Automatic generation of exams in R

Bettina Grün¹, Achim Zeileis^{2,*}

1. Department of Applied Statistics, Johannes Kepler Universität Linz

2. Department of Statistics, Universität Innsbruck

*Contact author: Achim.Zeileis@R-project.org

Keywords: Exams, Multiple Choice, Arithmetic Problems

Package **exams** provides a framework for automatic generation of standardized statistical exams which is especially useful for large-scale exams. To employ the tools, users just need to supply a pool of exercises and a master file controlling the layout of the final PDF document. The exercises are specified in separate Sweave files (containing *R* code for data generation and $\text{LAT}_{\text{E}}X$ code for problem and solution description) and the master file is a $\text{LAT}_{\text{E}}X$ document with some additional control commands. An overview is given of the main design aims and principles as well as strategies for adaptation and extension. Hands-on illustrations – based on example exercises and control files provided in the package – are presented to get new users started easily.

References

Grün, B. and A. Zeileis (2009). Automatic generation of exams in R. *Journal of Statistical Software* 29(10), 1–14. http://www.jstatsoft.org/v29/i10/