[**https://www.javatpoint.com/uml-tools**](https://www.javatpoint.com/uml-tools)

[**https://www.slideshare.net/curiousEngine/uml-case-tools**](https://www.slideshare.net/curiousEngine/uml-case-tools)

**(refer links for uml tools)**

**UML tool**

It is a software application that supports some or all of the notation and semantics associated with UML.

It is used to include application programs which are not exclusively focused on UML but which support some functions on UML.

It supports the following kinds of functionality:

 Diagramming - creating and editing UML diagrams.

 Round-trip engineering - refers to the ability of the UML tool to perform code generation from models(generation from code).

 Code generation

 Reverse engineering

 Model and diagram interchange

 Model transformation

**Example:** StarUML, Umple, ATL, ArgoUML, BoUML, CaCoo, Gliffy, JDeveloper, Microsoft Visual studio, MyEclipse, NetBeans, PlantUML,.etc,.

* [StarUML](http://staruml.sourceforge.net/en/) − StarUML is an open source project to develop fast, flexible, extensible, featureful, and freely-available UML/MDA platform running on Win32 platform.
* [ArgoUML](http://argouml.tigris.org/) − ArgoUML is the leading open source UML modeling tool and includes support for all standard UML diagrams.
* [Umbrello UML Modeller](http://uml.sourceforge.net/) − Umbrello UML Modeller is a Unified Modelling Language diagram programme for KDE.
* [Acceleo](http://www.acceleo.org/pages/home/en) − Acceleo is easy to use. It provides *off the shelf* generators (JEE, .Net, Php...) and template editors for Eclipse.
* [UML Tools List @ Wiki](https://en.wikipedia.org/wiki/List_of_UML_tools) - Comprehensive list of UML Tools and Utilities.
* [GenMyModel](https://www.genmymodel.com/) − An online UML modeling tool

**UML as a blueprint**

It is a Uml Model that focuses on completeness.

In forward engineering, the idea is that blueprints are developed by a designer whose job is to build a detailed design for a programmer to code up.

 Designs must be complete.

In reverse engineering, blueprints aim to convey detailed information about code, either in a paper document or as an interactive graphical browser.

 It must show every detail about a class in graphical form.

Blueprints require much more sophisticated tools that sketch in order to handle the details required for tasks.

 Specialized CASE(computer-aided software engineering) tools are used.

 Forward engineering tools support diagrams and back it up with a repository to hold information.

 Reverse engineering tools read source code and interpret from it into the repository and generate diagrams.

 Round-trip tools- perform both tasks of the above tools.

 Some tools use source code itself as a repository and use diagrams as a graphic viewport on code.