

Task Packages

Tom Verhoeff

Presented by Eljakim Schrijvers

Overview

- Motivation
- Stakeholders
- Package Contents
- Package Operations and Interfaces
- Package Format

Motivation

- Archive
- Exchange
- Quality control
- Reuse

Stakeholders

- Supervisor (Teacher, Contest Director)
- Author
- Solver (Student, Contestant)
- Grader, Grading System Devel./Admin.
- Mediator, Trainer, Coach
- Researcher

Content

- Textual information
- Data files
- Configuration parameters
- Tools and scripts
- Submissions (good & bad)
- Metadata

Textual information

- Task Description
- Hints
- Background information
- Grading information
- Notes

Data files

- Example source code
- Input data
- Expected output
- Auxiliary data for evaluation
- Input for generators

Operations

- View contents
- Validate contents
- Grade submission (off-line)
- Deploy to automated grading system

Format

Considerations

- Character encoding, e.g. UTF-8, Latex
- End-of-lines, byte-order, file names
- Version control
- Handling information common to several tasks, e.g. in a task bundle

Conclusion

- Preserve
- Simplify reuse
- Improve quality
- Experience: peach3.nl package format used for many years; needs improvement
- International Standard: ISTN/RA