

Automatic code generation from models with easyUML (NetBeans plugin)

Topics covered

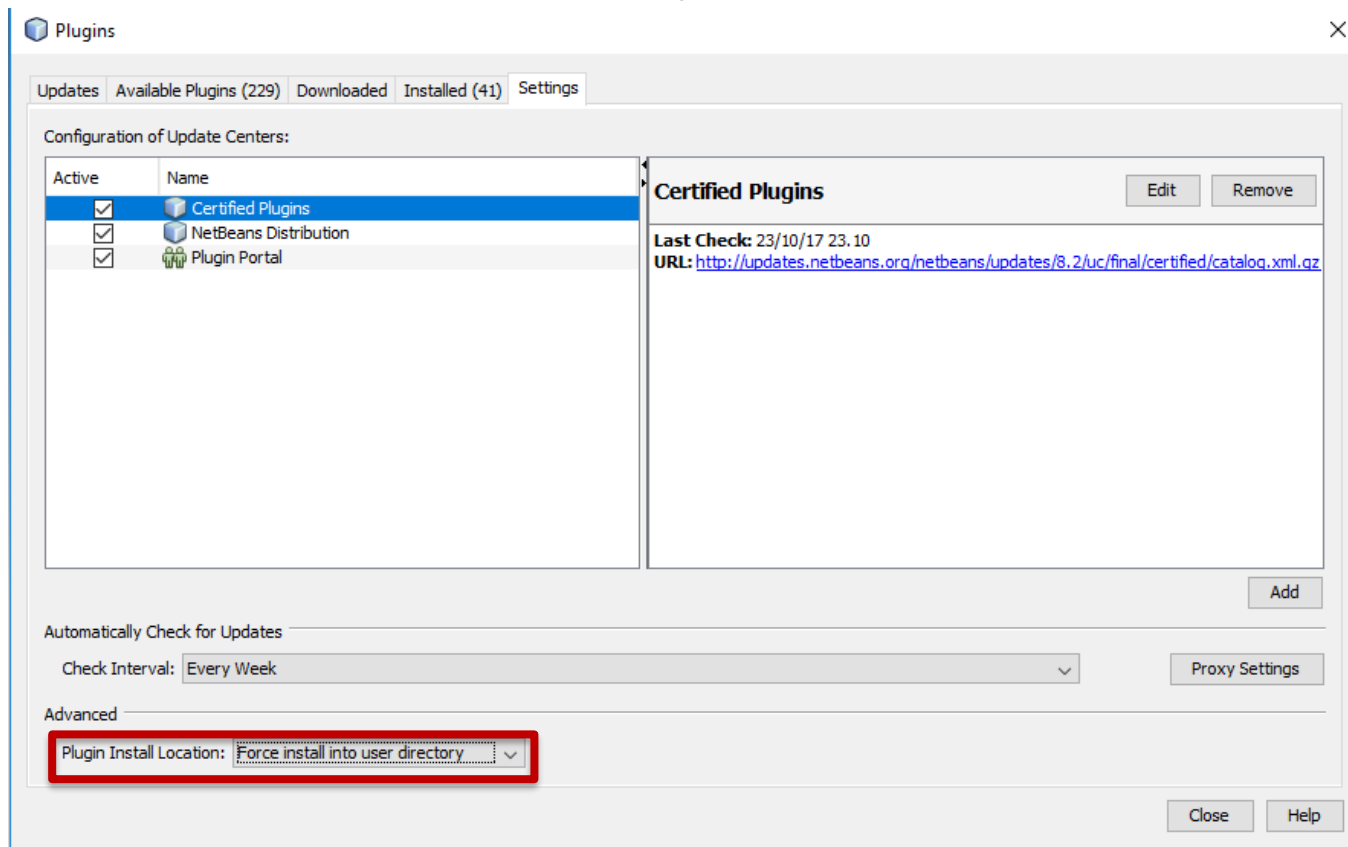
- Introduction to easyUML
- Hands-on session
- Other UML tools

Introduction to easyUML

- ❑ easyUML is a simple plugin for NetBeans
- ❑ It allows to create UML class diagrams and automatically generate code from diagrams. And viceversa it allows to create UML diagrams from code.
- ❑ <http://plugins.netbeans.org/plugin/55435/easyuml>

Before installation (for lab computers)

- ❑ 'Tools > Plugins' > 'Settings' and set 'Plugin Install Location' into
 - 'Force install into user directory'



Install easyUML

❑ NetBeans 8.0+:

