BLG 411E – Software Engineering

Recitation Session 2

ArgoUML

Bilge S. AKKOCA GAZİOĞLU, Müge EREL ÖZÇEVİK, Beyza EKEN

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Outline

UML Diagrams

Structural Diagrams

- **Class diagram:** Consists of classes, interfaces, associations, and collaboration. They basically represent the object-oriented view of a system and generally used for development purpose.
- **Object diagram:** Described as an instance of class diagram. They are more close to real-life scenarios where we implement a system. They are used to build prototype of a system from a practical perspective.
- **Component diagram:** Represent a set of components and their relationships. They are used to visualize the implementation.
- **Deployment diagram:** Are a set of nodes and their relationships. These nodes are physical entities where the components are deployed. They are used for visualizing the deployment view of a system.

UML Diagrams

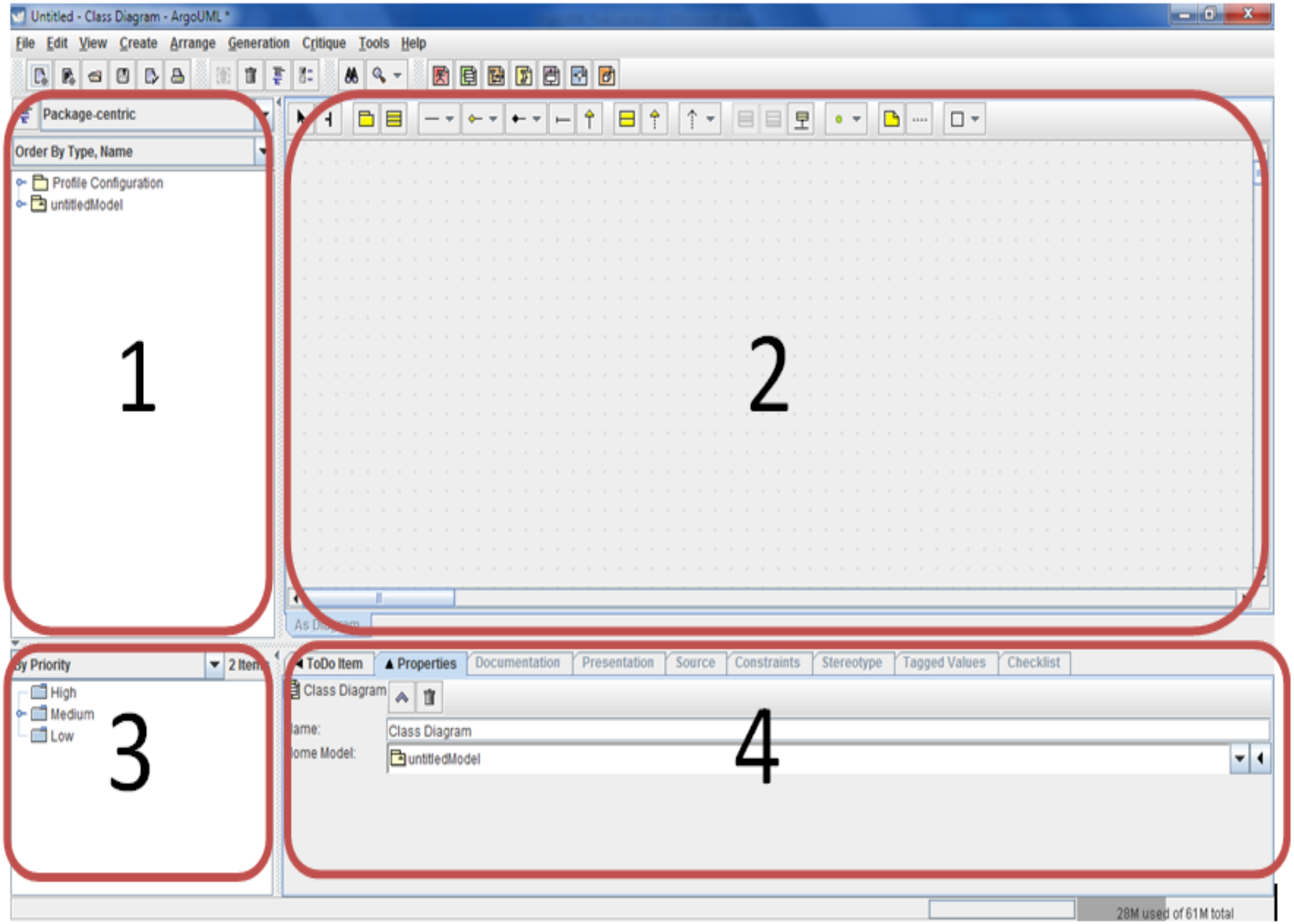
Behavioral Diagrams

- **Use case diagram:** Describes the relationships among the functionalities and their internal /external controllers-actors.
- **Sequence diagram:** Deals with sequence of messages flowing from one object to another. It is used to visualize the sequence of calls in a system to perform a specific functionality.
- **Collaboration diagram:** Represents the structural organization of a system and the messages sent /received. It is used to visualize the organization of objects and their interaction.
- **Statechart diagram:** Represents the event driven state change of a system. It is used to visualize the reaction of a system by internal /external factors.
- **Activity diagram:** It is used to visualize the flow of controls in a system.

