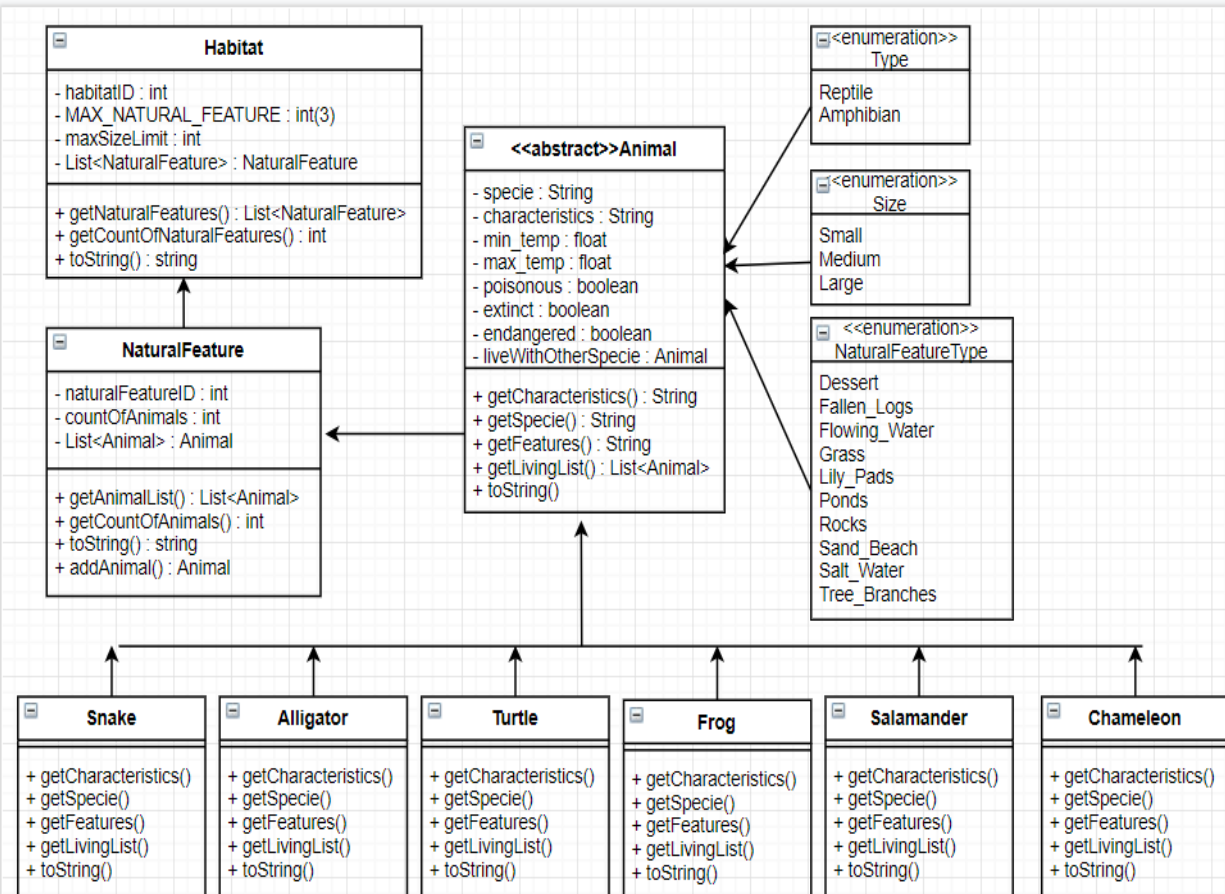


## Project 1 – Reptiles –Design Document

### UML Diagram



### Testing Plan

@Test for entry of a particular animal in a habitat

`assertEquals("Habitat ID: 1, Natural Feature ID : 2, Specie: rattlesnake, Characteristics: has a special rattle on its tail, Type: Reptile, Size: Large, Natural Feature Type: Dessert, Temperature range: 35-50 C, Poisonous: true, extinct: false, endangered : true, Can Live with: Snake", rattlesnake.toString())`

@Test for constructor of animal entry (Expected = `IllegalArgumentException`)

`assertEquals("Habitat ID: 1, Natural Feature ID : 2, Specie: rattlesnake, Characteristics: Highly venomous, Type: Reptile, Size: Big , Natural Feature Type: Dessert, Temperature range: 35-50 C, Poisonous: true, extinct: false, endangered : true, Can Live with: Snake", cobra.toString())`

@Test for more than 3 Natural Feature in Habitat (Expected = IllegalArgumentException)

```
NaturalFeature.addAnimal(Specie: Turtle, Characteristics: Lives on land and water, Type: Reptile, Size: Big , Natural Feature Type: Ponds, Temperature range: 30-40 C, Poisonous: false, extinct: false, endangered : true, Can Live with: Turtle", turtle.toString()))
```

@Test for amphibian animal in habitat

```
assertEquals("Habitat ID: 2, Natural Feature ID : 3, Specie: tree frog, Characteristics: slicky skin, Type: Amphibian, Size: Small , Natural Feature Type: Pond, Temperature range: 20-30 C, Poisonous: false, extinct: false, endangered : true, Can Live with: Frog, Salamander,Chameleon", frog.toString())
```

@Test characteristics list

```
assertEquals(slicky skin,frog.getCharacteristics())
```

@Test Animal List

```
assertEquals("rattlesnake",naturalFeature1.getAnimalList())
```

```
assertEquals("tree frog, common toad",naturalFeature3.getAnimalList())
```

@Test natural feature count in Habitat list

```
assertEquals(2,habitat1.getCountOfNaturalFeatures())
```