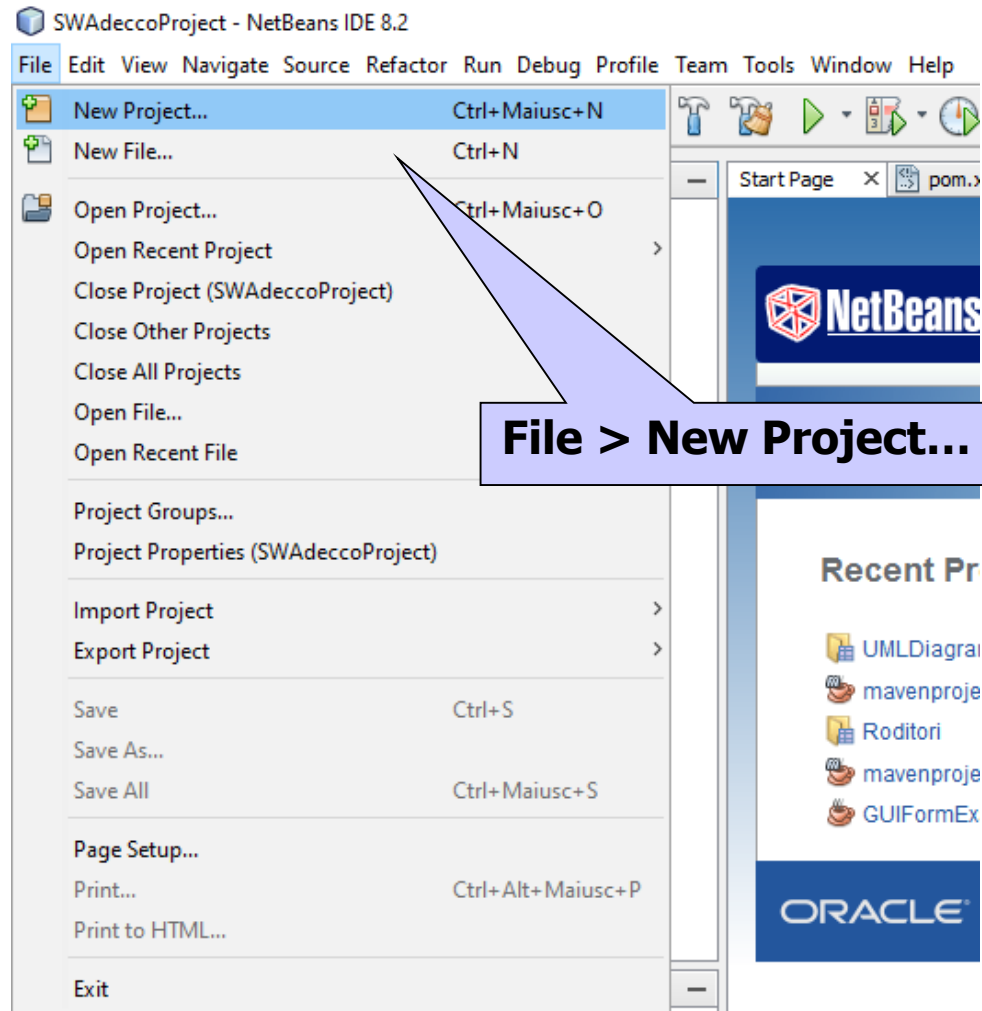
- The plugin is available on the NetBeans Plugin Portal Update Center. Use 'Tools > Plugins' action from the NetBeans IDE main menu.

❑ Manual installation:

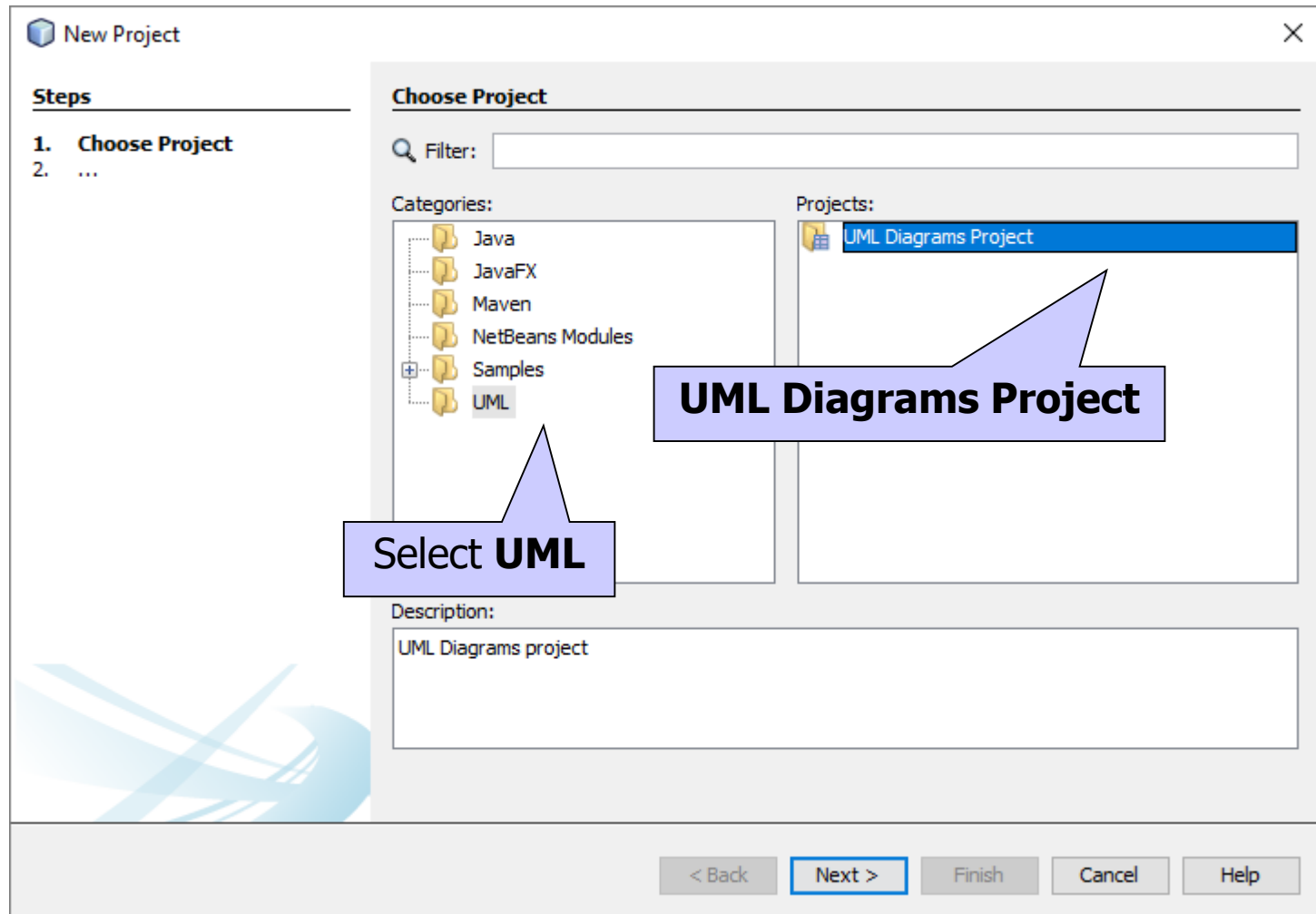
- Download the plugin and extract the archive <http://plugins.netbeans.org/plugin/55435/easyuml>
- Install it manually
From the NetBeans IDE main menu: Tools > Plugins > 'Downloaded' tab > 'Add Plugins...' button > Go to the directory that contains the plugin and open all the .nbm files > 'Install' button

easyUML: Hands-on session

Create new UML project



Create new UML project (2)



Create new UML project (2)

New Project

Steps

1. Choose Project
- 2. Name and Location**

Name and Location

Project Name:

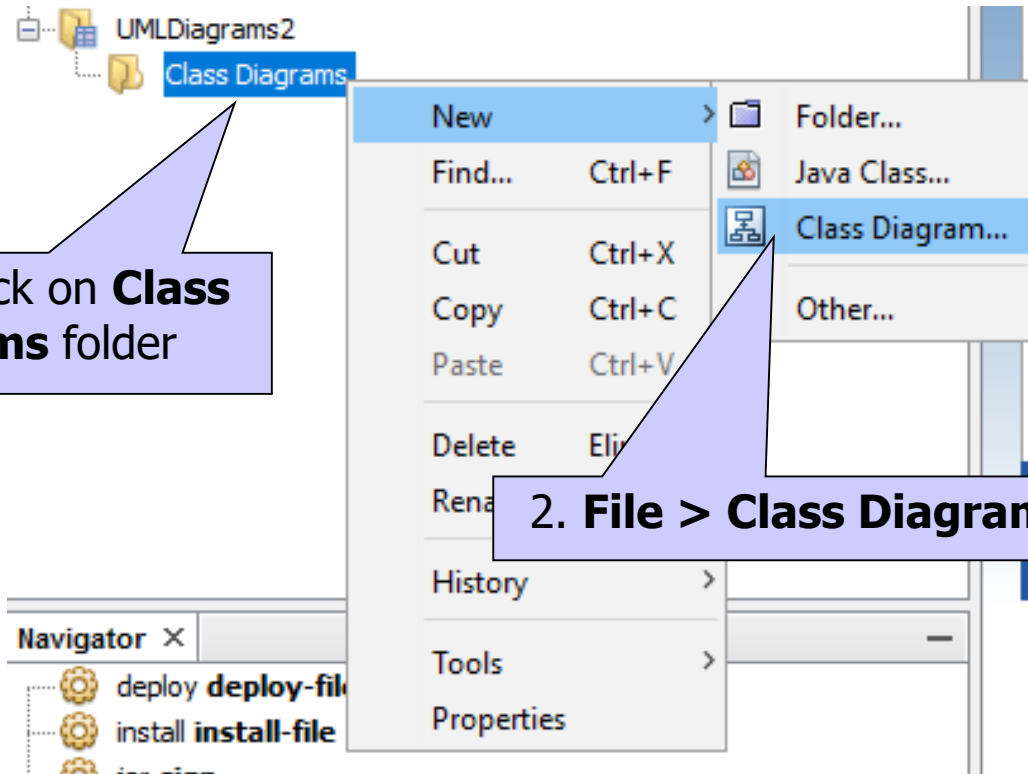
Project Location:

Project Folder:

1. Name of the project

2. Finish

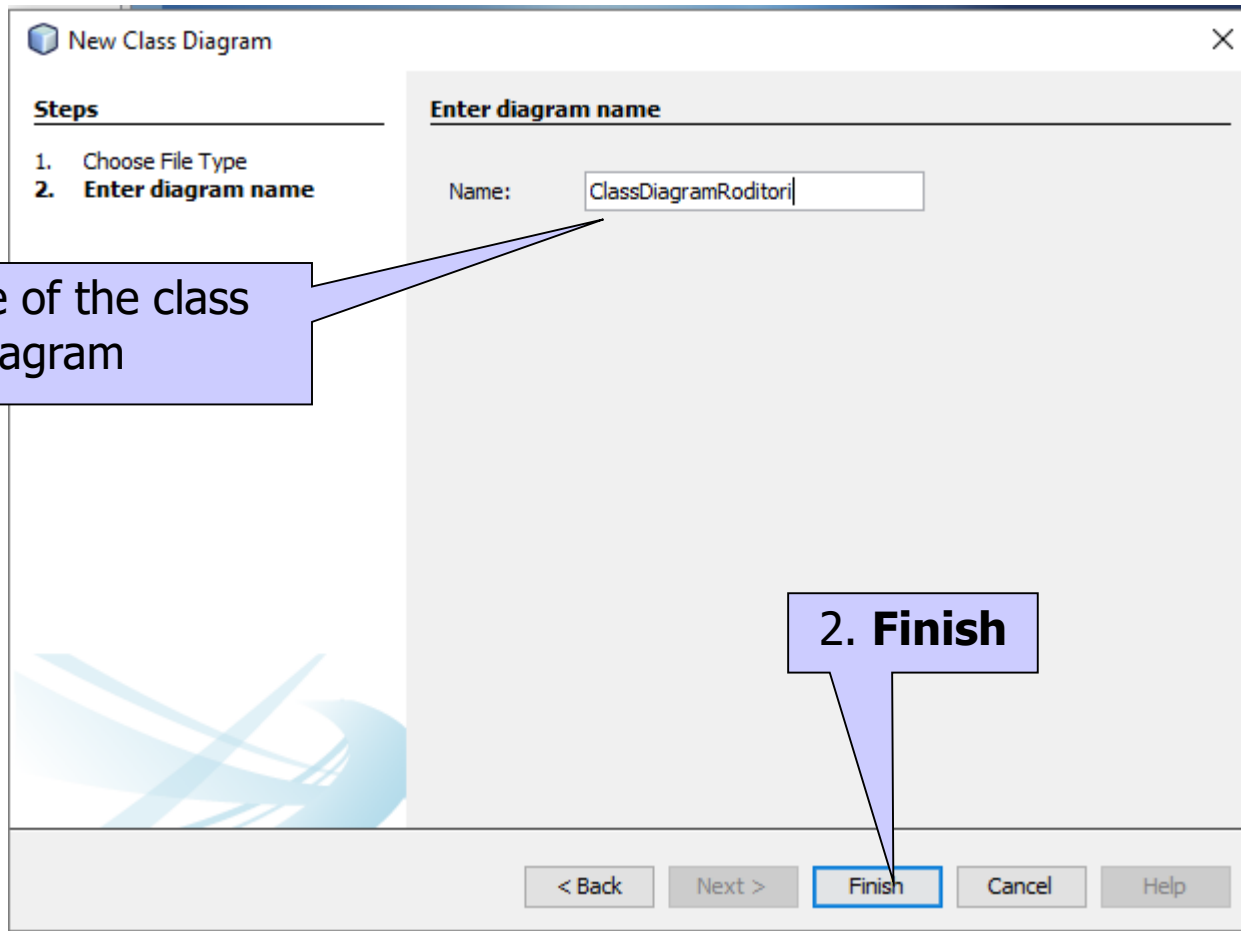
Add a class diagram



1. Right click on **Class Diagrams** folder

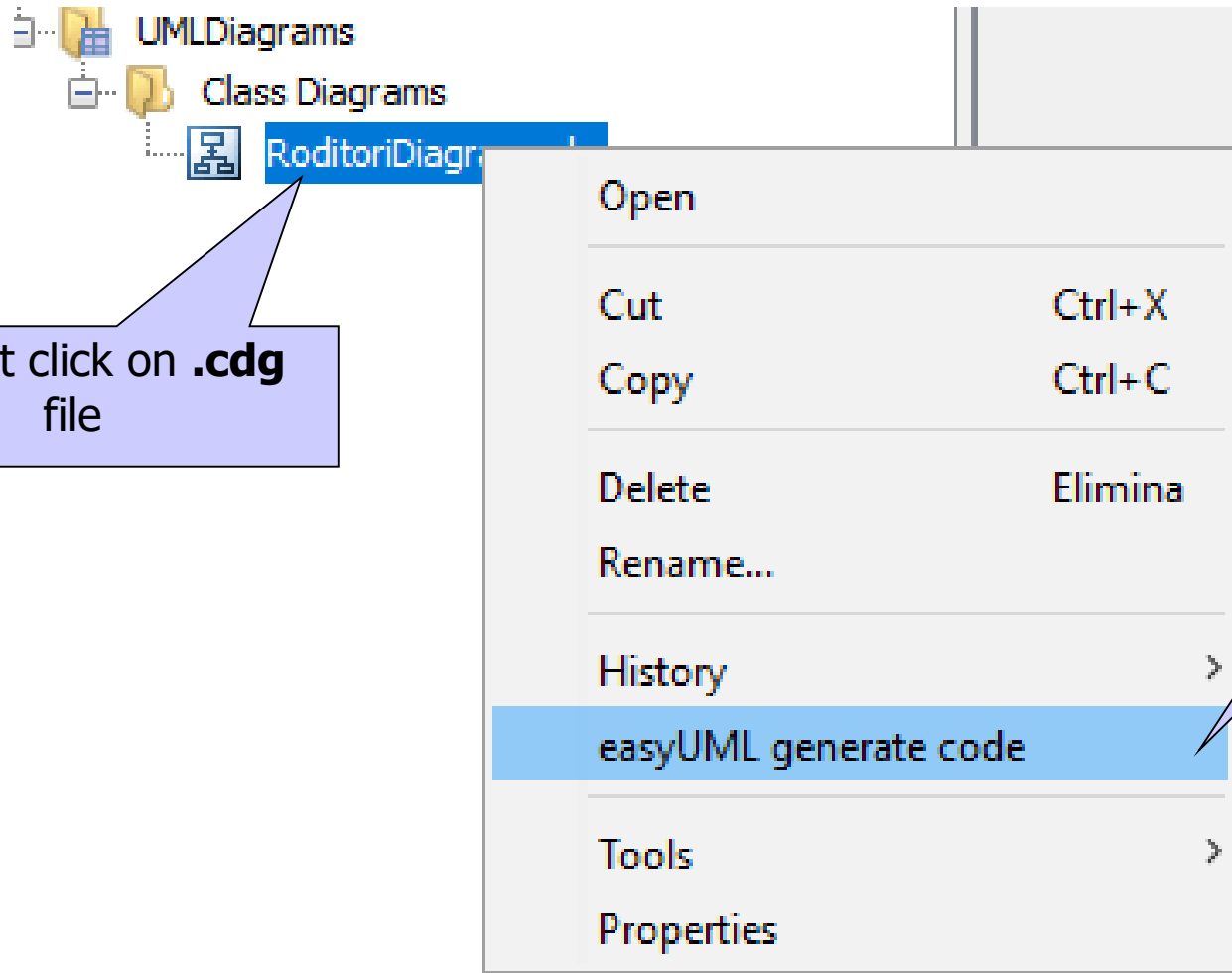
2. **File > Class Diagram ...**

Create a Diagram

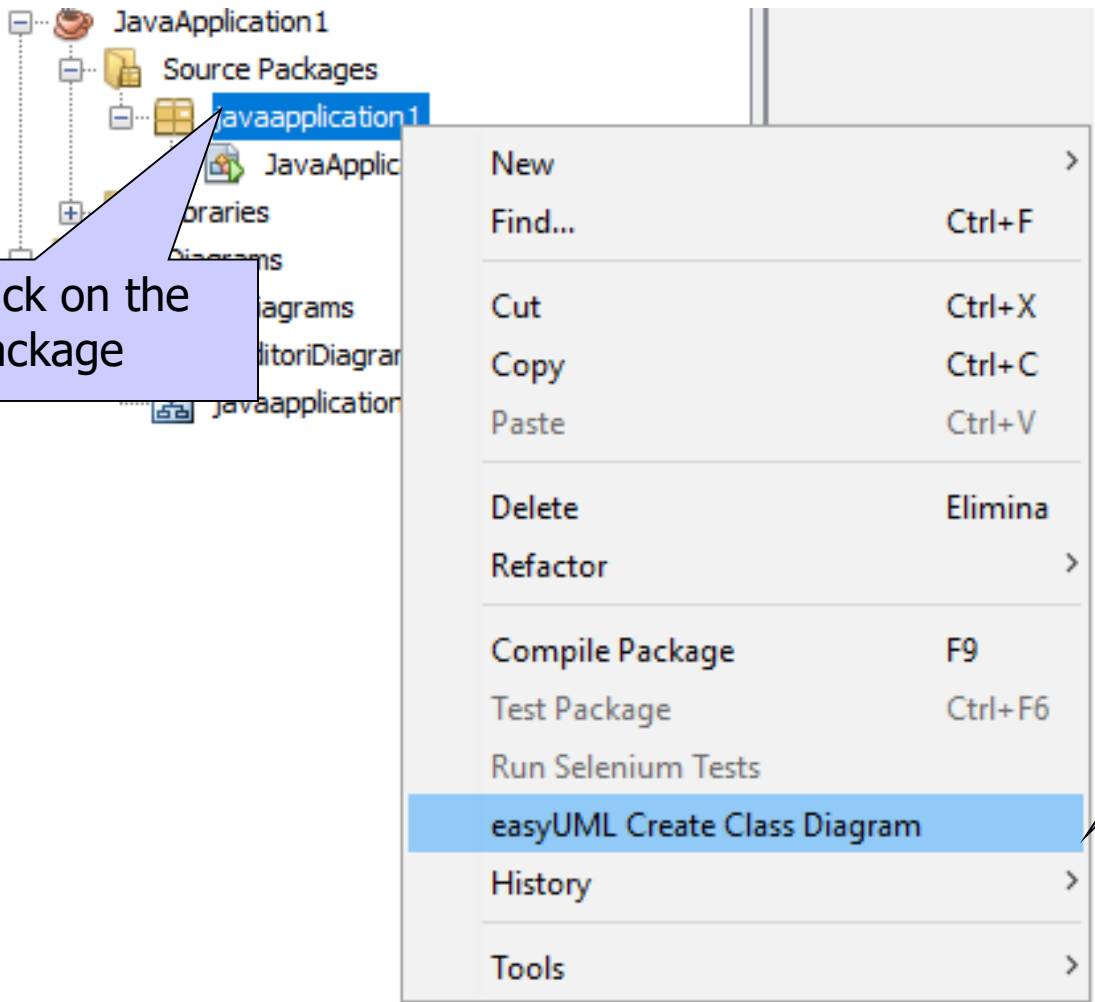


Live Example

Generate code from model



Generate model from code



1. Right click on the Java Package

2. Select

Other UML tools

- ❑ There are more sophisticated tools for UML design and automatic code generation from UML diagrams.
 - Modelio (open source): <https://www.modelio.org/>
 - ArgoUML (open source): <http://argouml.tigris.org/>
 - Umbrello (open source): <https://umbrello.kde.org/>