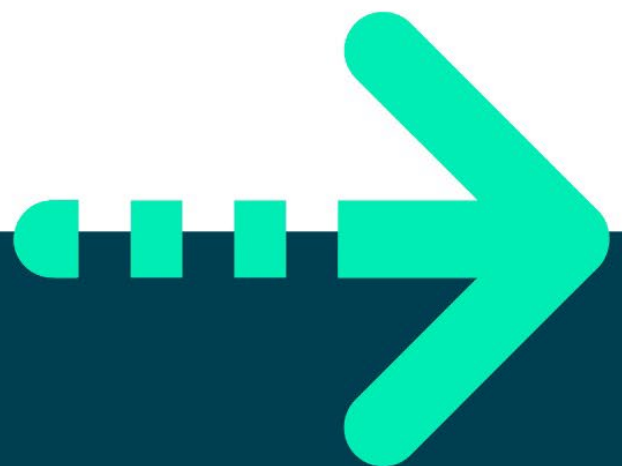




JAVA INTERFACES



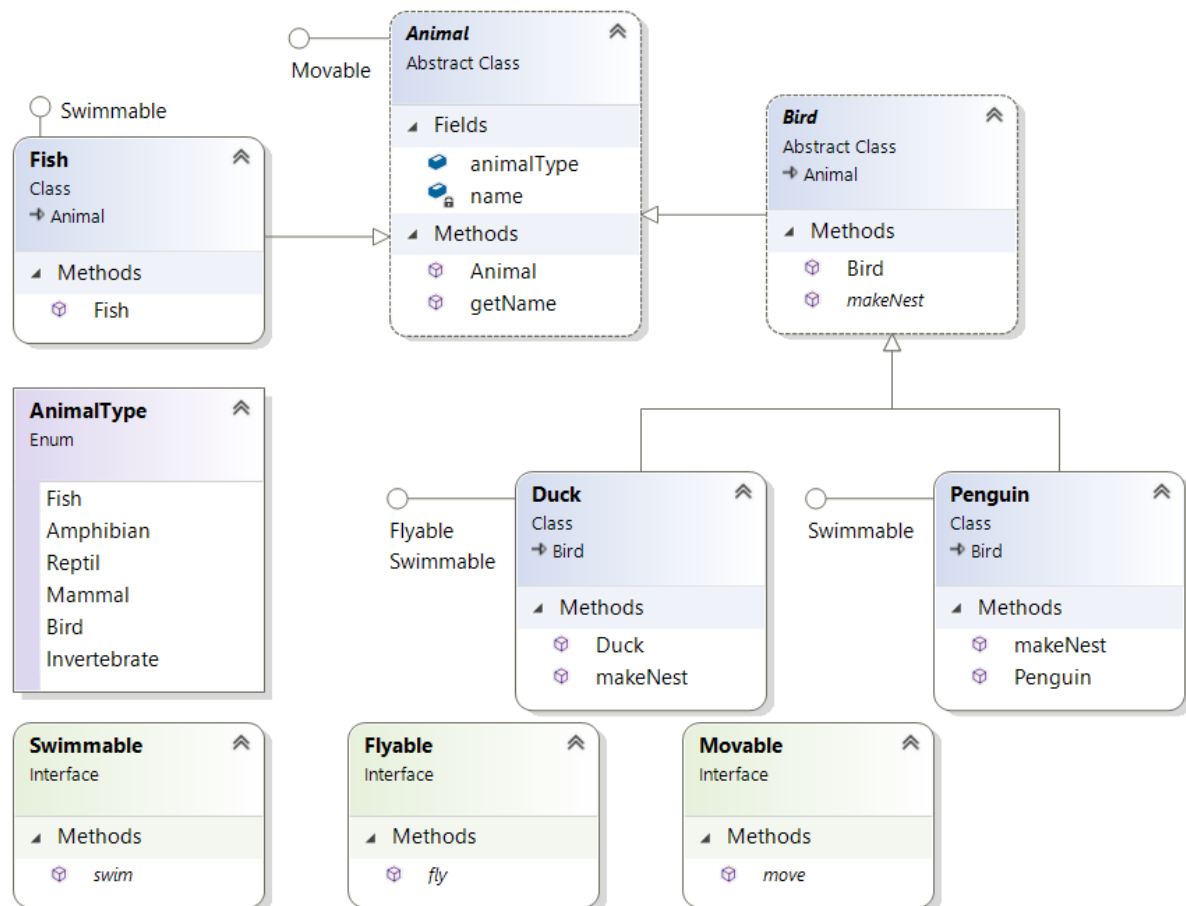
Objective

The primary objective of this lab is to provide you with the skills necessary to be able to define and implement interfaces.

Overview

In this lab you will implement a few interfaces to practice this subject.

The class diagram after completing the lab can be seen below.



Step by step

1. Following the code you generated in the previous lab, add the following interfaces to the package:
 - a. **Swimmable** with a method called `swim()`.
 - b. **Flyable** with a method called `fly()`.
 - c. **Movable** with a method called `move()`.

See example below for a movable interface:

```
public interface Movable {
    void move();
}
```



2. View the class diagram above and then implement the interfaces
Just display a message for every implemented method. For example, in the Duck class:

```
public void move {  
    System.out.println("Moving like a Duck!");  
}  
public void fly {  
    System.out.println("Flying like a Duck!");  
}
```

3. Open the class **Program** and write a few lines of code to test the interface's code.
 - a. In the 'for' loop that iterates over the **animals** array write an **if** statement to test if an **Animal** object is **Flyable** and if it is, cast it as **Flyable** and then call its **fly()**.
4. Run your code to make sure it works.
5. Inside the loop, test **if** the **Animal** object is **Swimable** and if it is, cast it as **Swimable** in order to call its **swim()** method.

