## Endpoint Objects allow greater abstraction in test cases

```
class ExampleApiTests(object):
   # create instances of endpoint
   color endpoint = color.ColorEndpoint()
   def test_get_color(self):
      # setup: make API request
       data = '000000'
        res = self.color endpoint.get color(data)
       # test point: verify the correct response for a correct api call
        assert res.status code == 200
       # test point: verify that we get back the same hex that we requested
        assert res.json()[0]['hex'] == data
       # test point: verify that the ison keys are correct
        assert self.color_endpoint.verify_keys_in_response(res.json()[0].keys())
```

## Custom Exceptions Support Functional Tests

```
class UnexpectedStatusCodeException(Exception):
        Raise this exception when the server response code from an http request is not
        a success code.
        Capture the requests response object and make that available.
        # pass the response object to the exception
        >>> raise UnexpectedStatusCodeException(response=res)
        # then catch and introspect the exception's property
        >>> except UnexpectedStatusCodeException as e:
            ... print(e.response.status code)
        400
    11 11 11
    def init (self, response):
        Exception. init (self, response)
        self.response = response
class PageIdentityException(Exception):
       Raise this exception when a page fails its self validation of identity.
    1111111
    pass
```

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class ExampleApiTests(object):
   # create instances of endpoint
    color_endpoint = color.ColorEndpoint()
    def test get color(self):
      # setup: make API request
        data = '000000'
        res = self.color_endpoint.get_color(data)
       # test point: verify the correct response for a correct api call
        assert res.status code == 200
       # test point: verify that we get back the same hex that we requested
        assert res.json()[0]['hex'] == data
       # test point: verify that the json keys are correct
        assert self.color_endpoint.verify_keys_in_response(res.json()[0].keys())
```