

Enterprise-Scale Software Development (COMP5348)

Semester 1, 2009

Tutorial Week 2

Part 0: Get to know more people in your lab.

Part A: Discussion.

Consider a video-store information system.

1. One use-case is that an existing customer has chosen a video from the stock on hand, and wishes to borrow it. The customer hands the video to the shop-assistant, who scans it, and (if the customer is allowed to borrow this item at this time), the information system is updated appropriately and the video handed back to the customer to take away. This is a simple request-response interaction. Identify the state that will be used in the handling of this use-case, and classify that state (session state, resource state, etc).
2. Another use-case is where a walk-by has chosen a video from the store stock, and wants to borrow it. They will need to become enrolled as a customer, and payment mechanisms will be agreed; as well the store will try to “up-sell” (offer extra services). Describe the sequence of interactions in this use-case. Identify the state that will be used in the handling of this use-case, and classify that state.
3. Choose several other use-cases, describe them, and identify the state they use.
4. Determine any concurrency concerns between the methods for the use-cases you have considered.

Part B: Duke’s Bank

1. Look at the business logic of the banking activities, such as depositing money to an account, in Duke’s Bank. The code is mainly in the class TxControllerBean. Notice how these classes call methods of the persistence entities which represent the shared state (eg Account, Customer).