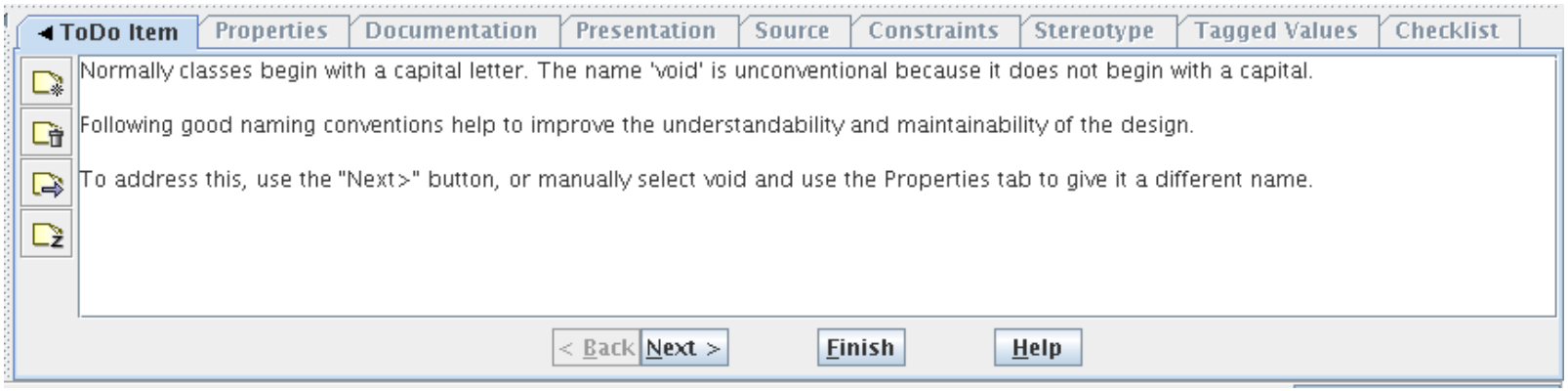
ArgoUML

- An open source UML modeling tool
- Support for all standard UML 1.4 diagrams
- Runs on any platform with Java 1.4 or Java 5
- Forward engineering
  - Generates code from diagrams to C++, Java, PHP, etc.
- Reverse engineering
  - Generates diagrams from source code

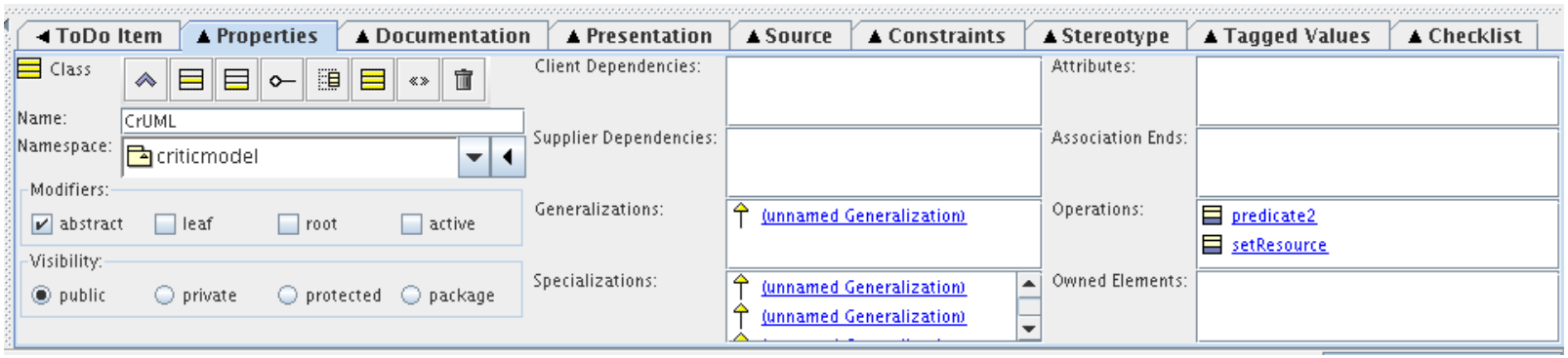
ArgoUML


Untitled - Class Diagram - ArgoUML *
File Edit View Create Arrange Generation Critique Tools Help
Package-centric
Order By Type, Name
Profile Configuration
untitledModel
1
2
3
4
ToDo Item
Properties
Documentation
Presentation
Source
Constraints
Stereotype
Tagged Values
Checklist
Class Diagram
Name:
Class Diagram
Home Model:
untitledModel
High
Medium
Low
28M used of 61M total

