

## **Business 2710**

### **Class 16 Handout**

In groups of 2 to 4 students, identify realistic situations in a business and process where you might need to apply the following resource patterns. The description from the textbook is provided for your reference.

1. Deferred distribution (but not direct or role-based distribution)

This pattern corresponds to the situation where the identification of the resource that a work item will be offered or allocated to is delayed until runtime.

2. Late distribution

Late Distribution corresponds to the situation where a work item is offered or allocated to a resource at some time after the time at which it is enabled.

3. Shortest Queue

Shortest Queue corresponds to the allocation of a work item to a specific resource selected from a group of resources based on who has the least work pending (i.e., the shortest work queue),

4. Stateless Reallocation (but not Stateful reallocation)

Stateless Reallocation corresponds to the situation where a resource chooses to allocate a work item that they have already started (but not completed) executing to another resource without retaining any associated state information.

5. Pre-Do

Pre-Do corresponds to the ability of a resource to execute a work item in the current case ahead of the time that it has been offered or allocated to any resources.

6. Chained Execution

Chained execution corresponds the ability to automatically start the next work item in a case once the previous one has completed. Typically, the use of this pattern falls under the auspices of an individual resource for work items associated with a specific case.

7. Piled Execution

Piled Execution corresponds to the ability to initiate the next instance of a work item corresponding to a given task (perhaps in a different case) once the previous one has completed, such that all work items are allocated to the same resource. Typically, the use of this pattern falls under the auspices of an individual resource for work items associated with a specific task. Only one resource can be in Piled Execution mode for a given task at any time.