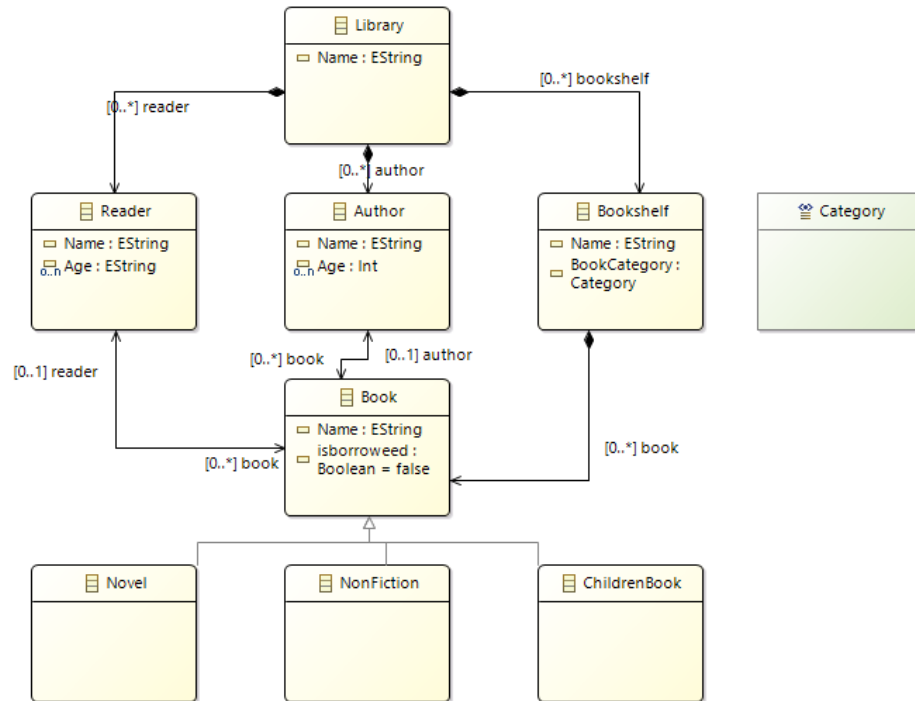


# Topic 3

## Task1 Library



runtime-EclipseApplication - TaskModelProj/My.taskmetamodel - Obeo Designer Community

File Edit Navigate Search Project TaskMetaModel Editor Run Window Help

Model Explorer

type filter text

- TaskModelProj
  - Project Dependencies
  - My.taskmetamodel
    - representations.aird

Outline

platform:/resource/TaskModelProj/My.taskmetamodel

My.taskmetamodel

Resource Set

- platform:/resource/TaskModelProj/My.taskmetamodel
  - Library
    - Reader R1
    - Reader R2
    - Reader R3
    - Reader R4
    - Author A1
    - Author A2
    - Author A3
    - Author A4
    - Bookshelf B1
      - Novel NA
      - Non Fiction NFA
    - Bookshelf
      - Children Book CBA
      - Non Fiction NFB

Selection Parent List Tree Table Tree with Columns

Properties Problems

Property	Value
Age	24
Book	Children Book CBA
Name	R1

Selected Object: Reader R1

runtime-EclipseApplication - TaskModelProj/My.taskmetamodel - Obeo Designer Community

File Edit Navigate Search Project TaskMetaModel Editor Run Window Help

Model Explorer

type filter text

- TaskModelProj
  - Project Dependencies
    - My.taskmetamodel
      - representations.aird

Outline

platform:/resource/TaskModelProj/My.taskmetamodel

My.taskmetamodel

Resource Set

- platform:/resource/TaskModelProj/My.taskmetamodel
  - Library
    - Reader R1
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    - Reader R3
    - Reader R4
    - Author A1
    - Author A2
    - Author A3
    - Author A4
  - Bookshelf B1
    - Novel NA
    - Non Fiction NFA
  - Bookshelf
    - Children Book CBA
    - Non Fiction NFB

Selection Parent List Tree Table Tree with Columns

Properties Problems

Property	Value
Age	35
Book	Children Book CBA
Name	A1

Selected Object: Author A1

runtime-EclipseApplication - TaskModelProj/My.taskmetamodel - Obeo Designer Community

