A DMSL for System Capability Diagram

MODEL DRIVEN SOFTWARE ENGINEERING PROJECT

Arthur Milani Giovanini
Gustavo Palma dos Santos
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Group 3

SUMMARY

- The System Capability Diagram
- Metamodel
- Abstract & concrete syntax
- Relations
- Viewpoint specification (.odesign)
- Demo time!

THE SYSTEM CAPABILITY DIAGRAM

- Define system capabilities
- Connects actors, entities, and capabilities
- Analyzes relationships between capabilities

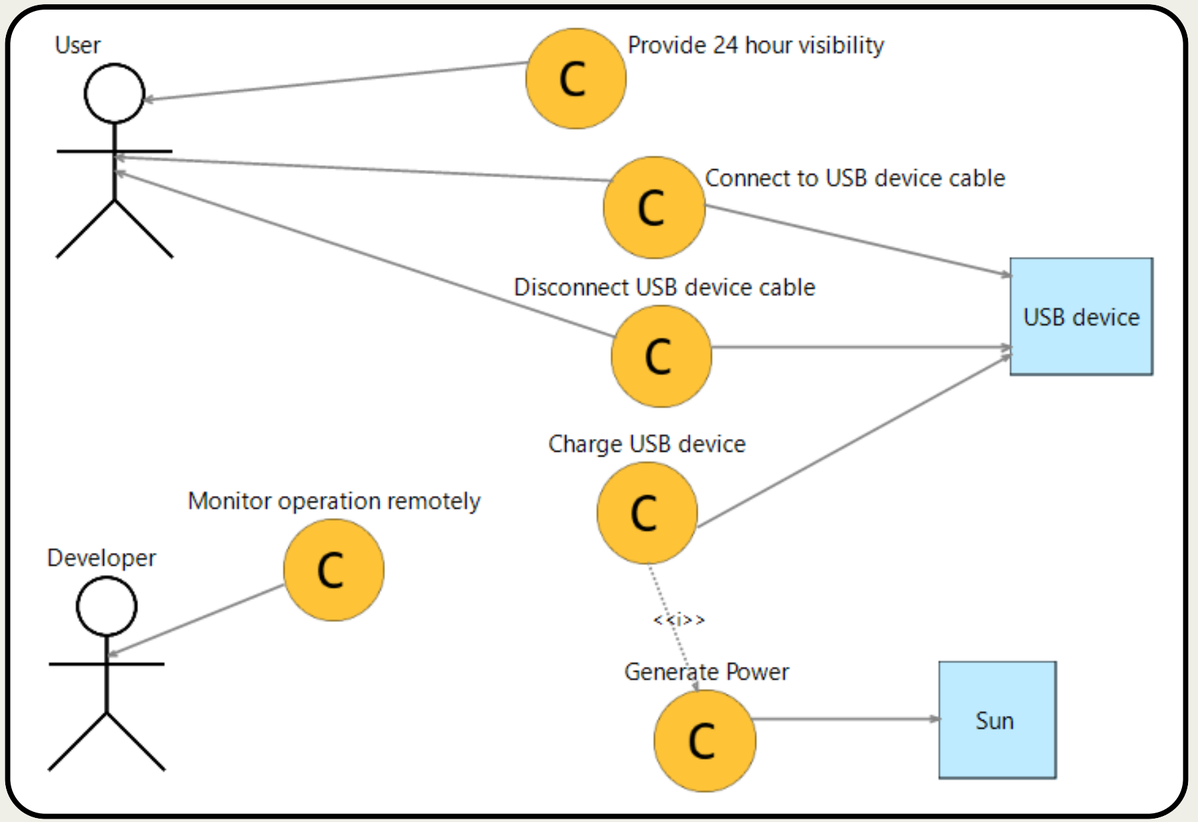


Fig. 1: Trail Power model

METAMODEL

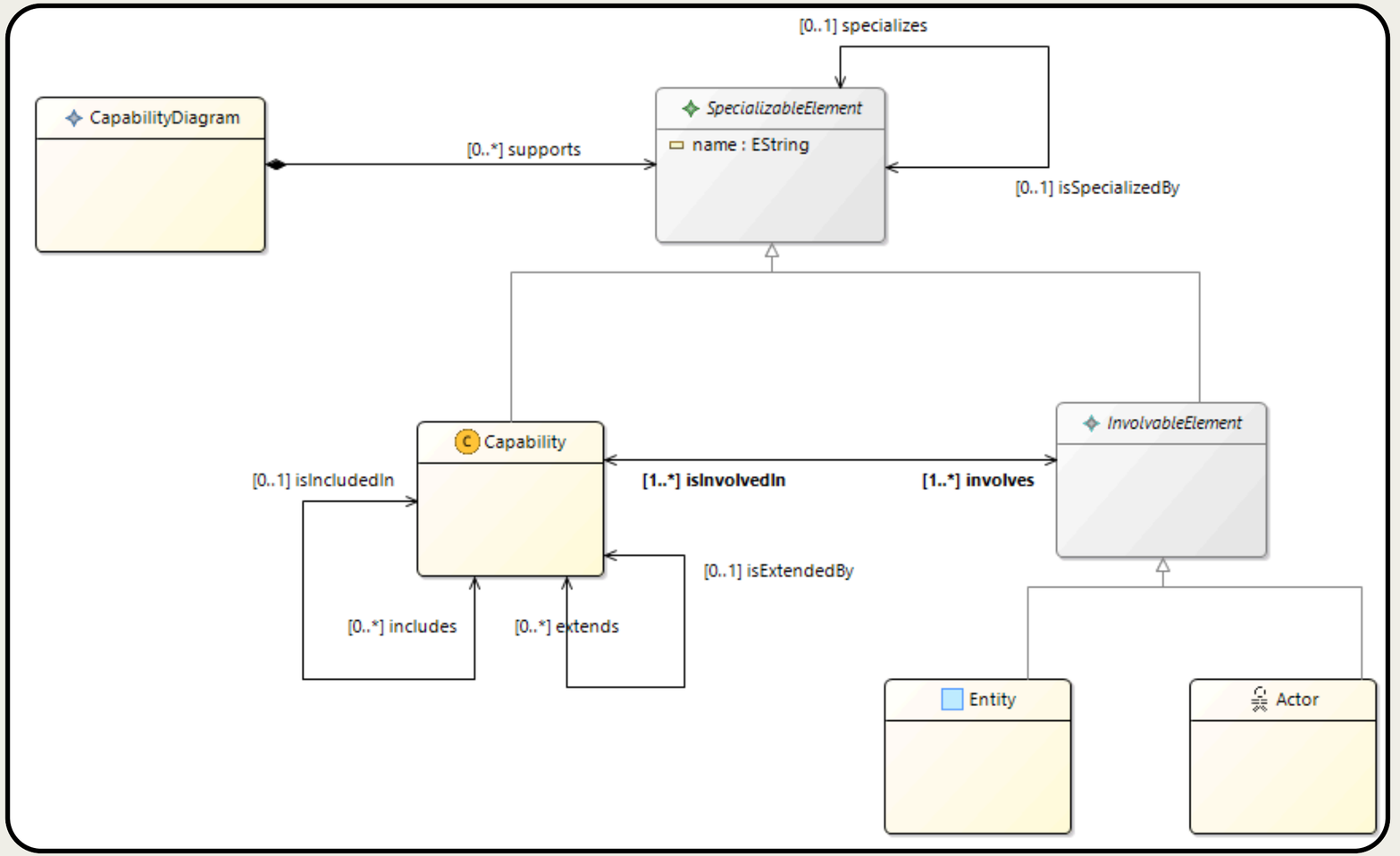
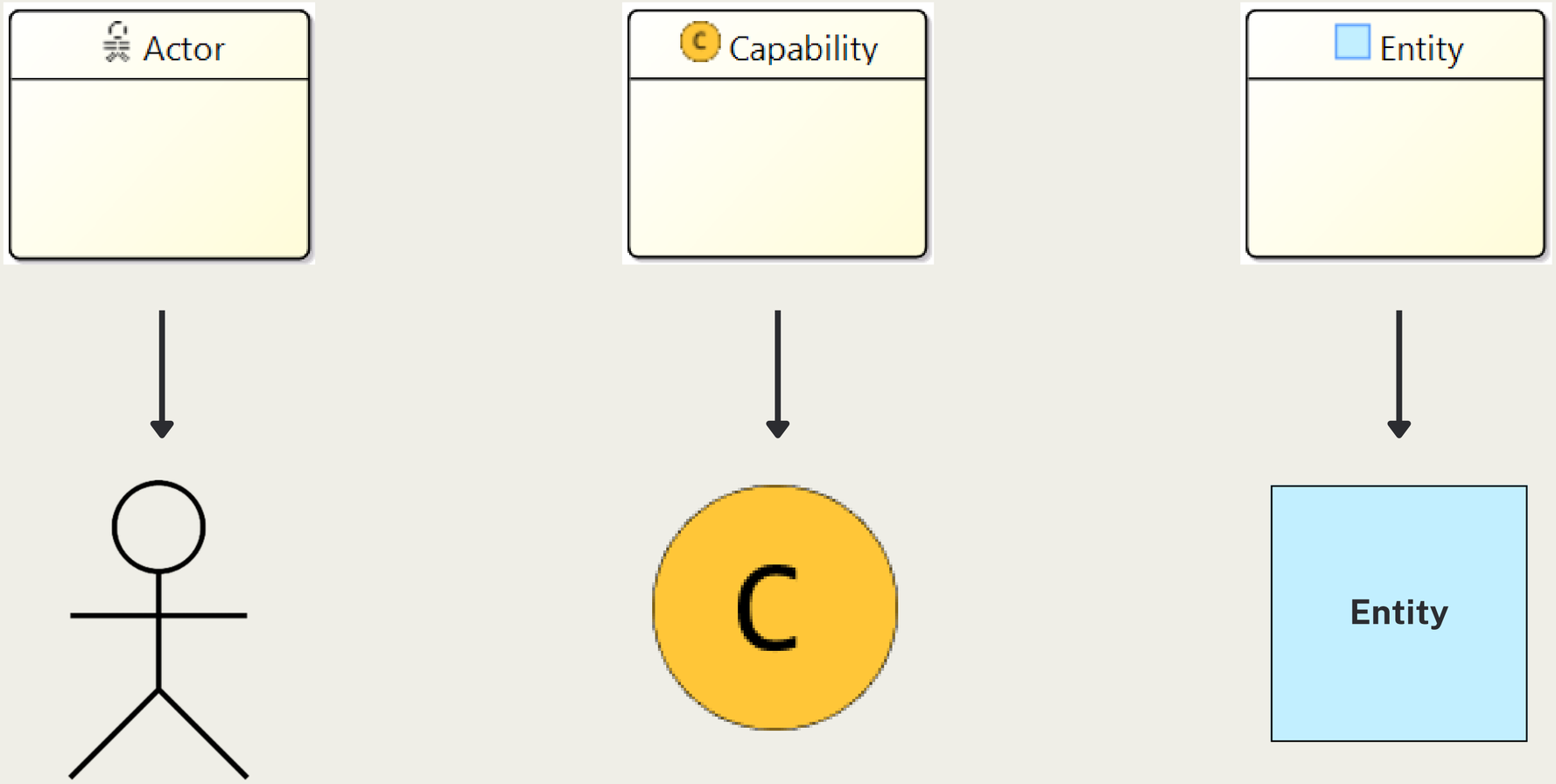
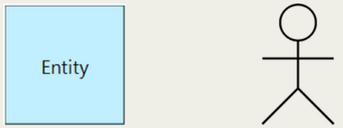


