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UservProductDerby

DriverEligibility

Created on: 7/18/2007

Modified by: Marco Ensing

DA_3
Priority: -2
Version: 1.0

if DriverClass **is not equal to** TypicalDriver
and trainingCertificate **is not equal to** NotSpecified
then IsEligibleDriver **=** true

DA_4
Priority: -2
Version: 1.0

if DriverClass **is equal to** TypicalDriver
then IsEligibleDriver **=** true

DA_7
Priority: -1
Version: 1.0

if **not** ((PersonGender **is equal to** Male)
and (Age **is less than** 25))
and not ((PersonGender **is equal to** Female)
and (Age **is less than** 20))
then DriverClass **=** TypicalDriver

DA_1
Version: 1.0

if PersonGender **is equal to** Male
and Age **is less than** 25
then DriverClass **=** YoungDriver

DA_2
Version: 1.0

if PersonGender **is equal to** Female
and Age **is less than** 20
then DriverClass **=** YoungDriver

DA_5
Version: 1.0

if IsChargedDUI **is equal to** true
or Accidents **is greater than** 2
or MovingViolations **is greater than** 3
then HasTrainingCertificate **=** true

DA_8
Version: 1.0

if Age **is greater than** 70
then DriverClass **=** SeniorDriver

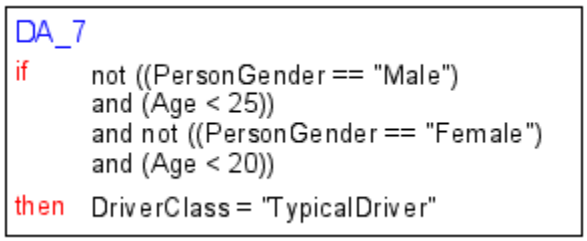
Else part of DA_5
Description: (else part of rule)
Version: 1.0

if **not** (((IsChargedDUI **is equal to** true)
or (Accidents **is greater than** 2))
or (MovingViolations **is greater than** 3))
then hasTrainingCertificate **=** false

Self Anomalies

Redundancy

A redundancy within a rule is detected when the premise of the rule has overlaping condition parts, or when the same value is assigned multiple times to a term in the actions.



