\*\*

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/known**

Expected: no error

**curl -H "Accept: application/json" http://api-holly.appspot.com/user/known**

Expected: entry from above no longer in 'runs'

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/run/known**

Expected: no user

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/known/run/unknown**

Expected: no entry for user

**curl -X DELETE -H "Accept: application/json" http://api-holly.appspot.com/user/unknown/run/unknown**

Expected: no user

\*\*New Bike\*\*

**curl --data "date=01/01/2015&user=known" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: new entry, all blank accept date

**curl --data "date=01/01/2015&user=unknown" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: User not found error

**curl --data "date=01/01/2015" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: Invalid request, user id required

**curl --data "user=known" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: no date error

Got: Debug warning, "BadValueError: Entity has uninitialized properties: date". Forgot return statement after date validation fails in entry.py. Fixed.

**curl --data "date=01/01/2015&user=known&distance=2" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: New entry

**curl --data "date=01/01/2015&user=known&distance=Two" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: value error

**curl --data "date=01/01/2015&user=known&time=20" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: New entry

**curl --data "date=01/01/2015&user=known&time=Twenty" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: value error

**curl --data "date=01/01/2015&user=known&bike\_type=newtype" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: New entry

**curl --data "date=01/01/2015&user=known&level=20" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: New entry

**curl --data "date=01/01/2015&user=known&level=Twenty" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: value error

**curl --data "date=01/01/2015&user=known&kilos=True" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: New entry

**curl --data "date=01/01/2015&user=known&kilos=true" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: New entry

**curl --data "date=01/01/2015&user=known&kilos=blah" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: kilos = false

**curl --data "date=01/01/2015&user=known&kilos=True&distance=2&time=20&level=20&bike\_type=Road" -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: {"distance": 2, "level": 20, "kilos": true, "bike\_type": "Road", "key": 4855880898052096, "time": 20, "date": "01/01/2015"}

\*\*Entry info - Bike\*\*

**curl -H "Accept: application/json" http://api-holly.appspot.com/bike/4855880898052096**

Expected: entry info: {"distance": 2, "level": 20, "kilos": true, "bike\_type": "Road", "key": 4855880898052096, "time": 20, "date": "01/01/2015"}

**curl -H "Accept: application/json" http://api-holly.appspot.com/bike/unknown**

Expected: no such entry

**curl -H "Accept: application/json" http://api-holly.appspot.com/bike**

Expected: all entry keys

**curl -H "Accept: application/json" http://api-holly.appspot.com/bike/nonsense**

Expected: error

Result: 404 Not Found, The resource could not be found.

\*\*Entry info - Run\*\*

**curl -H "Accept: application/json" http://api-holly.appspot.com/run/known**

Expected: entry info: {"distance": 2, "kilos": true, "key": 5649050225344512, "time": 20, "date": "01/01/2015", "path": "Trail"}

**curl -H "Accept: application/json" http://api-holly.appspot.com/run/unknown**

Expected: no such entry

**curl -H "Accept: application/json" http://api-holly.appspot.com/run**

Expected: all entry keys

**curl -H "Accept: application/json" http://api-holly.appspot.com/run/nonsense**

Expected: error

Result: 404 Not Found, The resource could not be found.

--END--