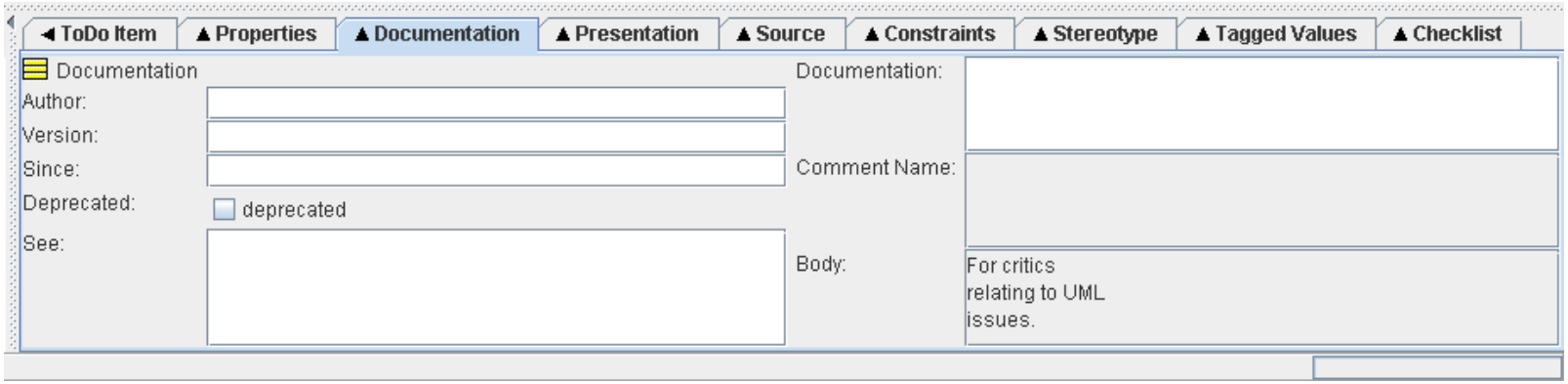
ArgoUML-ToDoItem Tab



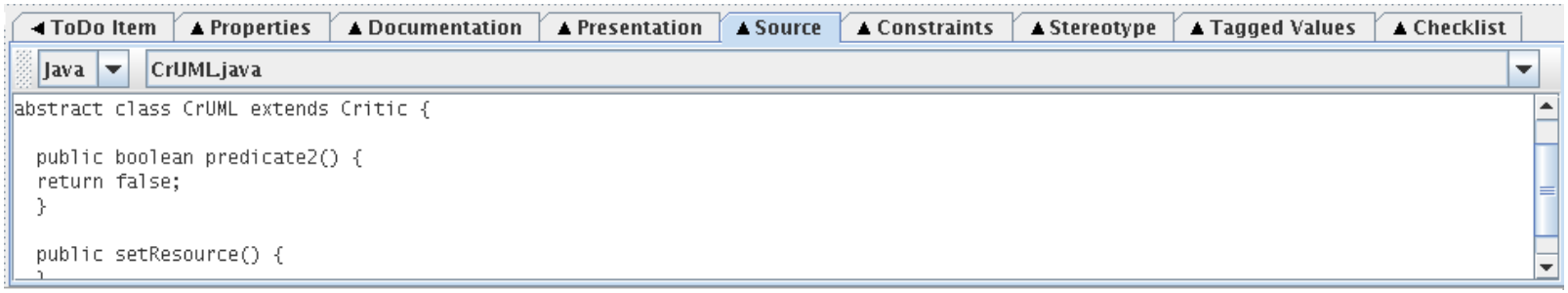
