Part 6 - Events and Artifacts

1.1 Events

Notes:

The next class of BPMN objects is “Events”, which describe something that “happens” during a business process. An Event affects the flow of the process and typically has a cause or an impact. Events happen all the time in life - think of a red stop light on your drive to work or someone stopping by your desk while you are working on a project.

The simple process flow in this slide includes four examples of events. You have seen the narrow circle at the start of this process, which belongs to an Event sub-class called “Start Events”. The bold circle at the end of this process belongs to a sub-class called “End Events”.

There are two more Events in this diagram. The double circle denotes the third and final Event sub-class - Intermediate Events. Intermediate Events may be placed anywhere between the start and end of a process. These two Events represent the “throw” and “catch” of a message - in this case an e-mail message. You can think of a “throw” as sending a message and a “catch” as receiving a message.

The unique behavior of an Event is designated by the symbol inside the circle. Events can indicate an error occurred, that a condition must be met, or that a delay occurred, for example.

Take a minute to review the “Quick Guide to BPMN Symbols.” If you haven’t printed a copy, use the link on this panel. The last page contains a table of commonly used Event objects. Keep this page of the Guide open. We’ll review more Events on the next slide.
1.2 Events

Notes:

This slide contains an enhanced version of the previous process flow with three additional Events. If you look to the right of the “Move to Meeting Room” task, there is a Timer Event, which stops the process flow until the scheduled meeting time occurs. You can also use the Timer Event to indicate that a fixed amount of time must pass before the process can continue, or to simply indicate a delay.

Continuing with the flow, the second new Event type is a Conditional Event. We use it here to show that a test must be passed before the flow may continue. A Conditional Event can support simple or very complex test criteria. As is the case here, simple criteria are often described in an Annotation connected to the Conditional Event through an Association. Notice how we represent a split in the flow depending upon the condition. Can you see that an Exclusive Gateway might be used here instead of the Conditional Event? The last Event, the one with an embedded lightening bolt, is an Error Event. This Event type identifies where the process ends with an undesirable result.

We are covering only a few of the many Events available for use. Please review the last page of the “Quick Guide”, which lists the most commonly used Event objects. The 80-20 rule applies here: you will probably use only 20 percent of the available Event Types in perhaps 80 percent of the BPMN diagrams you develop.

Notice how the Events in the “Quick Guide” are separated into three columns. These columns represent each of the Event sub-classes, one for Start Events, one for Intermediate Events, and one for Stop Events. You may have noticed there are gaps in the grid. These exist because some types of Events are not appropriate for certain sub-classes. For example, it doesn’t make sense to use a Cancel or Terminate Event as a way to start a process.
1.3 Artifacts

Artifacts, the final class of BPMN objects, help the reader better understand BPMN diagrams. There are four types of Artifacts displayed in this slide, all of which you’ve seen. This process flow gives us a chance to review these BPMN objects as a set.

Starting at the top of the diagram, the rectangle consisting of a dashed line is called a “Group”. I use this object to logically associate two or more BPMN objects. I labelled this group as the “Main Data Entry Process” and used it to distinguish a set of BPMN objects from the remainder of those in the diagram. You can also use it to associate objects that span multiple Lanes or Pools. Grouping objects has no effect on the flow of a process.

The object that looks like a disk drive is a Data Store object. You can use this symbol to represent electronic storage of information such as a database or spreadsheet. Another object looks like a dog-eared page. You probably recall this object from an earlier slide. It is called a Data Object and represents information stored on paper or some other non-electronic medium. Both the Data Store and the Data Object are used to represent information needed and/or produced through a process.

We use the fourth Artifact, the Annotation, to provide supplemental narrative about another BPMN object or portion of the process flow. You can see it here as a large left-hand bracket followed by narrative.