Writing Unit Tests: It’s Now or Never!

Claus Klammer* and Albin Kern

*corresponding author:
Software Competence Center Hagenberg GmbH
Softwarepark 21, 4232 Hagenberg, Austria
claus.klammer@scch.at
Motivation

- Initial Situation
  - Large industrial software system
  - Continuously developed and enhanced for 10+ years
  - Includes legacy code with only few unit tests available

- Goal: Retrofitting unit tests
Findings

- **Code without unit tests** ...
  - ... often has a very **low testability** ...
  - ... caused by a **lack of modularization**

- Explored **solutions**
  - Refactoring → rewriting from scratch
  - Mocking → complex, unusable tests  

- **Conclusions**
  - **Low ROI** for unit testing of legacy code
  - Code without unit tests will rarely get unit tests later