ArgoUML-Properties Tab



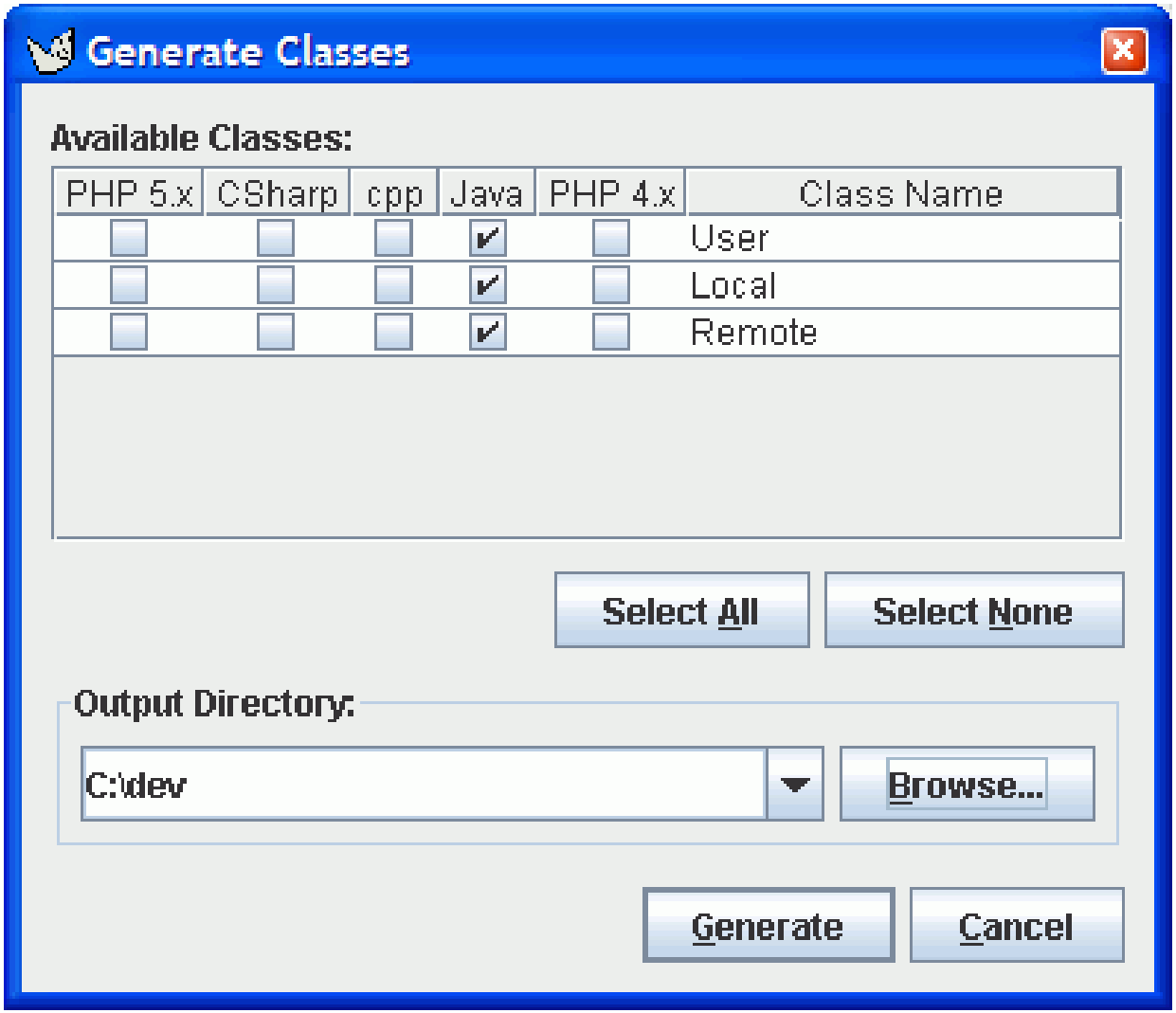
ArgoUML-Documentation Tab



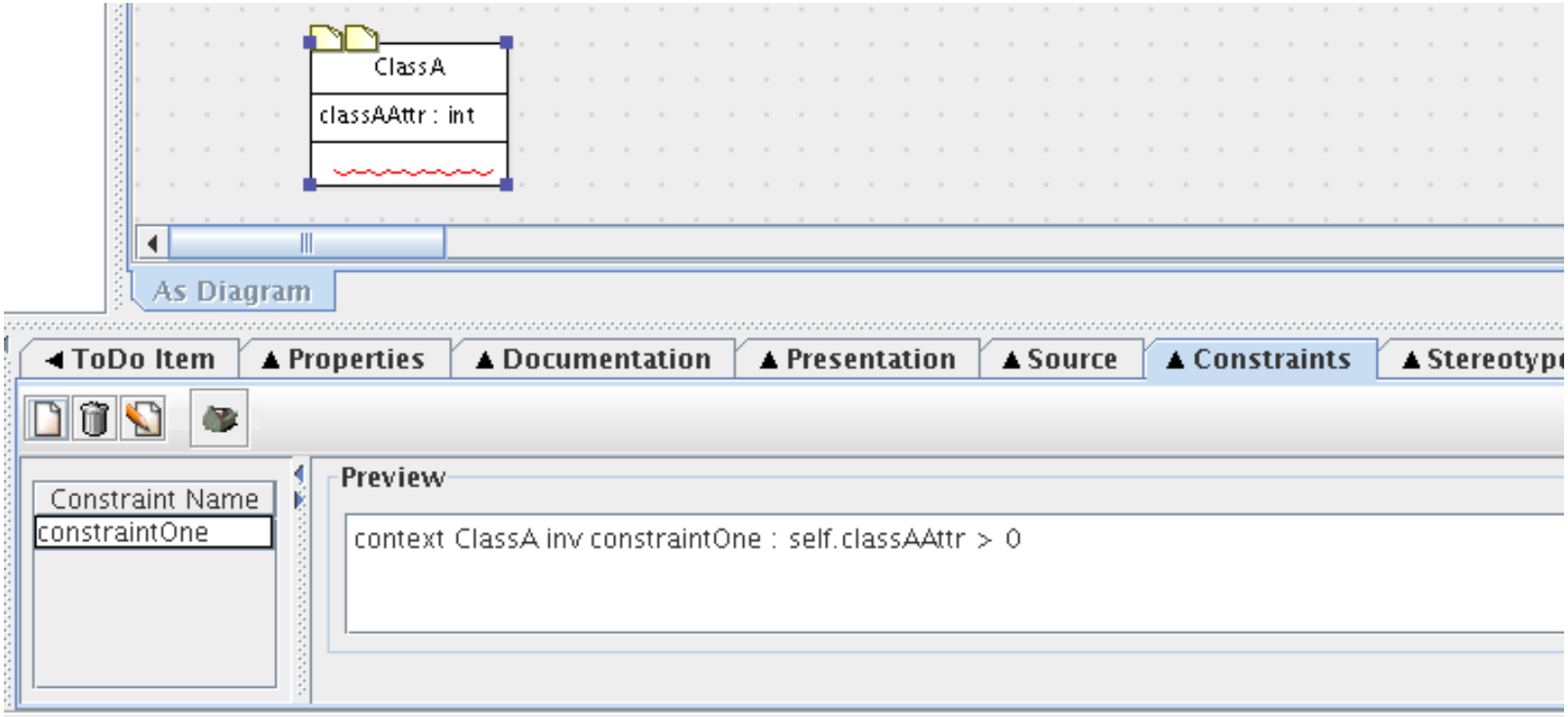