Fig. 2: System Capability Diagram metamodel

ABSTRACT & CONCRETE SYNTAX



RELATIONS

Relation	Origin	Target
Involves		
Specializes	All elements	The same type as origin
Includes		
Extends		

Tab. 1: System Capability Diagram relations

VIEWPOINT SPECIFICATION (.ODESIGN)

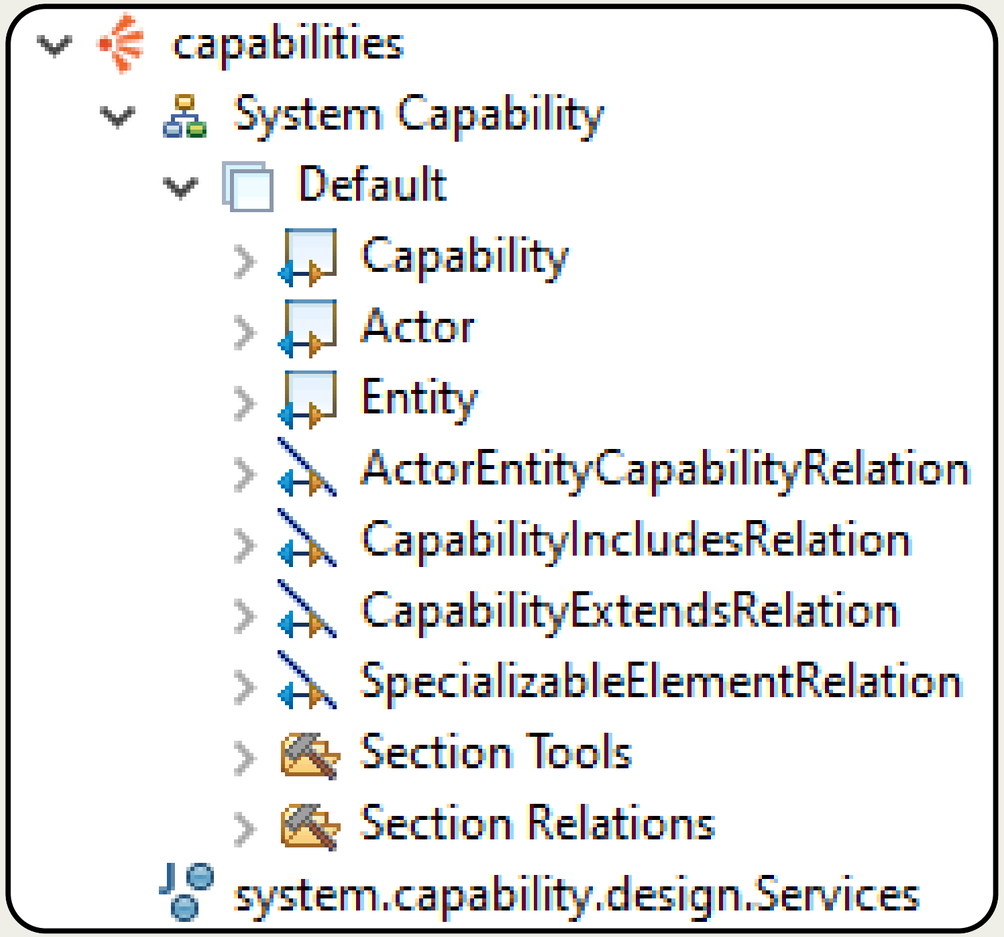


Fig. 3: Mapping implementation of the concrete syntax

VIEWPOINT SPECIFICATION (.ODESIGN)