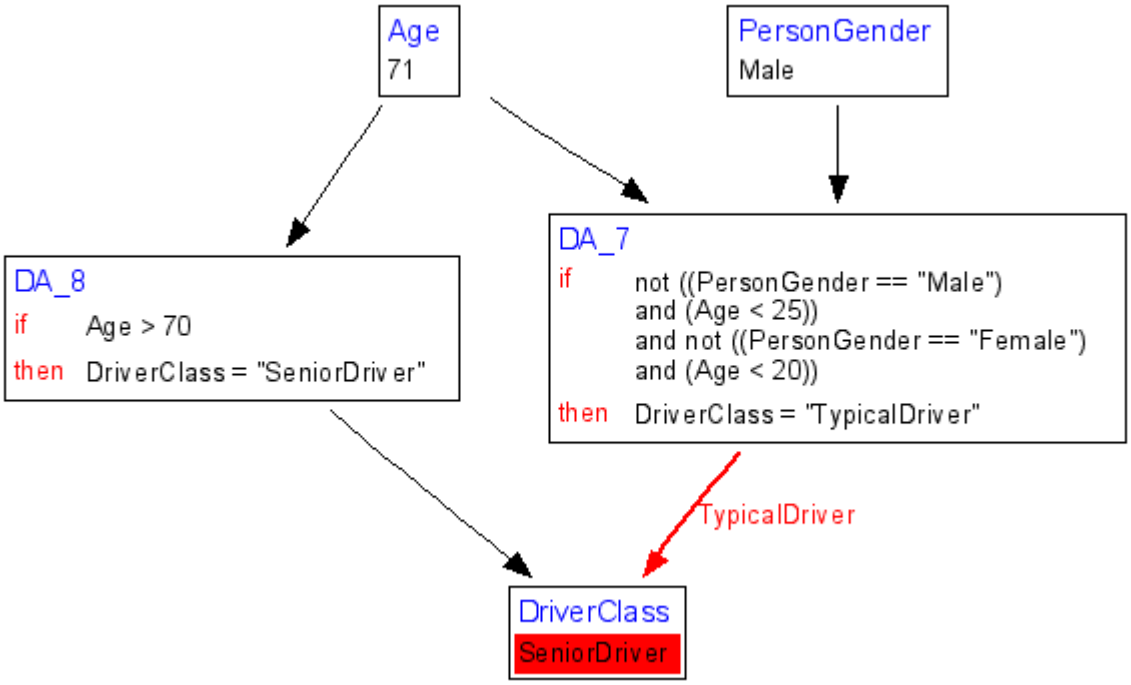
Rule Anomalies

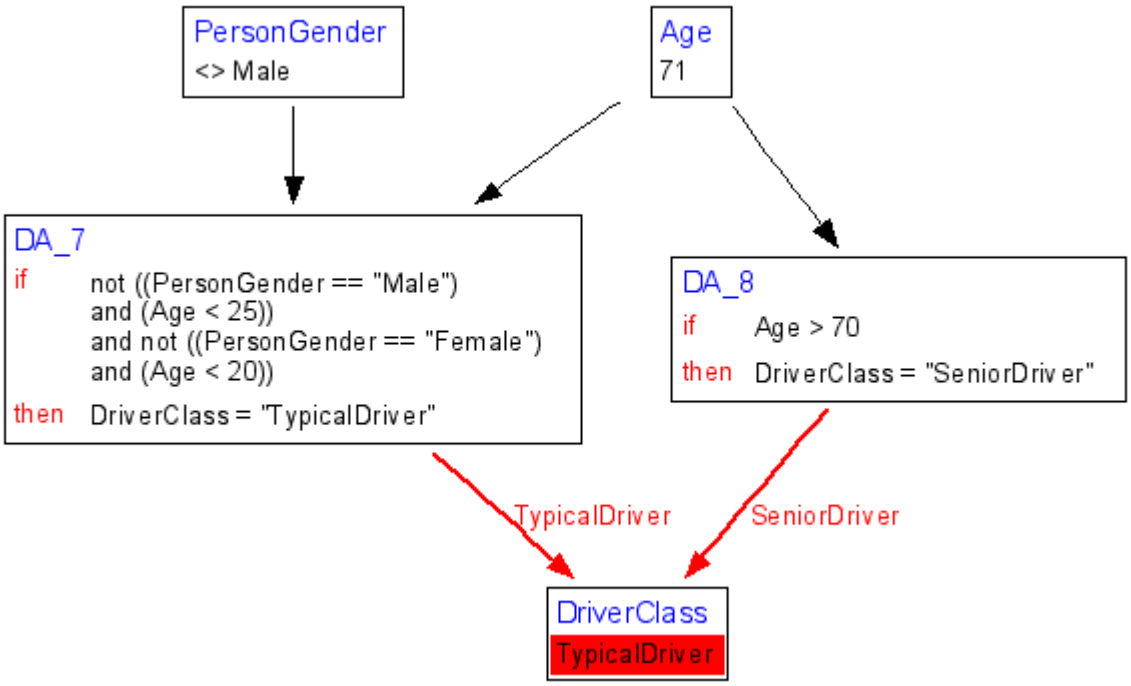
When rule anomalies exists, the rendered graphs may vary from one verification to another.This is a side effect of the order of rule execution. Rule execution is only set by rule priorities. When muliple rules with the same priority are available for execution, an arbitrary choice is made by the inference engine.

