

## Exception Handling

### Problem statement

Develop an application to accept the Bike and fill the fuel tank with petrol at filling station and handle the exceptional situation while filling bike tank.

### **Operations:-**

- 1) Validate the noOfLiters with tank capacity while filling petrol into the Bike tank.
  - a) if the noOfLiters $\leq$ 0 or noOfLiters $>$ tankCapacity  
throw OverflowException("tank capacity is overflown");
  - b) if the noOfLiters $>$ 1 and noOfLiters $\leq$ tankCapacity  
send message as "tank filled successfully"

### **Specifications:-**

- 1) create OverflowException class (a user defined exception class) with following properties:

Properties: private message : String

add 1-argument constructor, toString methods.

NOTE: OverflowException class must be inherited from Exception class.

- 2) create class: Bike with following properties:

Property: private String bikeName;

Private int tankCapacity;

Add constructors , setters, getters in the class.

3) create class: PetrolFilling

add the following methods:

```
public String fillPetrol(Bike bike, int noOfLiters){  
    // write the logic to check noOfLiters <=0 and noOfLiters  
is higher than tankCapacity  
    // for more info: look at the operations sections  
// use proper try and catch blocks to handle the exception  
}
```