File Edit Navigate Search Project TaskMetaModel Editor Run Window Help

Model Explorer

type filter text

- TaskModelProj
  - Project Dependencies
    - My.taskmetamodel
      - representations.aird

Outline

platform:/resource/TaskModelProj/My.taskmetamodel

My.taskmetamodel

Resource Set

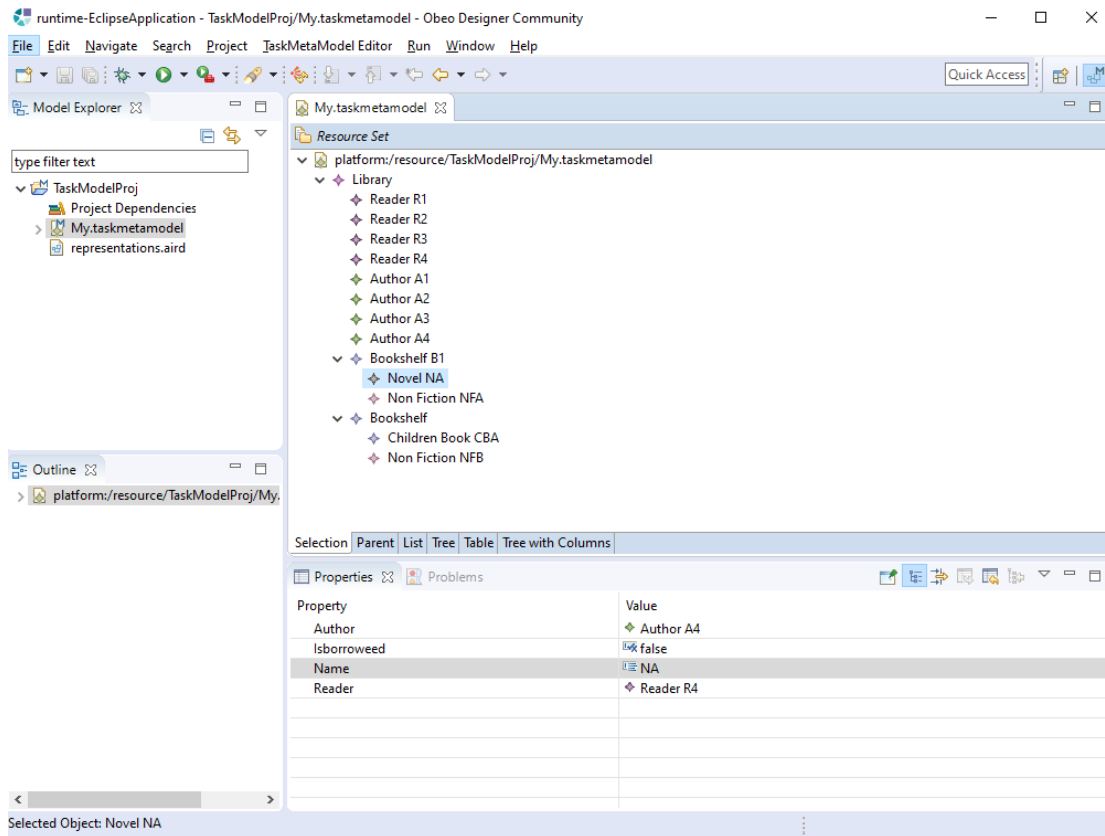
- platform:/resource/TaskModelProj/My.taskmetamodel
  - Library
    - Reader R1
    - Reader R2
    - Reader R3
    - Reader R4
    - Author A1
    - Author A2
    - Author A3
    - Author A4
  - Bookshelf B1
    - Novel NA
    - Non Fiction NFA
  - Bookshelf
    - Children Book CBA
    - Non Fiction NFB

