

User Interface - Bug #2607

The java generated code isn't compiled due to there is some implicit scoping that goes on with a trigger.

07/10/2015 01:39 PM - Sergey Ivanovskiy

Status:	New	Start date:	
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		case_num:	
billable:	No	version:	
vendor_id:	GCD		
Description			

History

#1 - 07/10/2015 01:49 PM - Sergey Ivanovskiy

- File addressApp.p added

The following exceptions occur if the conversion 4GL->Java is applied to the attached addressApp.p compile:

```
[javac] Compiling 29 source files to /home/sbi/projects/testcases/uast/build/classes
[javac] Picked up JAVA_TOOL_OPTIONS: -javaagent:/usr/share/java/jayatanaag.jar
[javac] /home/sbi/projects/testcases/uast/src/com/goldencode/testcases/AddressApp.java:90: error: cannot find symbol
[javac]     frame0.assignScreenValue(new Element(new FieldReference(address, "addrId"), frame0.widgetAddrId()));
[javac]                                     ^
[javac] symbol:   method widgetAddrId()
[javac] location: variable frame0 of type AddressAppFrame0
[javac] /home/sbi/projects/testcases/uast/src/com/goldencode/testcases/AddressApp.java:91: error: cannot find symbol
[javac]     frame0.assignScreenValue(new Element(new FieldReference(address, "street"), frame0.widgetStreet()));
[javac]                                     ^
[javac] symbol:   method widgetStreet()
[javac] location: variable frame0 of type AddressAppFrame0
[javac] /home/sbi/projects/testcases/uast/src/com/goldencode/testcases/AddressApp.java:92: error: cannot find symbol
[javac]     frame0.assignScreenValue(new Element(new FieldReference(address, "state"), frame0.widgetState()));
[javac]                                     ^
[javac] symbol:   method widgetState()
[javac] location: variable frame0 of type AddressAppFrame0
[javac] /home/sbi/projects/testcases/uast/src/com/goldencode/testcases/AddressApp.java:93: error: cannot find symbol
[javac]     frame0.assignScreenValue(new Element(new FieldReference(address, "zipCode"), frame0.widgetZipCode()));
[javac]                                     ^
[javac] symbol:   method widgetZipCode()
[javac] location: variable frame0 of type AddressAppFrame0
[javac] /home/sbi/projects/testcases/uast/src/com/goldencode/testcases/AddressApp.java:94: error: cannot find symbol
[javac]     frame0.assignScreenValue(new Element(new FieldReference(address, "addrType"), frame0.widgetAddrType()));
[javac]                                     ^
[javac] symbol:   method widgetAddrType()
[javac] location: variable frame0 of type AddressAppFrame0
[javac] Note: Some input files use unchecked or unsafe operations.
[javac] Note: Recompile with -Xlint:unchecked for details.
[javac] 5 errors
```

May be it is because of the first trigger is linked to a new frame, but the second trigger is linked to the defined frame AddrFrame
Here is the listing of addressApp.p:

```
define button ExitButton label "Exit".
define button AddButton label "Add".
define button FindButton label "Find".
define var target like Address.city.
```

```
/**Frame Address**/
```

```
define frame AddrFrame
```

Address.addr-id at row 2 col 2
 Address.addr-type at row 2 col 40
 target at row 4 col 2
 Address.state at row 4 col 40
 Address.street at row 6 col 2
 Address.zip-code at row 8 col 2
 AddButton at row 10 col 2
 FindButton at row 10 col 20
 ExitButton at row 10 col 40
 with side-labels centered row 2 title "Address Form".
 /**Triggers**/
 *on choose of AddButton
 do:
 create Address.
 assign Address except Address.city.
 assign Address.city=target.
 end. *
 on choose of FindButton
 do:
 assign target.
 find first Address where Address.city = target no-error.
 if available(Address)
 then do:
 display Address except Address.city with frame AddrFrame.
 end.
 else do: Message "Couldn't find " + target
 view-as alert-box title "Warning."
 end.

 end.

 find first Address.
 if available(Address)
 then target = Address.city.

 display Address except Address.city with frame AddrFrame.

 enable all with frame AddrFrame.
 wait-for choose of ExitButton.

The conversion process produces for the first trigger this java code:

```
public class TriggerBlock0
    extends Trigger
{
    {
        frame0 = GenericFrame.createFrame(AddressAppFrame0.class, "");
    }
    public void body()
    {
        address.create();
        RecordBuffer.startBatch();
        frame0.assignScreenValue(new Element(new FieldReference(address, "addrId"), frame0.widgetAddrId()));
        frame0.assignScreenValue(new Element(new FieldReference(address, "street"), frame0.widgetStreet()));
        frame0.assignScreenValue(new Element(new FieldReference(address, "state"), frame0.widgetState()));
        frame0.assignScreenValue(new Element(new FieldReference(address, "zipCode"), frame0.widgetZipCode()));
;
        frame0.assignScreenValue(new Element(new FieldReference(address, "addrType"), frame0.widgetAddrType()
));
        RecordBuffer.endBatch();
        RecordBuffer.startBatch();
        address.setCity(target);
        RecordBuffer.endBatch();
    }
    public void body()
    {
        addrframeFrame.assignScreenValue(new Element(target, addrframeFrame.widgetTarget()));
        ErrorManager.silentErrorEnable();
        new FindQuery(address, "upper(address.city) = ?", null, "address.city asc, address.state asc", new Ob
ject[]
        {
            toUpperCase(target)
        }).first();
        ErrorManager.silentErrorDisable();
        if (address._available())
```

```

    {
        FrameElement[] elementList1 = new FrameElement[]
        {
            new Element(new FieldReference(address, "addrId"), addrframeFrame.widgetAddrId()),
            new Element(new FieldReference(address, "street"), addrframeFrame.widgetStreet()),
            new Element(new FieldReference(address, "state"), addrframeFrame.widgetState()),
            new Element(new FieldReference(address, "zipCode"), addrframeFrame.widgetZipCode()),
            new Element(new FieldReference(address, "addrType"), addrframeFrame.widgetAddrType())
        };
    }

addrframeFrame.display(elementList1);
}
else
{
    messageBox(concat(new character("Couldn't find "), target), ALERT_MESSAGE, BTN_OK, "Warning.");
}
}
}

```

Greg pointed out that there is some implicit scoping that goes on with a trigger, such that the references inside the trigger will be first resolved against any frame that is involved in the widget specification (AddButton in this case).

if the first trigger

```

/**Triggers**/
on choose of AddButton
do:
create Address.
assign Address except Address.city.
assign Address.city=target.
end.
is changed to this one
/**Triggers**/
on choose of AddButton
do:
create Address.
assign frame AddrFrame target.
assign frame AddrFrame Address.addr-id.
assign frame AddrFrame Address.addr-type.
assign frame AddrFrame Address.state.
assign frame AddrFrame Address.street.
assign frame AddrFrame Address.zip-code.
assign Address.city=target.
end.

```

then the conversion process is successfully performed.

Files

addressApp.p

1.2 KB

07/10/2015

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