Team 1 – Quiz (Week Number: 7)

**Lecture Topic: System Modelling**

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| **No** | **Quiz Questions** | **Student/Author Name** |
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| 6 | What is the use of Activity Diagram?  What is the use of Interaction Model? | Sen Wang |
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**What is system modeling?**

System modeling is the process of developing abstract models of a system, with each model presenting a different view or perspective of that system. System modeling has now come to mean representing a system using some kind of graphical notation, which is now almost always based on notations defined in the Unified Modeling Language (UML). System modeling helps the analyst to understand the functionality of the system, and models are used to communicate with project team members and customers.

**When are System Models Used?**

* Models are used during requirements engineering for both – new development and maintenance projects.
* Models of the new system are used during requirements engineering to help explain the proposed requirements to other system stakeholders. Engineers use these models to discuss design proposals and to document the system for implementation.
* On maintenance projects they help us clarify what the existing system does, and they can be used to support change impact analysis and system evolution.
* On renovation projects models help capturing the legacy system functionality that becomes the basis for performing gap analysis and designing requirements for the new generation system.

**What is Context Diagram?**

Context diagram is a diagram that defines the boundary between the system and its environment, showing the external entities that interact with it.

**What are basic building blocks of use case model?**

The basic building blocks of the use-case model are the actors, the use cases, the relationships between them, and the diagrams.

**What does a data flow diagram represent?**

A data flow diagram is an effective technique to analyze data exchange within   
a small group of related features.

**What are the Four Fundamental Perspectives of the System Modeling?**

The Four Fundamental perspectives of system modeling are:

* External Perspective
* Interaction Perspective
* Structural Perspective
* Behavioural Perspective

**What are the Common Diagrams that are used in Interaction Perspective?**

The common Diagrams that are used in Interaction Perspective are:

* Use Case diagram (UML)
* Sequence diagram (UML)
* Data flow diagram (DFD)

**What is Context Model?**

Context models are used to illustrate the operational context of a system - they show what lies outside the system boundaries.

**What is the use of Activity Diagram?**

Activity Diagram can be used to represent the end-to-end process flow, better understand the context of a given system, and can help us with the planning of end-to-end testing.

**What is use of Interaction Model?**

* Modeling user interaction is important, because it helps us identify product requirements.
* Modeling system-to-system or feature interactions highlights the communication (interface) problems that may arise.
* Modeling component interaction helps us understand if a proposed system structure is likely to deliver the required system performance and dependability.

**What are Sequence diagrams?**

Sequence diagrams are part of the UML and are used to model the interactions between the actors and the objects within a system.

**What is Data Flow Diagram?**

A data flow diagram is an effective technique to analyze data exchange within a small group of related features.