q1. What is the most appropriate intent for each transformation?

Choose one intent per question only by dragging it inside the 'Intent' box.

If you are <u>REALLY</u> doubting between two intents, drag the most likely one in the 'Intent' box and the other in the 'Alternate Intent' box.

Q2. Convert a Class diagram to XMI in order to store the model on the cloud. Input: Class diagram Output: XMI schema schema

Items Abstraction	Intent Serialization 1	Alternate Intent
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Finding		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		
Model Synchronization		
Normalization		
Optimization		
Parsing		
Refinement		
Rendering		
Restrictive Query		
Reverse Engineering		
Simulation		
Synthesis		
Translation		
Translational Semantics		

Q3. Flatten a Simulink model. Input: Simulink model Output: Simulink model

Analysis
Animation
Approximation
Canonicalization
Migration
Model Editing
Model Finding
Model Generation
Model Matching
Model Merging
Model Refactoring
Model Synchronization
Optimization
Parsing
Refinement
Rendering
Restrictive Query
Reverse Engineering
Serialization
Simulation
Synthesis
Translation
Translational Semantics

Q4. Transform a model defined in the Kernel Meta Meta Model (KM3) into a model defined in Ecore. Input: KM3 model Output: Ecore model

Items	Intent
Abstraction	Translation 1
Analysis	
Animation	
Approximation	
Canonicalization	
Migration	
Model Editing	
Model Finding	
Model Generation	
Model Matching	
Model Merging	
Model Refactoring	
Model Synchronization	
Normalization	
Optimization	

Parsing
Refinement
Rendering
Restrictive Query
Reverse Engineering
Serialization
Simulation
Synthesis
Translational Semantics

Q5. Given a state machine, generate a counter-example for a property. Input: State machine Output: Counter-example trace

Items	Intent	Alternate Inten
Abstraction	Model Finding 1	
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		
Model Synchronization		
Normalization		
Optimization		
Parsing		
Refinement		
Rendering		
Restrictive Query		
Reverse Engineering		
Serialization		
Simulation		
Synthesis		
Translation		
Translational Semantics		

Q6. Given a class diagram, introduce common super-classes for classes that share common attributes. Input: Class diagram Output: Class diagram

Items	Intent
Abstraction	Model Refactoring 1
Analysis	
Animation	
Approximation	
Canonicalization	
Migration	
Model Editing	
Model Finding	
Model Generation	
Model Matching	
Model Merging	
Model Synchronization	
Normalization	
Optimization	
Parsing	
Refinement	
Rendering	
Restrictive Query	
Reverse Engineering	
Serialization	
Simulation	
Synthesis	
Translation	
Translational Semantics	

Q7. Generate the Java Doc from a class diagram. Input: Class diagram Output: The HTML documentation

Items	Intent	Alternate Intent
Abstraction	Synthesis	1
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Finding		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		

Model Synchronization
Normalization
Optimization
Parsing
Refinement
Rendering
Restrictive Query
Reverse Engineering
Serialization
Simulation
Translation
Translational Semantics

Q8. Convert a relation model (of a relational database) into its unique third normal form (3NF). Input: Entity-Relation (ER) model Output: ER model

Items	Intent
Abstraction	Canonicalization 1
Analysis	
Animation	
Approximation	
Migration	
Model Editing	
Model Finding	
Model Generation	
Model Matching	
Model Merging	
Model Refactoring	
Model Synchronization	
Normalization	
Optimization	
Parsing	
Refinement	
Rendering	
Restrictive Query	
Reverse Engineering	
Serialization	
Simulation	
Synthesis	
Translation	
Translational Semantics	

Q9. Define the actions that can be performed from a Pacman game state to move to its next state.

Input: Pacman configuration model

Output: Pacman configuration model

Items	Intent	Alternate Ir
Abstraction	Simulation 1	
Analysis		
nimation		
Approximation		
Canonicalization		
ligration		
1odel Editing		
1odel Finding		
1odel Generation		
1odel Matching		
lodel Merging		
lodel Refactoring		
lodel Synchronization		
ormalization		
ptimization		
arsing		
efinement		
Rendering		
Restrictive Query		
Reverse Engineering		
Serialization		
ynthesis		
ranslation		
ranslational Semantics		

Q10. Given a DSM consisting of processes with some tasks initially assigned, produce an optimal assignment of the set of tasks to the set of processors. Input: ProcessorTaskAssignment DSM Output: ProcessorTaskAssignment DSM

Items	Intent	Alternate Intent
Abstraction	Optimization	1
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Finding		
Model Generation		