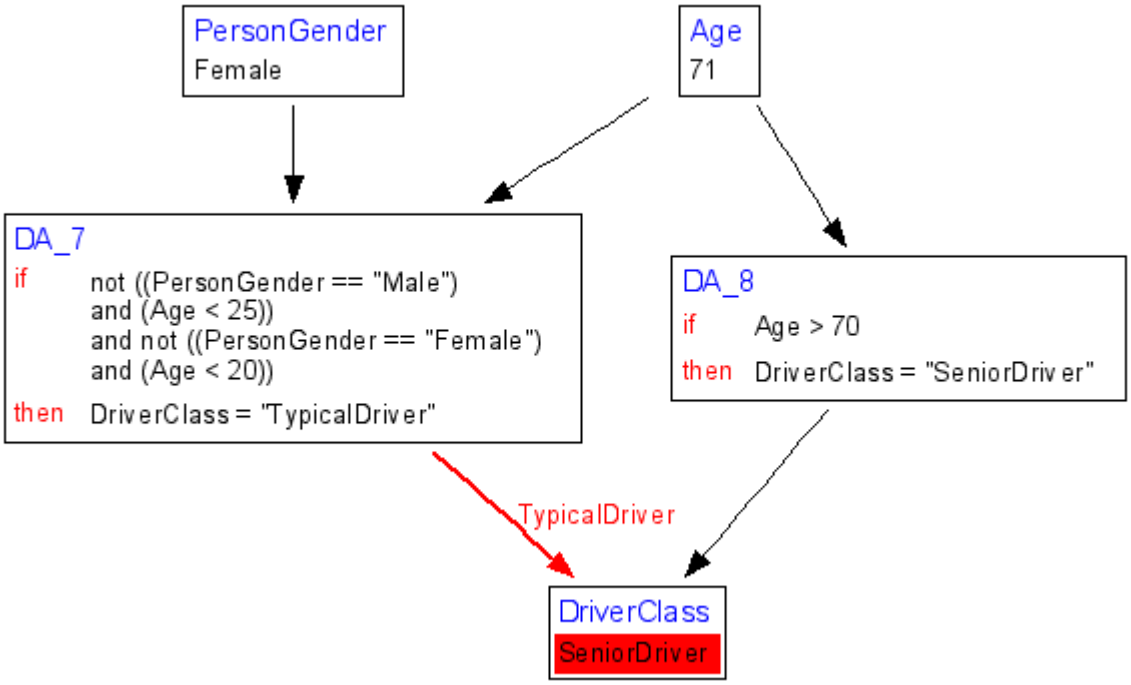
Note: Self anomalies within rules were detected. These kind of anomalies have a great impact on the discovered rule anomalies. Make sure that the self anomalies in previous section have been resolved before analyzing the discovered rule anomalies.

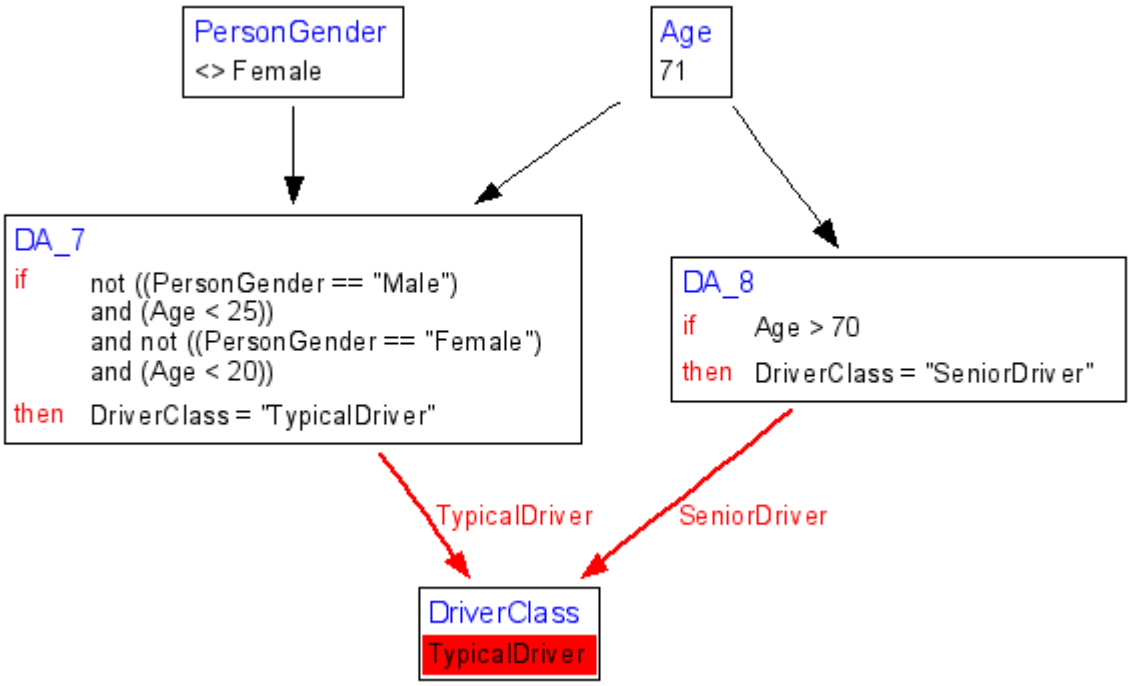
Contradictions

A contradiction among rules is detected when different rules execute by one or more common input terms and different values are assigned to an output term. Where applicable, the image will also show other rules that assign a value to this output term. The contradictions are colored in red.