ArgoUML-Source Tab



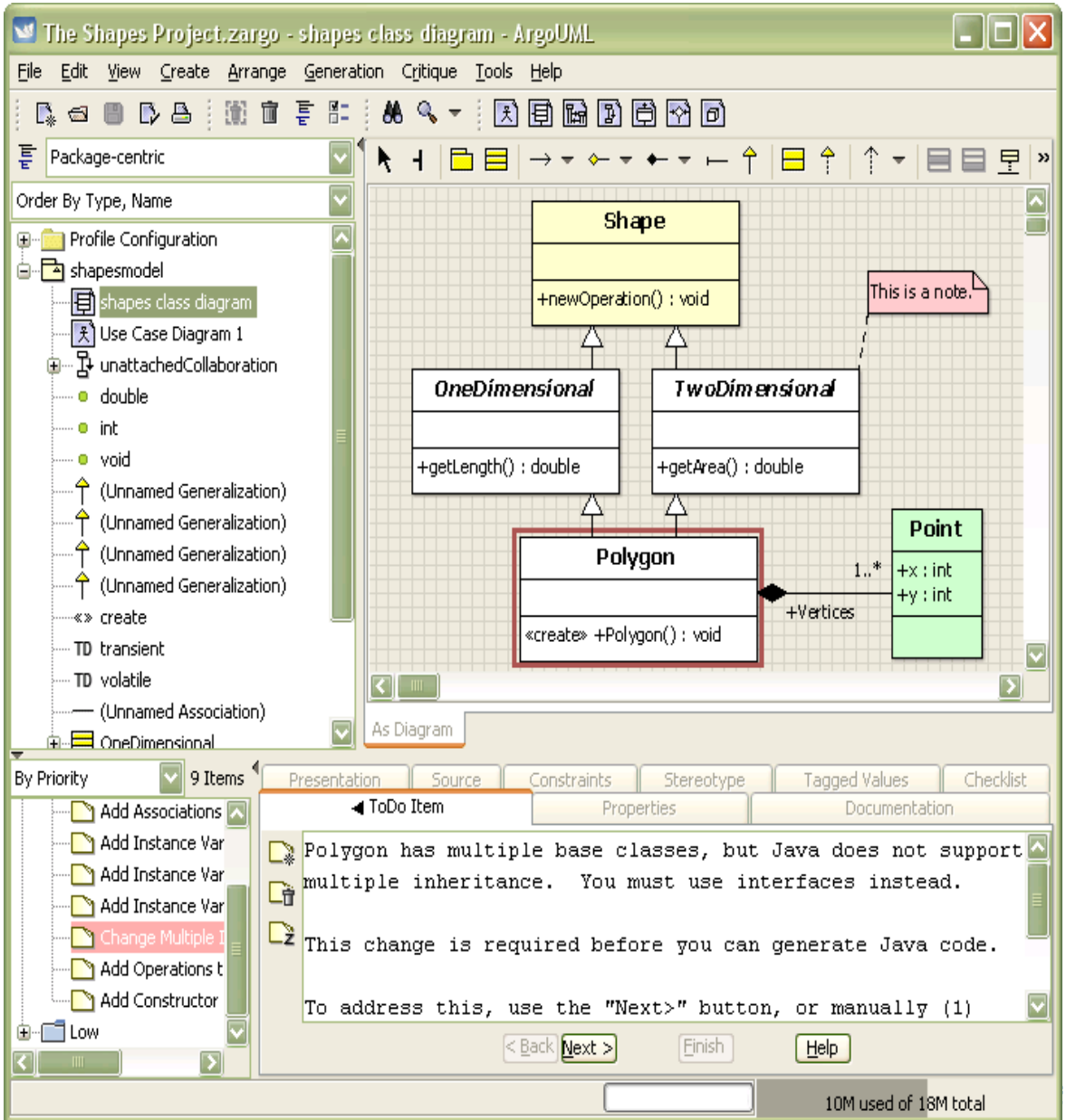
ArgoUML-Source Tab



