Ruml creates UML class diagrams from existing S classes and in the sense of UMLGraph for Java classes. This is usefull for documentation and exploration of existing packages: R specific things like generic functions, namespaces, S3 and S4, ... are considered.

*Funky idea:* the package allows to “calculate” with classes: create subtraction, addition, diffs, ... of classes (even of different packages). This allows an exploratory approach of code refactoring.

**An outline**

```r
R> library(coin)
R> rl = RumlClassList(getClasses('package:coin'))
R> plot(rl)
```

![Diagram of class relationships](image)

```r
R> plot(rl, attributes=TRUE)
```

![Detailed diagram with attributes](image)
Project attributes

Easier project; student needs to know the structural elements of R (like functions, S3/4 classes, generics, ...) very well and has basic knowledge about UML (class diagrams).