PersonGender
<> Male
Age
71
DA_7
if not ((PersonGender == "Male")
and (Age < 25))
and not ((PersonGender == "Female")
and (Age < 20))
then DriverClass = "TypicalDriver"
DA_8
if Age > 70
then DriverClass = "SeniorDriver"
TypicalDriver
SeniorDriver
DriverClass
TypicalDriver


PersonGender
Female
Age
71
DA_7
if not ((PersonGender == "Male")
and (Age < 25))
and not ((PersonGender == "Female")
and (Age < 20))
then DriverClass = "TypicalDriver"
DA_8
if Age > 70
then DriverClass = "SeniorDriver"
TypicalDriver
DriverClass
SeniorDriver


PersonGender
<> Female
Age
71
DA_7
if not ((PersonGender == "Male")
and (Age < 25))
and not ((PersonGender == "Female")
and (Age < 20))
then DriverClass = "TypicalDriver"
DA_8
if Age > 70
then DriverClass = "SeniorDriver"
TypicalDriver
SeniorDriver
DriverClass
TypicalDriver

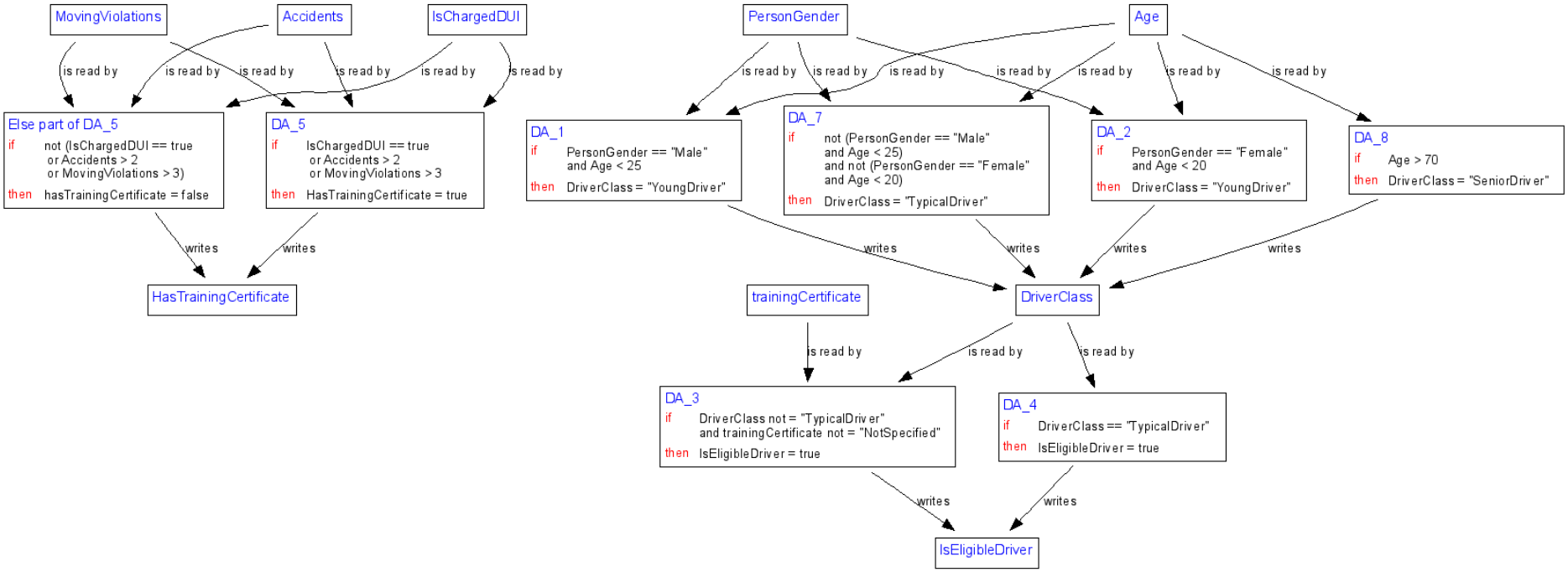
Incompleteness

Incompleteness are discovered when a set of input terms do not assign a value to an output term, while there exists values for these input terms that do assign a value to this output term. These input data scenarios might identify missing rules.

IsEligibleDriver does not get a value assigned when

trainingCertificate	= NotSpecified
DriverClass	<> TypicalDriver

Rule Dependency Graph



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