CT4: CSE 203 (Sec C) - Object-Oriented Programming I: Java
Time: 20 min   Mark: 20

Name: **ID:**

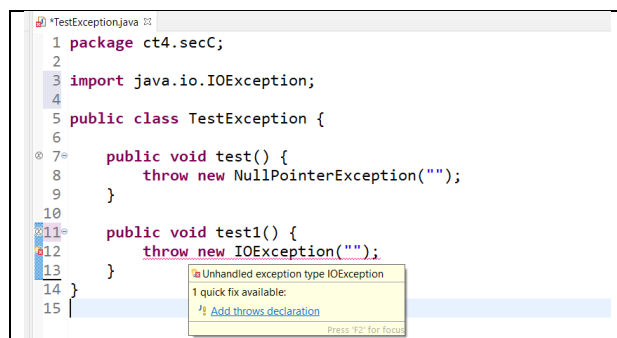**Question 1:**   **[12]**

Create a user defined Exception named **InvalidUserException**. Add 2 constructors to **InvalidUserException:** the 1st constructor takes 2 parameters: an id and user type (Doctor/Nurse/Patient) and the 2nd constructor only take id as parameter. In the first constructor set the Exception message to "**id** is not a valid **userType**" where **id** and **userType** are the parameters passed to the constructor. In the 2nd constructor, set the Exception message to "**id** is not a valid user." where **id** is the parameter passed to the constructor.

Question 2:   **[8]**

Take a look at the code below, both **test**() and **test1**() method are throwing 2 different exceptions but compiler is showing error only inside **test1()** method but not in **test**(). Why **test()** is not showing any error but **test1()** does?


```java
package ct4.secC;

import java.io.IOException;

public class TestException {

    public void test() {
        throw new NullPointerException("");
    }

    public void test1() {
        throw new IOException("");
    }
}
```

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Question 1:   **[12]**

Create a user defined Exception named **InvalidApplicantException**. Add 2 constructors to **InvalidApplicantException:**

i) The 1st constructor takes 2 parameters: 2 integer **min** and **max** to represent the valid age range of an applicant. Inside the constructor, set the Exception message to "Applicants who are between min and max years old are eligible for this position." where **min** and **max** are the parameters passed to the constructor.

ii) The 2nd constructor only take a String parameter named **minQualification**. Inside the constructor, set the Exception message to "Applicant must have a **minQualification** degree or higher to be eligible for this position" where **minQualification** is the parameter passed to the constructor.

Question 2:   **[8]**

Write sample code to show the use of 2 keywords **throw** and **throws** for the **InvalidApplicantException,** the one you just defined in **Question 1**.