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**BSCS 3A - Software Engineering**  
**Activity 6**

**1. Explain how models serve as a bridge between software requirements and source code. Why are they essential for communication among stakeholders?**

- a. Models bridge the low-level implementations of the developers, to the high-level requirements of the stakeholders. This structures the business-logic of the requirements like a blueprint, while not bound to a low level implementation.

**2. Describe the difference between static and dynamic UML diagrams. Give an example of each and explain when they are most useful.**

- a. Static UML diagrams are structural and focus on classes and their relationships. On the other hand, dynamic UML diagrams focuses on interactions and workflows.
- b. A good example of a static UML diagram is a Class Diagram. It shows the structure of the system using classes, their fields, methods, and relationships between classes.
- c. An example of a dynamic diagram on the other hand is a Sequence Diagram. Its main components are the objects/participants, the messages, and lifecycle of objects. It emphasizes on the behavior over time and how objects interact with one another.

**3. Sequence diagram: Attached as a separate file**  
(canonizado-sequence-diagram.png)

**4. Activity Diagram: Attached as a separate file**  
(canonizado-activity-diagram.png)