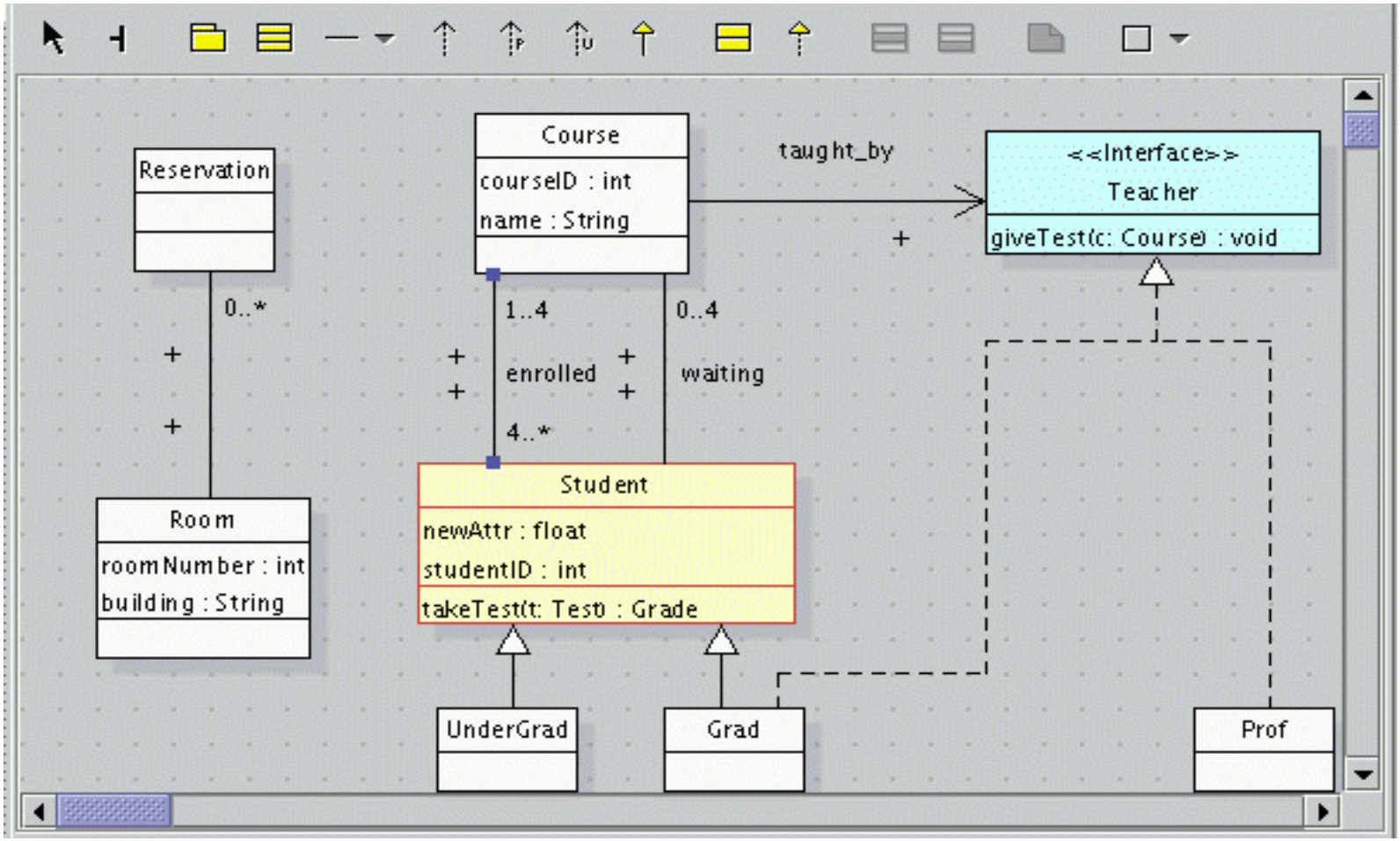
ArgoUML-Constraints Tab



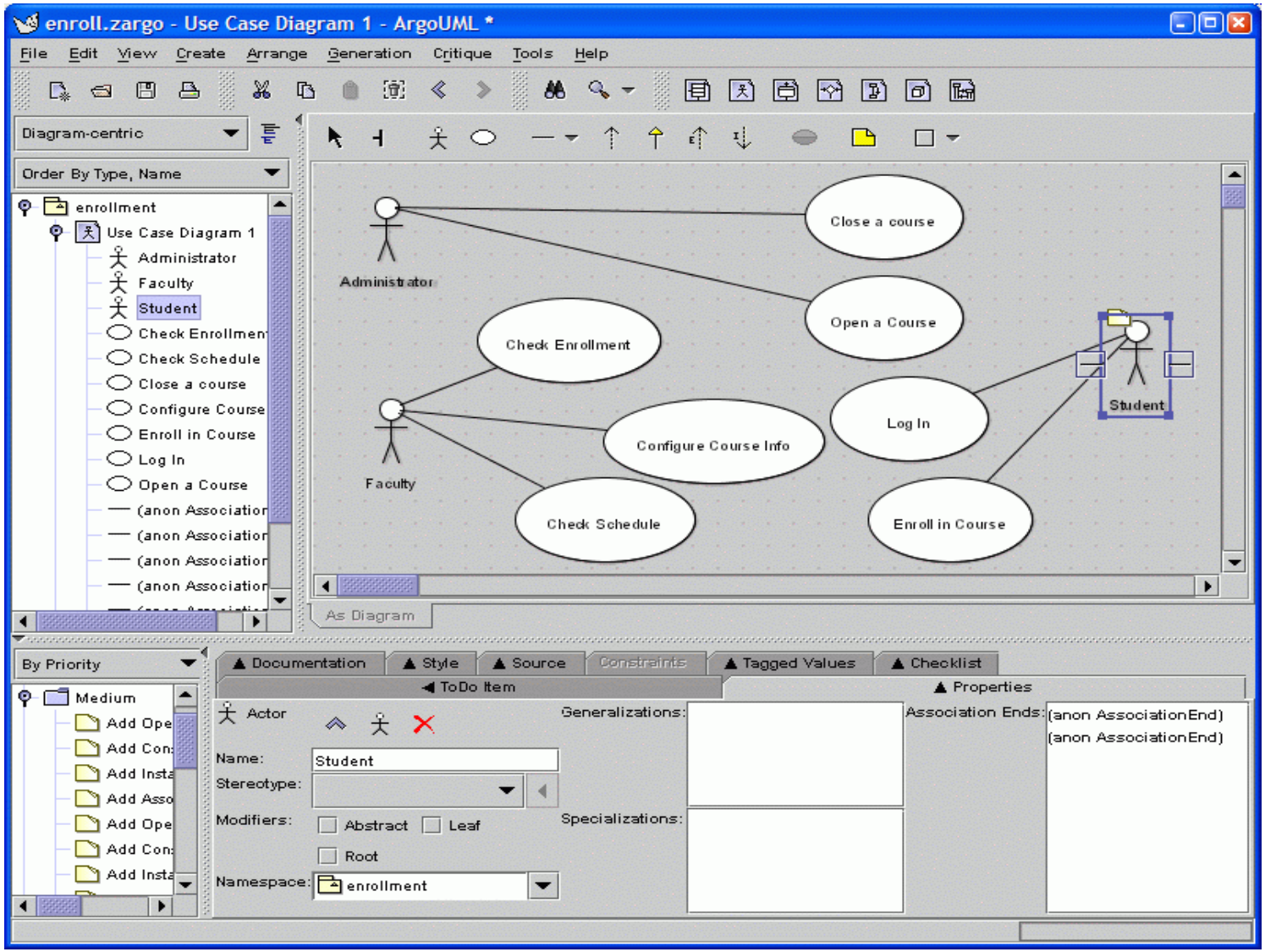
ArgoUML-Class Diagram