Selection Parent List Tree Table Tree with Columns

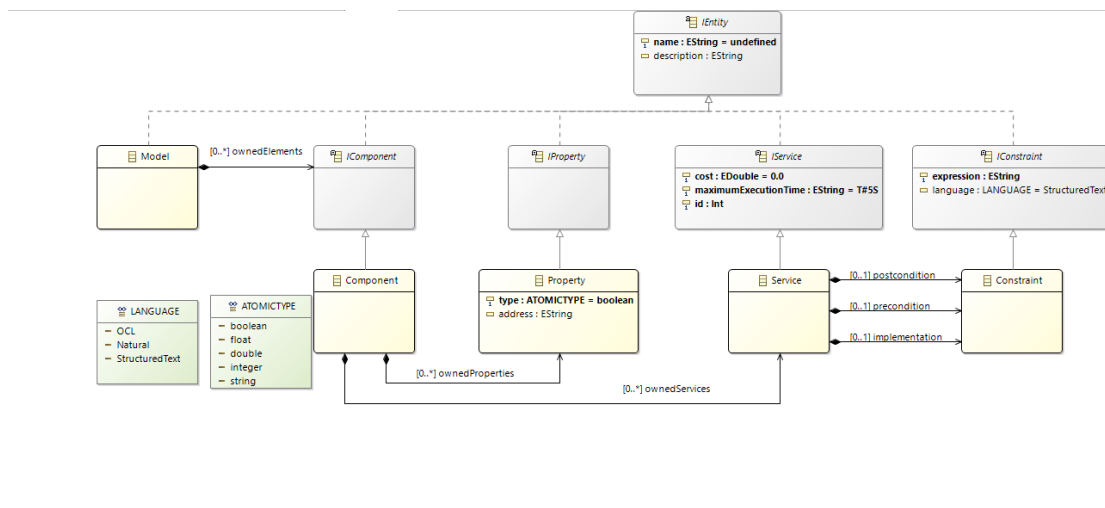
Properties Problems

Property	Value
Book Category	
Name	B1

Selected Object: Bookshelf B1



## Task 2 Exercise



In the meta-modell of the template everything is already setted up, so i don't need to change it.

- platform:/resource/platformModelProj/My.plant
  - Model Testing station
    - Component Testing station
      - Property e\_werkstueck\_vorhanden
      - Property e\_werkstueck\_nicht\_schwarz
      - Property e\_arbeitsraum\_frei
      - Property e\_hoehe\_ok
      - Property e\_aufzug\_oben
      - Property e\_aufzug\_unten
      - Property e\_zylinder\_eingefahren
      - Property e\_folgestation\_frei
      - Property a\_aufzug\_abwaerts
      - Property a\_aufzug\_aufwaerts
      - Property a\_zylinder\_ausschieben
      - Property a\_luft\_an
      - Property a\_station\_frei
    - Service workpiece\_require
      - Constraint workpiece\_require\_Pre
      - Constraint workpiece\_require\_Post
      - Constraint workpiece\_require\_Impl
    - Service lift\_up
      - Constraint lift\_up\_Pre
      - Constraint lift\_up\_Post
      - Constraint lift\_up\_Impl
    - Service lift\_down
    - Service cylinder\_eject
    - Service air\_cushion\_on
    - Service Standby\_measure

- Service workpiece\_require
  - Constraint workpiece\_require\_Pre
  - Constraint workpiece\_require\_Post
  - Constraint workpiece\_require\_Impl
- Service lift\_up
  - Constraint lift\_up\_Pre
  - Constraint lift\_up\_Post
  - Constraint lift\_up\_Impl
- Service lift\_down
- Service cylinder\_eject
- Service air\_cushion\_on
- Service Standby\_measure

Selection	Parent	List	Tree	Table	Tree with Columns
Properties	Problems				
Property	Value				
Description					
Expression	NOT e_werkstueck_vorhanden				
Language	StructuredText				
Name	workpiece_require_Pre				

- Service workpiece\_require
    - Constraint workpiece\_require\_Pre
    - Constraint workpiece\_require\_Post
    - Constraint workpiece\_require\_Impl
  - Service lift\_up
    - Constraint lift\_up\_Pre
    - Constraint lift\_up\_Post
    - Constraint lift\_up\_Impl
  - Service lift\_down
  - Service cylinder\_eject
  - Service air\_cushion\_on
  - Service Standby\_measure

Selection		Parent	List	Tree	Table	Tree with Columns
		Properties Problems				
Property		Value				
Description						
Expression		e_werkstueck_vorhanden				
Language		StructuredText				
Name		workpiece_require_Post				