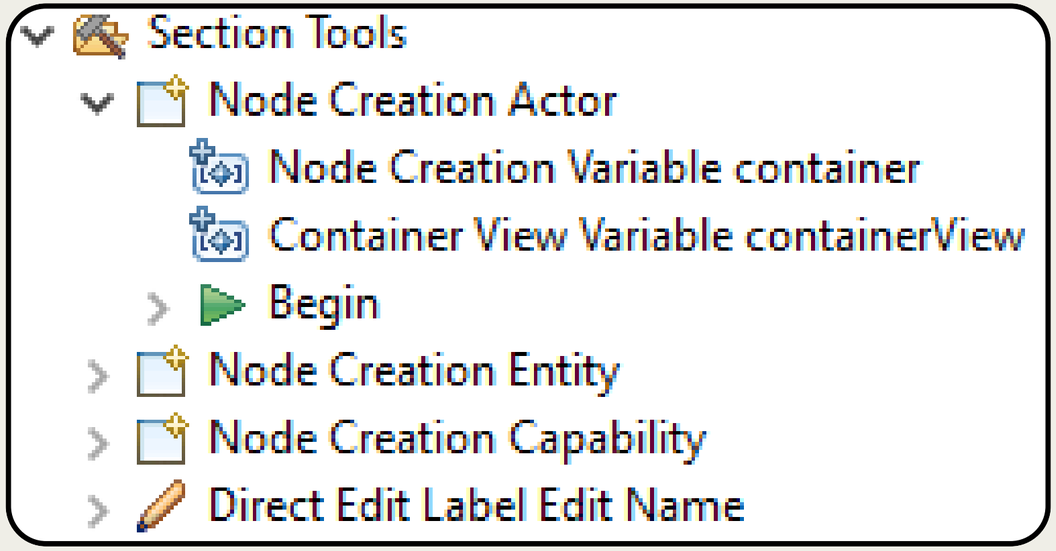


Fig. 4: Tools to create nodes

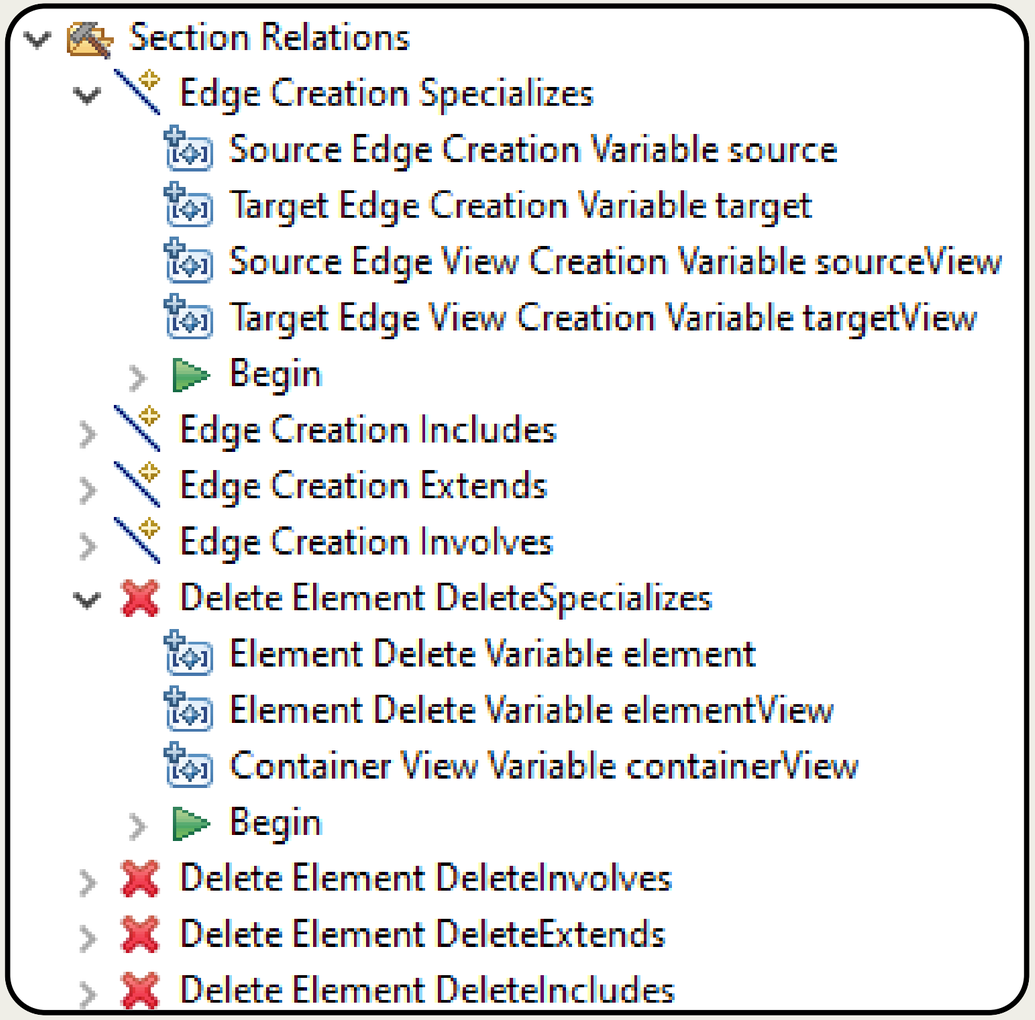


Fig. 5: Tools to create and delete edges

