

BUSI 2710

Class 16

Examples for the Workflow Patterns

1. Deferred distribution

A team carries out a daily meeting, and the coordination of this meeting is a task that must be carried out daily. Prior to the coordination of the meeting, the team leader sets the agenda for the meeting. Depending on the items on the agenda, different people are qualified to be meeting coordinators. Thus, it is only at run-time that the resources to which the task “coordinate meeting” should be offered, are known. They are the output of the work item “set meeting agenda”, and may for example be determined by the team leader as output of that work item.

Note that the work item cannot simply be offered to all members of the team (which would be role-based distribution), as not all may be qualified. The work item distribution set can also not be based on roles or qualifications, as the required qualifications may change from day to day.

2. Late distribution

A company processes invoices based on their due date. In order to gain benefits from paying invoices on time, it processes invoices that are due on the current date. Only once these are completed, are work items for invoices with later due dates offered.

3. Shortest Queue

A process for servicing VIP customers requires the fastest possible service. Thus, its work items will be inserted into the shortest queue in the hope that this will allow the work item to be completed fastest. Note that this is not guaranteed: The system knows nothing about how long each work item in the queue will take, and shortest queue allocation only ensures fastest completion if all types of work items for the resource are of approximately equal duration.

4. Stateless reallocation

A company's HR process includes a task “write recommendation”, which is to create a recommendation about an applicant. Imagine a situation where it has become known that the applicant and the HR specialist who is currently working on the recommendation are in a conflict of interest (for example, the applicant is the HR specialist's cousin). In that case, the company re-allocates the task to another HR specialist, but it removes any information already entered by the original HR specialist, in order to not prejudice the second HR specialist and provide a fair evaluation of the applicant.

5. Pre-Do

In a pharmacy, a well-known customer requests a re-fill of medication that he/she has used for the last 10 years. Despite the fact that the process requires the step “check insurance coverage” to be completed, the pharmacist may wish to proceed with the work item “dispense medication”, knowing that the insurance coverage is in place.

6. Chained execution

An insurance company processes insurance applications. The specialist in charge of a case wishes to complete the work items for each step in order, without this being interrupted by work items from other cases. She does this, so that she can keep working on a familiar case and does not have to change to a different set of supporting documents in the file drawer.

7. Piled execution

When processing invoices, the accounts payable team have informally decided that Anna will code the invoices in the morning, while Betty will check invoices against received goods. In the afternoon, they will switch these tasks. In the interest of allowing this to happen quickly, Anna decides to pile all work items “code invoice” to herself, and Betty piles all work items “check receipt” to her in the morning. In the afternoon, they will switch.

Rather than round-robin allocation (which also ensures that Anna and Betty get equal shares of the two tasks), this allows Anna and Betty to become experts/familiar with the task, rather than switching the types of task randomly during the day.