



# Development of Eclipse Plug-Ins for VariantSync

Introduction to SE Projects | Thomas Thüm, Paul Maximilian Bittner | WS2020/21



Software Engineering  
Programming Languages



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# Development of Eclipse Plug-Ins

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- **Who are we looking for?**

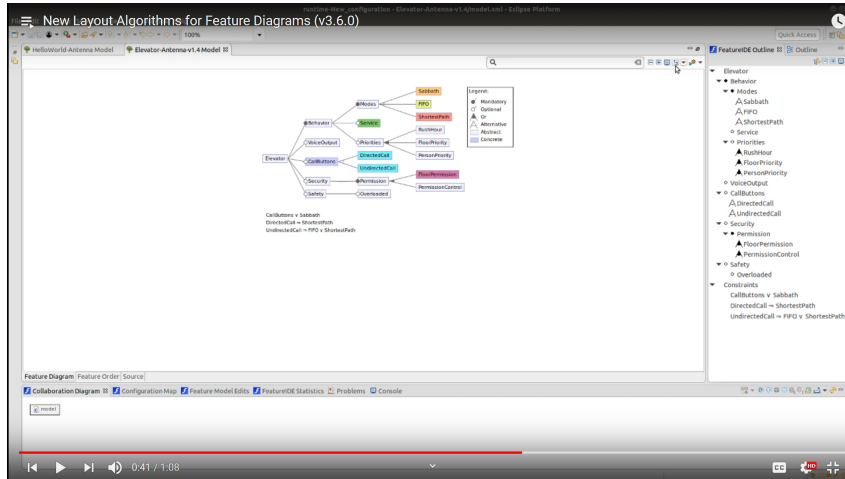
inquiring students with good Java skills

# Development of Eclipse Plug-Ins

Results from previous years (in Braunschweig/Magdeburg)

Constraint	Description
SylvesterStallone ↔ Rocky	Sylvester Stallone ONLY plays in Rocky movies, Rocky movies have to have Sylvester Stalon as the main actor
~Sharknado	
Female	There's not to be a woman in the movie
LeonardoDiCaprio → ~Awards	is an Award (yes we know this is not relevant anymore)
Documentary → ~Actors	
AdultMovie ↔ Documentary	
BlakeLively v MeghanFox v ScarlettJohans	three actresses for a movie

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The screenshot displays the Eclipse IDE with the 'LaTeX/TikZ Export for Feature Diagrams and Configurations (v3.6.0)' plug-in active. The interface is divided into several panes:

- Editor:** Shows a LaTeX document with the following code:

```
1 \input{head.tex}
2 \begin{document}
3   \sffamily
4   \input{myFeatureDiagram.tex}
5 \end{document}
```
- Diagram View:** Displays a hierarchical feature diagram. The root node is 'Root', which branches into 'ContentHandler', 'Base', 'UserInterface', and 'OS'. 'ContentHandler' has children 'HTML', 'TXT', and 'LATEX'. 'Base' has a child 'GUI' (marked with a '10' in a circle). 'UserInterface' has children 'Commandline' and 'Windows'. 'OS' has a child 'Linux'. A legend on the right explains the symbols: a square for 'Abstract', a filled square for 'Concrete', a circle for 'Mandatory', a triangle for 'Or', a diamond for 'Alternative', and a circle with a vertical line for 'Collapsed Nodes'.
- Console:** Shows the output of the LaTeX compilation process. It includes messages like 'Prozess gestartet: pdflatex -synctex=1 -interaction=nonstopmode "body".tex' and 'Prozess endete normal'.
- Status Bar:** At the bottom, it shows 'Seite 1 von 1', '159', and 'de\_DE - UTF-8 - Fertig'.

# Development of Eclipse Plug-Ins

Feedback by participants (in German)

*„Man wird sehr schnell lernen, wie man produktiv arbeitet, welche Probleme man zu bewältigen hat und ob seine Arbeit wirklich gut ist. Und das Beste ist, dass man etwas handfestes erstellt! Das Projekt hat Zukunft und auch viele Interessenten - es ist wirklich ein Projekt was die Arbeit und Zeit wert ist.“*

*„Insgesamt, hat es mir viel gebracht und ich kann es jedem weiterempfehlen. [...] Man arbeitet an einem großen, bestehendem Projekt, dass auch tatsächlich eingesetzt wird. Man lernt etwas darüber sich in fremden Code zurecht zu finden.“*

*„Ich würde dieses Projekt jedem Studenten, mit genügend Java Kenntnissen und Willen zum Vertiefen dieser Skills, empfehlen.“*



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- Built on top of [FeatureIDE](#)
- Make product-line technology accessible for existing software projects!  
→ Maybe even yours!
- Shape the existing prototype!
- Coordinate issues and communicate with your team!

# Interested?

Get more information on our project page



[https://www.uni-ulm.de/in/sp/lehre/wintersemester-2020-21/  
projekt-development-of-eclipse-plugin-ins-for-variantsync/](https://www.uni-ulm.de/in/sp/lehre/wintersemester-2020-21/projekt-development-of-eclipse-plugin-ins-for-variantsync/)