VIEWPOINT SPECIFICATION (.ODESIGN)

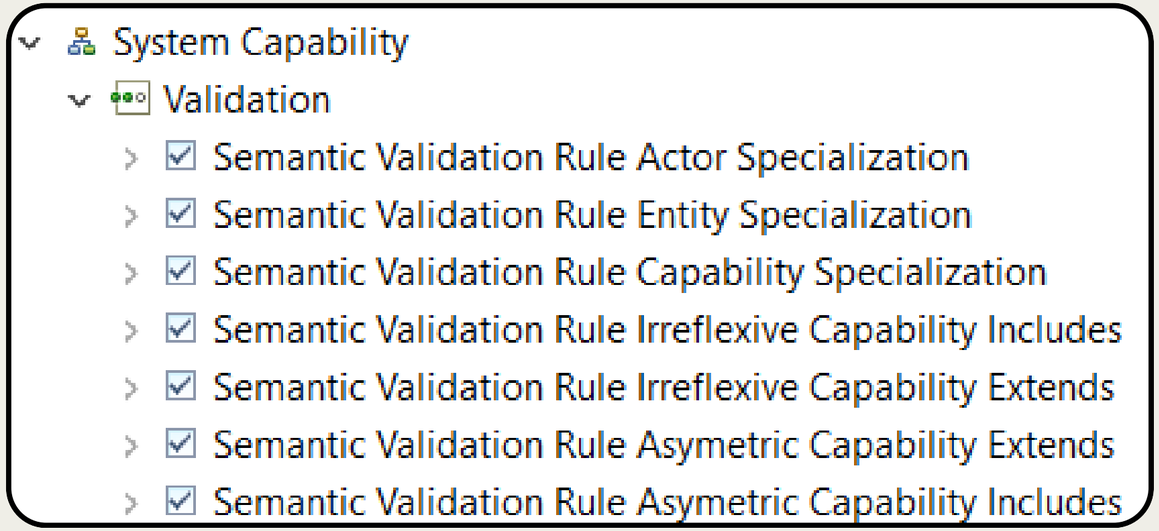


Fig. 6: Validations to cover the OCL constraints

Demo time!