

CMN - OOP and UML - Mod 1 - DQ - Day 6

Q. Inheritance represents?

- 1). **"is a" relationship**
- 2). "has a" relationship
- 3). "part of" relationship
- 4). instantiation relationship

Q. Messages on a Sequence Diagram will get mapped to what in the corresponding Class Diagram?

- 1). Class Name
- 2). Attribute of Class
- 3). **Operation of Class**
- 4). Stereotype

Q. The relationship which depicts a component implementing an interface is?

- 1). Association
- 2). **Realization**
- 3). Aggregation
- 4). Composition

Q. Which of the following is a correct description related to sequence diagram notations?

- 1). **Life line represents the lifetime of an object**
- 2). **Arrows indicate the flow of messages between objects**
- 3). Includes indicated the one scenario is included in the other
- 4). Composition is indicated by a filled diamond

Q. Which of the following is not a valid inheritance relationship?

- 1). Single inheritance
- 2). Multiple inheritance
- 3). Multi level inheritance
- 4). **Single to multiple inheritance**

Q. Which of the following is/are the types of use case relationships?

- 1). link
- 2). **extend**
- 3). **include**
- 4). conditional

Q. The source code for an object can be written and maintained independently of the source code for other objects.

This is called as?

- 1). Information-hiding
- 2). **Modularity**
- 3). Code re-use
- 4). Pluggability and debugging ease

Q. Which of the following statements are true?

1). The relationship between a class and its superclass is an example of a "has-a" relationship

2). **The relationship between a class and its superclass is an example of an "is-a" relationship**

3). **The relationship between a class and an object referenced by a field within the class is an example of a "has-a" relationship**

4). The relationship between a class and an object referenced by a field within the class is an example of an "is-a" relationship

Q. Which of the following statements is TRUE for a sequence diagram?

- 1). It is a static view diagram
- 2). It shows the sequence in which an object changes state
- 3). **It shows exchange of messages across objects**
- 4). It is semantically equivalent to a class diagram

Q. Which of the following statements is true about UML?

- 1). It is a process
- 2). **It is a visual modeling language**
- 3). It is a programming language

4). It is a tool repository

CMN - OOP and UML - Mod 1 - DQ - Day 5

Q. An XML element is of type "xs:date" and contains a string like "Hello World", the element will be ____.

- 1). valid
- 2). sometimes valid
- 3). sometimes not valid
- 4). **not valid**

Q. When is a constructor called?

- 1). When the class containing the constructor is loaded in the memory
- 2). **During the instantiation of a new object**
- 3). During the construction of a new class
- 4). At the beginning of any program execution

Q. Which of these are not complex elements in XML ?

- 1). Empty elements
- 2). Elements that contain only other elements
- 3). **Elements that contain only text**
- 4). **Elements that contain only numbers**

Q. What is an overloaded constructor?

- 1). A constructor with multiple program statements
- 2). A second constructor with the same constructor name and signature as the first constructor
- 3). A second constructor with a different signature and a different name than the first constructor
- 4). **A second or other multiple constructors with same name but different signature than any other constructor**

Q. The correct syntax for defining an attribute is?

- 1). **<xs:attribute name="empName" type="xs:string"/>**
- 2). <xs:attribute name="empName"/>
- 3). <attribute name="empName" type="xs:string"/>

4). <xs:attribute id=empName type=xs:string/>

Q. Which of the following statement/s is/are true for Object Oriented languages?

- 1). They emphasize on doing things rather than on data
- 2). More development time is required
- 3). **Model real-world well**
- 4). Less re-usability

Q. Match the following:

- i. State
- ii. Operation
- iii. Behavior
- iv. Modularity

- a. The extent to which a system can be divided into internal components
- b. The operations that the object can perform
- c. One of the possible conditions in which the object may exist
- d. Requested from any object of the class to affect behavior

- 1). i-b, ii-c, iii-d, iv-a
- 2). i-c, ii-a, iii-d, iv-b
- 3). **i-c, ii-d, iii-b, iv-a**
- 4). i-b, ii-a, iii-c, iv-d

Q. _____ is an entity that is external to the system and directly interacts with the system, deriving some benefits from the interaction.

- 1). **Actor**
- 2). Use case
- 3). Class
- 4). Relationship

Q. Refer the given schema code snippet:

```
<xs:element name="root">  
<xs:complexType>  
<xs:choice>
```

```
<xs:sequence>  
<xs:element name="A"/>  
<xs:element  
name="B"/>  
</xs:sequence>  
<xs:sequence>  
<xs:element name="X"/>
```

```
<xs:element name="Z"/>  
</xs:sequence>
```

</xs:choice>

</xs:complexType>

</xs:element>

Which of the following statement is true about the above given code snippet?

- 1). **This not a valid schema definition**
- 2). **<xs:sequence> cannot appear inside <xs:choice>**
- 3). **This will allow either elements <A> and OR elements <X> and <Z>**
- 4). **This is a valid definition**

Q. <book>

<title>Introduction to XML</title>

<author>

<firstname>James</firstname>

<lastname>Williams</lastname>

</author>

</book>

Identify the correct schema file relevant to the above given XML file:

- 1). <xs:element name="book">

<xs:complexType>

<xs:sequence>

<xs:element name="title" type="xs:string"/>

<xs:element name="author"

type="xs:string"/>

<xs:element name="firstname"

type="xs:string"/>

<xs:element

name="lastname" type="xs:string"/>

</xs:sequence>

</xs:complexType>

</xs:element>

2). <xs:element name="book">

<xs:complexType>

<xs:sequence>

<xs:element name="title" type="xs:string"/>

<xs:element

name="author" type="xs:string"/>

<xs:sequence>

<xs:element name="firstname" type="xs:string"/>

<xs:element name="lastname" type="xs:string"/>

</xs:sequence>

</xs:sequence>

</xs:complexType>

</xs:element>

3). <xs:element name="book">

<xs:complexType>

<xs:sequence>

<xs:element name="title" type="xs:string"/>

<xs:element name="author">

<xs:complexType>

<xs:sequence>

<xs:element name="firstname" type="xs:string"/>

<xs:element name="lastname" type="xs:string"/>

<xs:sequence>

</xs:sequence>

</xs:complexType>

</xs:element>

```
4). <xs:element name="book">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="title" type="xs:string"/>
      <xs:element name="author">
        <xs:complexType>
          <xs:sequence>
            <xs:element
              name="firstname" type="xs:string"/>
            <xs:element name="lastname" type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
```