Pet store RESTful API Test Plan:

Pet store RESTful API is the API to collect pet information and be able to get, update and delete these information.

Functional test:
- Test the Post API to make sure all require functionalities are implemented and return the expected results.
- Test the Get API to make sure all require functionalities are implemented and return the expected results.
- Test the Put API to make sure all require functionalities are implemented and return the expected results.
- Test the Delete API to make sure all require functionalities are implemented and return the expected results.

Regression test:
- Not required

Performance test: (Not complete)
- Provide output performance metrics
  - Plan to use pytest-performance, not implement yet

Test Use Cases:
POST
/pet
Add a new pet to the store
- Post with required payload, validate API status return 200
- Post with required payload, validate posted record is returned by Get API
- Post name field is empty in payload, validate API status return 400
- Post photoUrls field is empty in payload, validate API status return 400
- Post without name in payload, validate API status return 400
- Post without photoUrls in payload, validate API status return 400
- post without Header, validate API status return 415
- post with not existing payload, validate API status return 405

Issues:
- Post pet API doesn't have error check for required name and photoUrls fields

/pet/{petId}/uploadImage
Uploads an image
- Post image with petId, validate API status return 200
- Post Image with empty petId, validate API status return 404

Note:

- Not Cover the test for non-required fields in POST pet API request

GET
/pet/{petId}
- Get by existing id, validate API status return 200
- Get by id empty, validate API returns 405
- Get by id not existing, validate API returns 404

Issues:
- Get pet by Id API is not working correctly. It is not returning existing pet information

/pet/findByStatus
- Get by status = 'available' or 'Pending' or 'sold', validate API status return 200
- Get by status without input parameter, validate API returns 400
- Get by status with not correct status, validate API returns 400

Issues:
- Get pet by status API doesn't have error check if status is not correct

PUT
/pet
Add a new pet to the store
- Put with required payload, validate API status return 200
- Put with required payload, validate posted record is returned by Get API
- Put name field is empty in payload, validate API status return 400
- Put photoUrls field is empty in payload, validate API status return 400
- Put without name in payload, validate API status return 400
- Put without photoUrls in payload, validate API status return 400
- put without Header, validate API status return 415
- put with not existing payload, validate API status return 405

Issues:
- Put pet API doesn't have error check for required name and photoUrls fields

Note:
- Not Cover the test for non-required fields in PUT pet API request

DELETE
/pet/{petId}
Delete the pet

- Delete by existing id, validate API status return 200
- Delete by id empty, validate API returns 405
- Delete by id not existing, validate API returns 404