

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--