CDO Competency Questions

The following document includes the ontology competency questions and SPARQL query answers for the Change Detection Ontology (CDO).

Competency question	Answer (Classes and Properties)	Result Value	Correct
Who executed the process?	```SELECT DISTINCT ?actor WHERE { ?subject1 a owl:NamedIndividual; rei-denontic:actor ?actor. ?subject2 a owl:NamedIndividual; lode:involvedAgent ?actor. }```	ex:userAgent	Yes
What is a change?	```SELECT DISTINCT ?event WHERE { ?eventLog a cdo:EventLog; cdo:hasEvent ?event . }```	ex:insertEvent1 ex:insertEvent2	Yes
What is a grouping of changes?	```SELECT ?eventLog WHERE { ?eventLog a owl:NamedIndividual; a cdo:EventLog . }```	ex:eventLog	Yes
When did the change occur?	```SELECT DISTINCT ?time WHERE { ?eventLog a cdo:EventLog; cdo:hasEvent ?event . ?event lode:atTime ?time. }```	ex:detectionTime	Yes
Where did the change occur?	```SELECT DISTINCT ?sourceData WHERE { ?eventLog a cdo:EventLog; cdo:hasEvent ?event . ?event lode:atPlace ?sourceData }```	ex:sourceData	Yes
What type of change was it?	```SELECT DISTINCT ?eventType WHERE { ?eventLog a owl:NamedIndividual; a cdo:EventLog; cdo:hasEvent ?event . ?event a ?eventType . FILTER (?eventType NOT IN```	cdo:InsertSourceData	Yes

| | ```
(owl:NamedIndividual))
}
``` | | |
| Why did the change occur? | ```
SELECT ?eventReason
WHERE {
   ?eventLog a owl:NamedIndividual;
           a cdo:EventLog;
           cdo:hasEvent ?event .
   ?event cdo:hasReason ?eventReason
.
}
``` | ```
"Value '12'
inserted into 'ID'
element."
"Value '12'
inserted into 'ID'
element."
``` | Yes |
| When will the user be notified of these changes? | ```
SELECT DISTINCT ?policy
WHERE {
   ?policy a owl:NamedIndividual;
           a rei-policy:Policy.
}
``` | ```
ex:notificationPoli
cy
``` | Yes |
| What is the notification method? | ```
SELECT DISTINCT ?notificationMethod
WHERE {
   ?obligation a
owl:NamedIndividual;
           a
rei-denontic:Obligation;
           rei-denontic:action
?notificationMethod.
}
``` | ```
ex:sendNotification
Action
``` | Yes |
| What is the notification condition? | ```
SELECT ?constraint
WHERE {
   ?eventLog a owl:NamedIndividual;
           a
rei-denontic:Obligation;

rei-denontic:startingConstraint
?constraint .
}
``` | ```
ex:notificationCons
traint
``` | Yes |
| Who will send the notification? | ```
SELECT ?softwareAgent
WHERE {
   ?eventLog a owl:NamedIndividual;
           a
rei-denontic:Obligation;
           rei-denontic:obligedTo
?softwareAgent .
}
``` | ```
ex:softwareAgent
``` | Yes |
| Who owns the policy? | ```
SELECT ?actor
WHERE {
   ?eventLog a owl:NamedIndividual;
           a
rei-denontic:Obligation;
           rei-denontic:actor
?actor .
}
``` | ```
ex:userAgent
``` | Yes |