Model Matching
Model Merging
Model Refactoring
Model Synchronization
Normalization
Parsing
Refinement
Rendering
Restrictive Query
Reverse Engineering
Serialization
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Synthesis
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Q11. Augment a class diagram by adding navigability information on associations, role names, attribute types, methods return types, and method parameter types. Input: Metamodel in UML class diagram Output: Metamodel in UML class diagram

Items	Intent	Alternate Intent
Abstraction	Refinement 1	
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Finding		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		
Model Synchronization		
Normalization		
Optimization		
Parsing		
Rendering		
Restrictive Query		
Reverse Engineering		
Serialization		
Simulation		
Synthesis		

Translation

Translational Semantics

Q12. Check a temporal property on a state machine. Input: State machine model Output: Boolean value

Items	Intent
Abstraction	Analysis
Animation	
Approximation	
Canonicalization	
Migration	
Model Editing	
Model Finding	
Model Generation	
Model Matching	
Model Merging	
Model Refactoring	
Model Synchronization	
Normalization	
Optimization	
Parsing	
Refinement	
Rendering	
Restrictive Query	
Reverse Engineering	
Serialization	
Simulation	
Synthesis	
Translation	
Translational Semantics	

Q13. Extract the classes with no super-classes from a class diagram. Input: Class diagram Output: Class diagram

Items	Intent	Alternate Intent
Abstraction	Restrictive Query 1	
Analysis		
Animation		
Approximation		
Canonicalization		

Migration
Model Editing
Model Finding
Model Generation
Model Matching
Model Merging
Model Refactoring
Model Synchronization
Normalization
Optimization
Parsing
Refinement
Rendering
Reverse Engineering
Serialization
Simulation
Synthesis
Translation
Translational Semantics

Q14. Extract the class hierarchy from a class diagram (with single inheritance) in the form of a directed tree. Input: Class diagram Output: Tree

Items	Intent
Analysis	Abstraction 1
Animation	
Approximation	
Canonicalization	
Migration	
Model Editing	
Model Finding	
Model Generation	
Model Matching	
Model Merging	
Model Refactoring	
Model Synchronization	
Normalization	
Optimization	
Parsing	
Refinement	
Rendering	
Restrictive Query	
Reverse Engineering	

Serialization
Simulation
Synthesis
Translation
Translational Semantics

Q15. Clean up a UML class diagram by removing out-of-date annotations on all diagram elements. Input: Class diagram Output: Class diagram

Items	Intent	Alternate Intent
Abstraction	Model Editing 1	
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Finding		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		
Model Synchronization		
Normalization		
Optimization		
Parsing		
Refinement		
Rendering		
Restrictive Query		
Reverse Engineering		
Serialization		
Simulation		
Synthesis		
Translation		
Translational Semantics		

Q16. Generate a sequence diagram from Python code. Input: Python program Output: Sequence diagram

Items	Intent	Alternate Intent
Abstraction	Reverse Engineering 1	
Analysis		

Animation
Approximation
Canonicalization
Migration
Model Editing
Model Finding
Model Generation
Model Matching
Model Merging
Model Refactoring
Model Synchronization
Normalization
Optimization
Parsing
Refinement
Rendering
Restrictive Query
Serialization
Simulation
Synthesis
Translation
Translational Semantics

Q17. Map a custom DSML for wrist watches to a Statechart model in order to define its behavior. Input: Watch DSML Output: Statechart

Items	Intent
Abstraction	Translational Semantics 1
Analysis	
Animation	
Approximation	
Canonicalization	
Migration	
Model Editing	
Model Finding	
Model Generation	
Model Matching	
Model Merging	
Model Refactoring	
Model Synchronization	
Normalization	
Optimization	
Parsing	

Refinement
Rendering
Restrictive Query
Reverse Engineering
Serialization
Simulation
Synthesis
Translation

Q18. Move dots representing vehicles through a map of a city. Input: City traffic DSML Output: City traffic DSML

Items	Intent	
Abstraction	Animation 1	
Analysis		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Finding		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		
Model Synchronization		
Normalization		
Optimization		
Parsing		
Refinement		
Rendering		
Restrictive Query		
Reverse Engineering		
Serialization		
Simulation		
Synthesis		
Translation		
Translational Semantics		

Q19. Given a Petri Net model that does not satisfy its well-formedness constraints, generate a repair to the model that does satisfy the constraints. Input: Petri Net Output: Petri Net

