Company Name	Inteks
Industry	Information Technologies
Client Name	Covered with NDA
Technology	Target OS: o Windows 2000 o Windows XP Implementation platform: o Java 2 o Eclipse platform 2.x UI library: o SWT 2.x (H)MVC framework: o Eclipse GEF 2.x Development Tools: o Eclipse SDK 2.1.2 o JUnit o CVS o Rational Rose 2002 o Apache Ant o MSVC 6.0
Business Objective	Analytical mistakes made during the requirements gathering process remain the headache of most software development projects. The main reason of this situation is that analysts and customers (users) speak different languages: while ones tend to express the requirements in terms of specifications and modern modeling languages like UML, the others tend to describe the system in terms of system-user interactions, i.e. in terms of its User Interface. The second reason is that UML does not provide any way to describe the system in a language, equally understandable for both users and developers. As a result, the analysts produce lots of requirements specifications which the customer must read and approve, having no chance to understand them in full. The developers, on the other hand, have to start the development without any guarantee that specifications were carefully read and, more important, understood. GUI prototypes are believed to be a panacea for this problem. However, as a matter of fact, prototyping does not provide 100% guarantee. As a rule, the prototype built on the basis of the initial use-case model, is frequently updated during the discussions with the customer or end-users. By the moment, when the prototype is finally approved by the customer, it has a great chance to be inconsistent with the model, because there is no way to automatically verify that any change done in the prototype is reflected in the corresponding part of the model.
Solution	Customer company decided to develop a CASE tool oriented to requirements analysis, which would combine UML technology with automated GUI-prototype generation and reverse engineering, providing a guarantee that both requirements definitions (UML model and GUI prototype) are consistent at any stage of the development process. Briefly, an idea was to extend UML syntax in such a way, that there was a possibility to describe GUI-forms sequences for each use-case scenario, and then just generate the prototype from UML model. Any change in requirements arisen during the discussion with the customer would lead to a change in the model, and then – to regeneration of the prototype.
Result	Inteks has developed Eclipse-platform based UML editor with extended UML semantics, GUI-design tool and prototype generator, as well as Rational Rose add-in providing the same functionality.