- Service workpiece\_require
    - Constraint workpiece\_require\_Pre
    - Constraint workpiece\_require\_Post
    - Constraint workpiece\_require\_Impl
  - Service lift\_up
    - Constraint lift\_up\_Pre
    - Constraint lift\_up\_Post
    - Constraint lift\_up\_Impl
  - Service lift\_down
  - Service cylinder\_eject
  - Service air\_cushion\_on
  - Service Standby\_measure

Selection		Parent	List	Tree	Table	Tree with Columns
		Properties Problems				
Property		Value				
Description						
Expression		a_station_frei				
Language		StructuredText				
Name		workpiece_require_Impl				

The properties of every service are similar, only the „id“ is changed from 0 to 6. So i made only one screenshot about Service „workpiece\_require“. The „adress“ of „Property“ are from „S1“ (Sensor) to „S8“ and from „A1“ (Actuator) to „A5“.

- Service workpiece\_require
    - Constraint workpiece\_require\_Pre
    - Constraint workpiece\_require\_Post
    - Constraint workpiece\_require\_Impl
  - Service lift\_up
    - Constraint lift\_up\_Pre
    - Constraint lift\_up\_Post
    - Constraint lift\_up\_Impl
  - Service lift\_down
  - Service cylinder\_eject
  - Service air\_cushion\_on
  - Service Standby\_measure

Selection		Parent	List	Tree	Table	Tree with Columns
		<div> <div>Properties</div> <div>Problems</div> </div>				
Property		Value				
Cost		0.0				
Description						
Id		0				
Maximum Execution Time		T#5S				
Name		workpiece_require				

- Service lift\_up
    - Constraint lift\_up\_Pre
    - Constraint lift\_up\_Post
    - Constraint lift\_up\_Impl
  - Service lift\_down
  - Service cylinder\_eject
  - Service air\_cushion\_on
  - Service Standby\_measure

Selection		Parent	List	Tree	Table	Tree with Columns
		<div> <div>Properties</div> <div>Problems</div> </div>				
Property		Value				
Description						
Expression		NOT e_aufzug_oben AND e_aufzug_unten				
Language		StructuredText				
Name		lift_up_Post				

- Service lift\_up
    - Constraint lift\_up\_Pre
    - Constraint lift\_up\_Post
    - Constraint lift\_up\_Impl
  - Service lift\_down
  - Service cylinder\_eject
  - Service air\_cushion\_on
  - Service Standby\_measure

Selection		Parent	List	Tree	Table	Tree with Columns
		<div> <div>Properties</div> <div>Problems</div> </div>				
Property		Value				
Description						
Expression		e_aufzug_oben AND NOT e_aufzug_unten				
Language		StructuredText				
Name		lift_up_Post				

- Service lift\_up
      - Constraint lift\_up\_Pre
      - Constraint lift\_up\_Post
      - Constraint lift\_up\_Impl
    - Service lift\_down
    - Service cylinder\_eject
    - Service air\_cushion\_on
    - Service Standby\_measure

Selection		Parent	List	Tree	Table	Tree with Columns
		Properties Problems				
Property		Value				
Description						
Expression		m_SystemTimer(IN:True,PT:=T#0.5s) AND a_aufzug_aufwaerts				
Language		StructuredText				
Name		lift_up_Impl				

- Service lift\_down
    - Constraint lift\_down\_Pre
    - Constraint lift\_down\_Post
    - Constraint lift\_down\_Impl
  - Service cylinder\_eject
  - Service air\_cushion\_on

Selection		Parent	List	Tree	Table	Tree with Columns
		Properties Problems				
Property		Value				
Description						
Expression		e_aufzug_oben AND NOT e_aufzug_unten				
Language		StructuredText				
Name		lift_down_Pre				

- Service lift\_down
    - Constraint lift\_down\_Pre
    - Constraint lift\_down\_Post
    - Constraint lift\_down\_Impl
  - Service cylinder\_eject
  - Service air\_cushion\_on

Selection		Parent	List	Tree	Table	Tree with Columns
		Properties Problems				
Property		Value				
Description						
Expression		NOT e_aufzug_oben AND e_aufzug_unten				
Language		StructuredText				
Name		lift_down_Post				

