**SINGTEL ASSIGNMENT**

Code Test Documentation:

I have designed a Spring boot microservice for this Animal Project assignment.

GIT HUB URL - <https://github.com/ashismohanty83/code-test.git>

Steps to setup the Application:

1. Checkout the git project from above URL

(git clone <https://github.com/ashismohanty83/code-test.git>)

2 - Import as maven project into your eclipse workspce

3- Add JDK-8 & Junit-4 into classpath

4- Please do clean build (pom.xml)

5- Once build is done please right click on AnimalApplication.java and run as java application

6 - Now microservice is up and running in your localhost:8080

Execute the different rest url and validate the results:

1. Get All the animal Details by animalType: http://localhost:8080/getAnimalDetails?animalType=DUCK&liveWith=

Here I have used 2 request parameter i.e. animalType is mandatory request parameter (to get the different animal details by providing different type i.e. DUCK, CHICKEN, PARROT, DOG, CAT, SHARK, CLOWNFISH, DOLPHIN, BUTTERFLY, CATEROILLAR, ROOSTER)

2nd request param is liveWith is a option parameter which is using for a to get PARROT details using the animal sound.

1. Get the Chicken or Rooster details - http://localhost:8080/getChickenType/CHICKEN?gender=MALE&age=13

CHICKEN - is a rest api @Pathvariable

AGE & GENDER to decide whether it is a CHICKEN or ROOSTER (For ROOSTER gender must be MALE and age would more than 12 months)

1. Get the butterfly details - http://localhost:8080/getAnimalDetails?animalType=BUTTERFLY&liveWith=

Response - ButterFly [isButterFly=false, sing()=, fly()=false, swim()=false, walk()=true, getName()=CATERPILLAR]

Initially butterfly details will give the CATERPILLAR details as it is in the initial or first stage of the Metamorphosis stage. After using this url <http://localhost:8080/butterflyMetamorphosis?animalType=BUTTERFLY> CATERPILLAR will converted to Butterfly.

Response - ButterFly [isButterFly=true, sing()=, fly()=true, swim()=false, walk()=false, getName()=BUTTERFLY]

1. Get the animal cound details by property i.e. http://localhost:8080/getAnimalCountByProperty?propertyType=SWIM

Here propertyType = {FLY, SWIM, SING, WALK}

Response - Animals Can SWIM : 4 [DUCK,SHARK,CLOWNFISH,DOLPHIN]

Application UML Diagram:

