

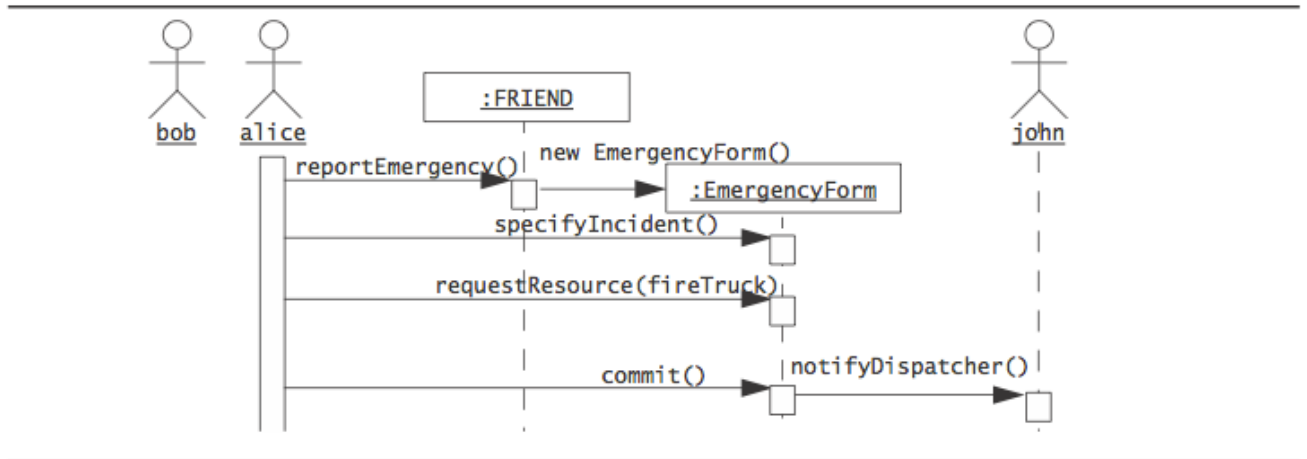
Week 5 – Class – Answers

1A. Exercise: sequence diagram from a use-case scenario

- ▶ *Draw a sequence diagram for the following warehouseOnFire scenario. Include the objects bob, alice, john, FRIEND, and instances of other classes you may need. Draw only the first five message sends.*
- ▶ Scenario name: warehouseOnFire
- ▶ Participating actor instances: bob, alice:FieldOfficer, john:Dispatcher
- ▶ Flow of events:
 - ▶ 1. Bob, driving down the main street in his police car, notices smoke coming out of a warehouse. His partner, Alice, activates the 'Report Emergency' function from her FRIEND laptop.
 - ▶ 2. Alice enters the address of the building, a brief description of its location (ie. northwest corner), and an emergency level. In addition to a fire unit, she requests several paramedic units on the scene given that area appears to be relatively busy. She confirms her input and waits for an acknowledgement.
 - ▶ 3. John, the Dispatcher, is alerted to the emergency by a beep of his workstation. He reviews the information submitted by Alice and acknowledges the report. He allocates a fire unit and two paramedic units to the Incident site and send their estimated arrival time (ETA) to Alice.
 - ▶ 4. Alice receives the acknowledgement and the ETA

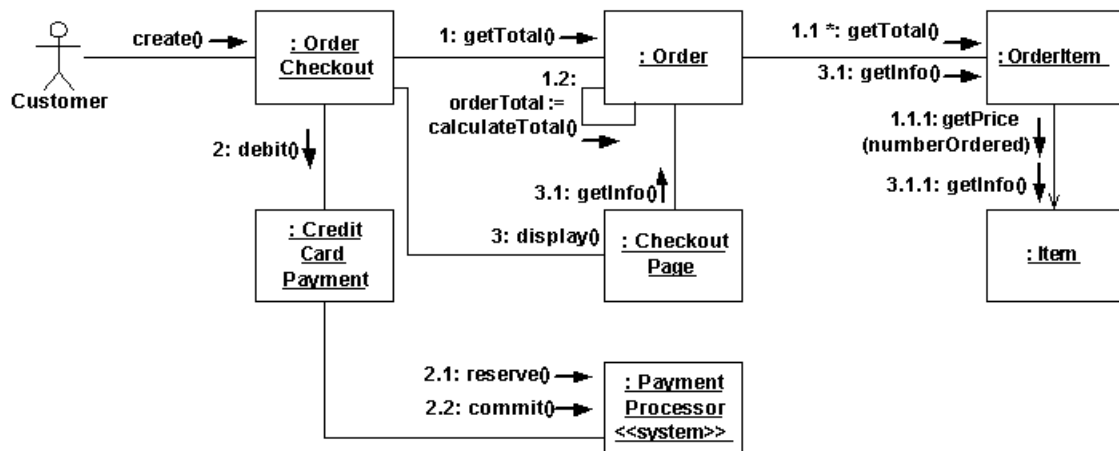
Answer:

This exercise checks the student's knowledge of sequence diagrams when using instances. This exercise can have several correct answers. In addition to the UML rules on sequence diagrams, all correct sequence diagrams for this exercise should include one or more actors on the left of the diagram who initiate the scenario, one or more objects in the center of the diagram which represent the system, and a dispatcher actor on the right of the diagram who is notified of the emergency. All actors and objects should be instances. The following figure depicts a possible answer.

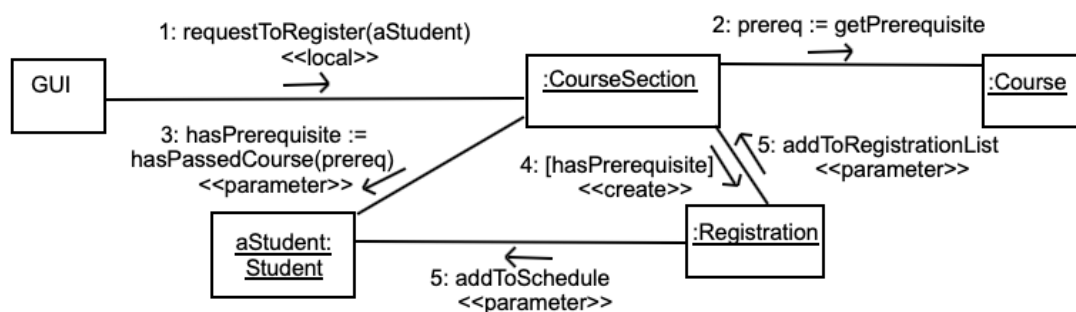


1B. Convert to a collaboration diagram

example collaboration diagram:



- 3. Draw a sequence diagram that models as much as possible (but not more than that!) of the contents that is being modelled by the following diagram:



OOD modelling notation: Sequence diagrams

- Essentially: Same contents as sequence diagram, different representation