- Constraint lift\_down\_Impl
    - Service cylinder\_eject
    - Service air\_cushion\_on

Selection		Parent	List	Tree	Table	Tree with Columns
		Properties Problems				
Property		Value				
Description						
Expression		m_SystemTimer(IN:True,PT:=T#0.5s) AND a_aufzug_abwaerts				
Language		StructuredText				
Name		lift_down_Impl				

Service cylinder\_eject

Constraint cylinder\_eject\_Pre

Constraint cylinder\_eject\_Post

Constraint cylinder\_eject\_Impl

Service air\_cushion\_on

Service Standby\_measure

Selection

Parent

List

Tree

Table

Tree with Columns

Properties

Problems

Property	Value
Description	
Expression	<code>e_werkstueck_vorhanden AND e_zyylinder_eingefahren</code>
Language	StructuredText
Name	cylinder_eject_Pre

Service cylinder\_eject

Constraint cylinder\_eject\_Pre

Constraint cylinder\_eject\_Post

Constraint cylinder\_eject\_Impl

Service air\_cushion\_on

Service Standby\_measure

Selection

Parent

List

Tree

Table

Tree with Columns

Properties

Problems

Property	Value
Description	
Expression	<code>NOT e_werkstueck_vorhanden AND NOT e_zyylinder_eingefahren</code>
Language	StructuredText
Name	cylinder_eject_Post

Service cylinder\_eject

Constraint cylinder\_eject\_Pre

Constraint cylinder\_eject\_Post

Constraint cylinder\_eject\_Impl

Service air\_cushion\_on

Service Standby\_measure

Selection

Parent

List

Tree

Table

Tree with Columns

Properties

Problems

Property	Value
Description	
Expression	<code>a_zyylinder_ausschieben AND m_SystemTimer(IN: True, PT:= T#0.5s)</code>
Language	StructuredText
Name	cylinder_eject_Impl

Service air\_cushion\_on

Constraint air\_cushion\_on\_Pre

Constraint air\_cushion\_on\_Post

Constraint air\_cushion\_on\_Impl

Service Standby\_measure

Selection

Parent

List

Tree

Table

Tree with Columns

Properties

Problems

Property	Value
Description	
Expression	<code>e_folgestation_frei</code>
Language	StructuredText
Name	air_cushion_on_Pre



Service air\_cushion\_on
 

- Constraint air\_cushion\_on\_Pre
- Constraint air\_cushion\_on\_Post
- Constraint air\_cushion\_on\_Impl

Selection Parent List Tree Table Tree with Columns

Properties Problems

Property	Value
Description	
Expression	NOT e_folgestation_frei
Language	StructuredText
Name	air_cushion_on_Post

Service air\_cushion\_on
 

- Constraint air\_cushion\_on\_Pre
- Constraint air\_cushion\_on\_Post
- Constraint air\_cushion\_on\_Impl

Selection Parent List Tree Table Tree with Columns

Properties Problems

Property	Value
Description	
Expression	a_luft_an AND m_SystemTimer(IN:=True;PT:=t#2s)
Language	StructuredText
Name	air_cushion_on_Impl

Service Standby\_measure
 

- Constraint Standby\_measure\_Pre
- Constraint Standby\_measure\_Post
- Constraint Standby\_measure\_Impl

Selection Parent List Tree Table Tree with Columns

Properties Problems

Property	Value
Description	
Expression	TRUE
Language	StructuredText
Name	Standby_measure_Pre

Service Standby\_measure
 

- Constraint Standby\_measure\_Pre
- Constraint Standby\_measure\_Post
- Constraint Standby\_measure\_Impl

Selection Parent List Tree Table Tree with Columns

Properties Problems

Property	Value
Description	
Expression	TRUE
Language	StructuredText
Name	Standby_measure_Post

- Service Standby\_measure
  - Constraint Standby\_measure\_Pre
  - Constraint Standby\_measure\_Post
  - Constraint Standby\_measure\_Impl

Selection	Parent	List	Tree	Table	Tree with Columns
Properties Problems					
Property		Value			
Description					
Expression		m_SystemTimer(IN:True,PT:=T#1s)			
Language		StructuredText			
Name		Standby_measure_Impl			