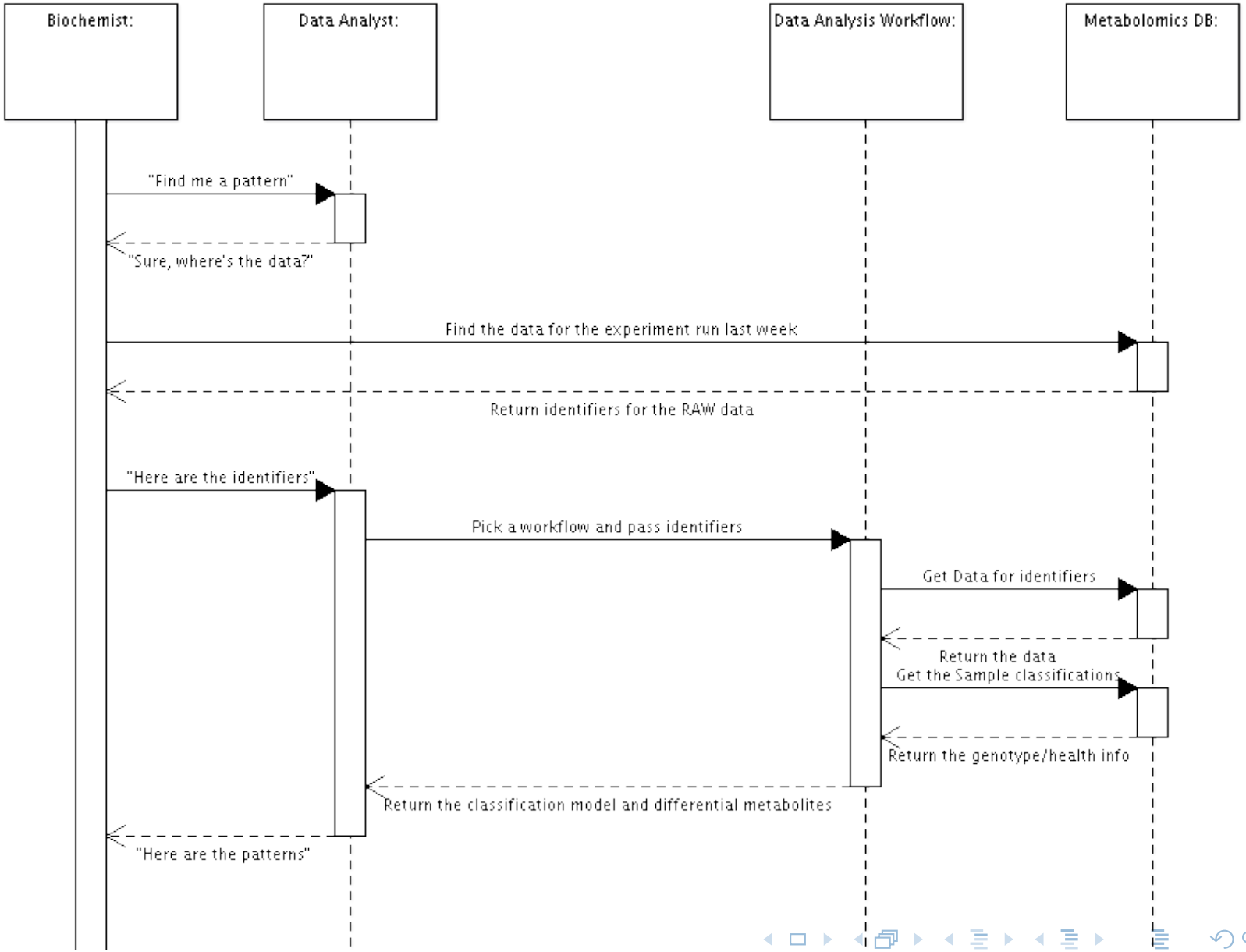
ArgoUML-Class Diagram



ArgoUML-Use Case Diagram



ArgoUML-Sequence Diagram



References and Further Reading

- https://http://argouml.tigris.org/
- http://argouml-users.net/