PART - A

1. What is an Elaboration?

It Build the core architecture, resolve the high-risk elements, define most requirements, and estimate the overall schedule and resources

2. What is a domain model?

A domain model is a visual representation of conceptual classes or real-world objects in a domain of interest. They have also been called conceptual models, domain object models, and analysis object models

3. Define Conceptual Classes?

The domain model illustrates conceptual classes or vocabulary in the domain. Informally, a conceptual class is an idea, thing, or object. More formally, a conceptual class may be considered in terms of its symbol, intension, and extension.

4. Define Description Class?

A description class contains information that describes something else. For example, a ProductDescription that records the price, picture, and text description of an Item.

5. What are Three Strategies to Find Conceptual Classes?

1. Reuse or modify existing models.

2. Use a category list.

3. Identify noun phrases

6. What is an association?

An association is a relationship between classes (more precisely, instances of those classes) that indicates some meaningful and interesting connection.

7. What is an Attributes?

An attribute is a logical data value of an object. It is useful to identify those attributes of conceptual classes that are needed to satisfy the information requirements of the current scenarios under development.

8. What About Attributes in Code?

The recommendation that attributes in the domain model be mainly data types does not imply that C# or Java attributes must only be of simple, primitive data types. The domain model is a conceptual perspective, not a software one. In the Design Model, attributes may be of any type.

9. What is a Derived Attributes?

The total attribute in the Sale can be calculated or derived from the information in the SalesLineItems. When we want to communicate that 1) this is a noteworthy attribute, but 2) it is derivable, we use the UML convention: a / symbol before the attribute name.

10. When to Define New Data Type Classes?

In the NextGen POS system an itemID attribute is needed; it is probably an attribute of an Item or ProductDescription. Casually, it seems like just a number or perhaps a string. For example, itemID : Integer or itemID : String.

11. Defining Conceptual Super classes and Subclasses?

It is valuable to identify conceptual super- and subclasses, it is useful to clearly and precisely understand generalization, super classes, and subclasses in terms of class definition and class sets.

12. What is Generalization?

Generalization is the activity of identifying commonality among concepts and defining superclass (general concept) and subclass (specialized concept) relationships.

13. What is Aggregation?

Aggregation is a vague kind of association in the UML that loosely suggests whole-part relationships (as do many ordinary associations). It has no meaningful distinct semantics in the UML versus a plain association, but the term is defined in the UML.

14. What is Composition?

Composition, also known as composite aggregation, is a strong kind of whole-part aggregation and is useful to show in some models. A composition relationship implies that 1) an instance of the part belongs to only one composite instance at a time, 2) the part must always belong to a composite and 3) the composite is responsible for the creation and deletion of its parts either by itself creating/deleting the parts, or by collaborating with other objects.

15. What is UML Activity Diagrams?

A UML activity diagram shows sequential and parallel activities in a process. They are useful for modeling business processes, workflows, data flows, and complex algorithms.

16. How to Apply Activity Diagrams?

A UML activity diagram offers rich notation to show a sequence of activities, including parallel activities. It may be applied to any perspective or purpose, but is popular for visualizing business workflows and processes, and use cases.

Part –B (16 Marks)

1. Explain Domain Models with an example?

2. Explain Conceptual Classes with an example and what are Three Strategies to Find Conceptual Classes?

3. Explain Descriptions with the Airline Domain example?

4. Explain Associations with Applying UML?

5. Explain Attribute with Applying UML?

6. What are Suitable Attribute Types? Explain Focus on Data Type Attributes in the Domain Model.

7. Explain Conceptual Superclasses and Subclasses with an example?

8. Explain Aggregation and Composition?

9. Explain UML Activity Diagrams and Modeling?