

# Labs

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## Lab 1: Exception Handling

**Estimated Time to Complete: 20 Min.**

**Problem Description:** Write an application which has a method, which accepts employee's mobile number as string and validates with respect to following instructions:

- a) String length should be 10 characters
- b) String should have only digits
- c) String should always start with digit '9'

**Note:** Input mobile number violates the above validation rules, the Validation method should throw "InvalidMobileNumberException". The method also should take care of "Null pointer exception"

## Lab 2: Exception Handling

**Estimated Time to Complete: 20 Min.**

**Problem Description:** Below code is having some mistake. Can you rectify the mistake?

```
try
{
    StreamReader sr = File.OpenText("C://abc.txt");
    int input1,input2,output;

    input1 = int.Parse(sr.ReadLine());
    input2 = int.Parse(sr.ReadLine());
    output = input1 / input2;
    sr.Close();
}
catch (OverflowException ex)
{
    throw ex;
}
catch (DivideByZeroException ex)
{
    throw ex;
}
```

Correct the program to handle all runtime-exceptions:

- invalid values in abc.txt
- DividebyZero
- Overflow

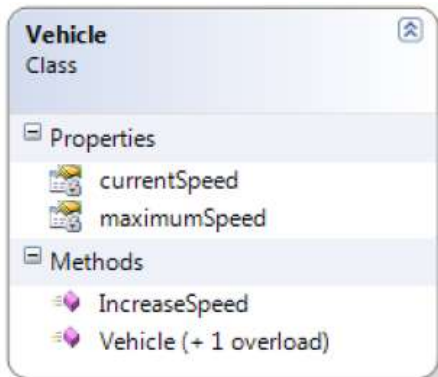
## Labs

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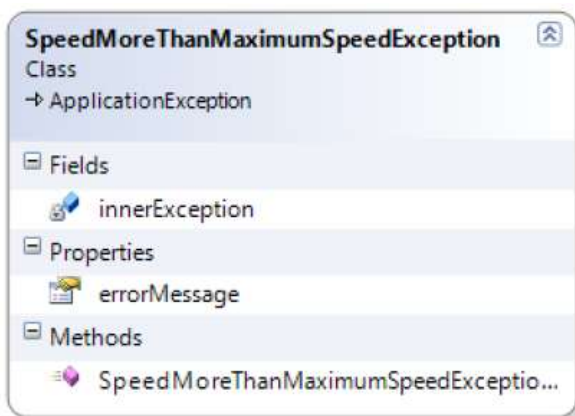
### Lab 3: Exception Handling

**Estimated Time to Complete: 20 Min.**

**Problem Description:** Write a class Vehicle as shown in the class diagram below:



Write a custom exception class as given in the class diagram:



Invoke the Vehicle class IncreaseSpeed method from Main() to catch SpeedMorethanMaximumSpeedException