**BPMN Designer Prompt**

**TRACE GENERATION Prompt 1 (From models)**

**Context:** We have a tool to create BPMN 2.0 models, called “BPMN-Designer”. The tool is built upon Eclipse Ecore metamodels and utilizes Sirius features. The metamodel is designed to model BPMN flow objects (Events, activities, gateways), connecting objects (sequence flow, message flow, association), swim lanes (Pool, lane, dark pool), and artifacts (data object, group, annotation). These four categories enable the creation of simple business process diagrams (BPDs). BPDs also permit making new types of flow object or artifact, to make the diagram more understandable. The file “BPMN20.ecore” containing the “BPMN-Designer” metamodel.

**Input Demonstration:** The file “c70.bpmn” contains an example model based on “BPMN-Designer” metamodel.

**Output Demonstration:** The file “2024-10-20 21.10 C70-representations.aird.xes” is the XES trace representing the modeling operation done by human when they created the example BPMN model “c70.bpmn” based on “BPMN-Designer” metamodel and modeling environment.

**Task:** Generate the XES trace file from the BPMN model in the file named “a10.bpmn”, where the model represents another business process. The XES trace file generated should have the same format used in the file "2024-10-20 21.10 C70-representations.aird.xes" (4 words each line representing the events recorder). The list of all possible events is the following:

event Process laneSets ADD

event AdHocSubProcess name SET

event AdHocSubProcess flowElements ADD

event Association sourceRef SET

event Association targetRef SET

event BusinessRuleTask name SET

event CallActivity calledElementRef SET

event CallActivity name SET

event DataInput name SET

event DataObject name SET

event DataOutput name SET

event DataStore name SET

event EndEvent name SET

event EndEvent eventDefinitions ADD

event EndEvent incoming ADD

event EndEvent outgoing ADD

event ExtensionAttributeValue value SET

event InputOutputSpecification dataInputs ADD

event InputOutputSpecification dataOutputs ADD

event IntermediateCatchEvent name SET

event IntermediateCatchEvent eventDefinitions ADD

event IntermediateThrowEvent name SET

event IntermediateThrowEvent eventDefinitions ADD

event IntermediateThrowEvent outgoing ADD

event Lane flowNodeRefs ADD

event Lane name SET

event Lane extensionValues ADD

event Lane partitionElement SET

event LaneSet lanes ADD

event LaneSet lanes MOVE

event LaneSet name SET

event ManualTask name SET

event Process flowElements ADD

event Process artifacts ADD

event ReceiveTask name SET

event ScriptTask name SET

event SendTask name SET

event SendTask outgoing ADD

event SendTask incoming ADD

event SequenceFlow sourceRef SET

event SequenceFlow targetRef SET

event ServiceTask name SET

event ServiceTask incoming ADD

event StartEvent name SET

event StartEvent outgoing ADD

event StartEvent eventDefinitions ADD

event SubProcess name SET

event SubProcess flowElements ADD

event SubProcess extensionValues ADD

event Task name SET

event Task incoming ADD

event Task loopCharacteristics SET

event TextAnnotation text SET

event UserTask name SET

event ExclusiveGateway incoming ADD

event ExclusiveGateway outgoing ADD

event ParallelGateway incoming ADD

event ParallelGateway outgoing ADD

event InclusiveGateway incoming ADD

event InclusiveGateway outgoing ADD

event ComplexGateway incoming ADD

event ComplexGateway outgoing ADD

event EventBasedGateway incoming ADD

event EventBasedGateway outgoing ADD