Items	Intent	Alternate Intent
Abstraction	Model Finding 1	
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		
Model Synchronization		
Normalization		
Optimization		
Parsing		
Refinement		
Rendering		
Restrictive Query		
Reverse Engineering		
Serialization		
Simulation		
Synthesis		
Translation		
Translational Semantics		

Q20. Convert a class diagram to a human usable textual notation (HUTN) version of it. Input: Class diagram Output: HUTN

Items	Intent	Alternate Intent
Abstraction	Rendering	1
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Finding		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		
Model Synchronization		

Normalization
Optimization
Parsing
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Q21. Generate a set of mutations of a sequence diagram used for mutation testing. Input: Sequence diagram metamodel, sequence diagram Output: Set of sequence diagrams

Items	Intent
Abstraction	Model Generation 1
Analysis	
Animation	
Approximation	
Canonicalization	
Migration	
Model Editing	
Model Finding	
Model Matching	
Model Merging	
Model Refactoring	
Model Synchronization	
Normalization	
Optimization	
Parsing	
Refinement	
Rendering	
Restrictive Query	
Reverse Engineering	
Serialization	
Simulation	
Synthesis	
Translation	
Translational Semantics	

Input: UML model v2.0 Output: UML model v2.6

Items	Intent	
Abstraction	Migration 1	1
Analysis		
Animation		
Approximation		
Canonicalization		
Model Editing		
Model Finding		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		
Model Synchronization		
Normalization		
Optimization		
Parsing		
Refinement		
Rendering		
Restrictive Query		
Reverse Engineering		
Serialization		
Simulation		
Synthesis		
Translation		
Translational Semantics		

Q23. Combine the Simulink models from different teams working on different parts of the system. Input: set of Simulink models Output: Simulink model

Items Abstraction	Intent Model Merging 1	Alternate Intent
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Finding		
Model Generation		
Model Matching		
Model Refactoring		

Model Synchronization
Normalization
Optimization
Parsing
Refinement
Rendering
Restrictive Query
Reverse Engineering
Serialization
Simulation
Synthesis
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Q24. Assume two wrist watch companies each have their own design DSMLs. Automatically map the most likely corresponding metamodel elements of the two DSMLs. Input: set of wrist watch DSMLs Output: Mapping correspondences

Items	Intent
Abstraction	Model Matching 1
Analysis	
Animation	
Approximation	
Canonicalization	
Migration	
Model Editing	
Model Finding	
Model Generation	
Model Merging	
Model Refactoring	
Model Synchronization	
Normalization	
Optimization	
Parsing	
Refinement	
Rendering	
Restrictive Query	
Reverse Engineering	
Serialization	
Simulation	
Synthesis	
Translation	
Translational Semantics	

Q25. Update the class diagram of A team according to the changes made by another team B. Input: Class diagram A, Class diagram B Output: Class diagram A, Class diagram B

Items	Intent
Abstraction	Model Synchronization 1
Analysis	
Animation	
Approximation	
Canonicalization	
Migration	
Model Editing	
Model Finding	
Model Generation	
Model Matching	
Model Merging	
Model Refactoring	
Normalization	
Optimization	
Parsing	
Refinement	
Rendering	
Restrictive Query	
Reverse Engineering	
Serialization	
Simulation	
Synthesis	
Translation	
Translational Semantics	

Q26. Given a class diagram, create another class diagram as similar to it as possible but that does not use multiple inheritance. Input: Class diagram Output: Class diagram

Items	Intent	Alternate Intent
Abstraction	Approximation 1	
Analysis		
Animation		
Canonicalization		
Migration		
Model Editing		
Model Finding		
Model Generation		

Model Matching
Model Merging
Model Refactoring
Model Synchronization
Normalization
Optimization
Parsing
Refinement
Rendering
Restrictive Query
Reverse Engineering
Serialization
Simulation
Synthesis
Translation
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Q27. Deduce the feature diagram model of a wristwatch DSML in textual notation to represent its essential features. Input: Wrist watch textual model Output: Feature diagram

Items	Intent	Alternate Inten
Abstraction	Parsing	
Analysis		
Animation		
Approximation		
Canonicalization		
Migration		
Model Editing		
Model Finding		
Model Generation		
Model Matching		
Model Merging		
Model Refactoring		
Model Synchronization		
Normalization		
Optimization		
Refinement		
Rendering		
Restrictive Query		
Reverse Engineering		
Serialization		
Simulation		

Synthesis Translation

Translational Semantics

Q28. Is the catalog self explanatory?

Yes.

Q29. Are there other intents you can think of that are not covered by the catalog?

Q30. Do you have any general remarks on the catalog?

