Summary

5th International Workshop on Traceability in Emerging Forms of Software Engineering (TEFSE’09)

Vancouver, British Columbia, Canada
TEFSE Goals

- Bring together researchers and practitioners working in traceability
- Promote interaction
- Focus on emerging form on traceability
TEFSE Topics

- Definitions of traceability models
- Traceability between artifacts and processes
- The semantics of traceability links
- Recovery and evolution of traceability links
- Visualization of traceability links
Session I

- Getting Back to Basics: Promoting the Use of a Traceability Information Model in Practice
  Patrick Mäder, Olly Gotel, and Ilka Philippow

- Towards Traceable Test-Driven Development
  Jane Hayes, Alexander Dekhtyar, and David Janzen

- Challenges for semi-automatic trace recovery in the automotive domain
  Jörg Leuser

- Establishing and Maintaining Traceability Between Large Aerospace Process Standards
  Ove Armbrust, Alexis Ocampo, Jürgen Münch, Masafumi Katahira, Yumi Koishi and Yuko Miyamoto
Session I - Cont.

- Should granularity be homogenous on both site of a traceability link and what is the right granularity?
  - Fine grain can generate too many events
  - What if we trace across boundaries of systems or companies?

- TDD is this a step toward the Holy Grail?
  - Co-changes represent an important source of information
  - As the process is going can we leverage test to produce traceability matrices in non intrusive ways?

- Multi language tracing and scalability problem
  - How to discover links between artifacts with different languages?
  - External light system in automotive companies may generate 24000 or more links ...

- Non ASCII languages and non electronic documents
  - how do we deal with multi-media data?
Session I - Cont.

- Teaching traceability and finding the right selling pitch
  - Make student fail in a controlled way
  - Make traceability mandatory part of curricula
  - Make a student face a real project
  - Make students face maintenance activities

- Scalability problem with regulatory documents and huge requirement
  - Regulation change how about outdated traces
  - Push for standard in writing standards and regulations
Session II

- Capturing Custom Link Semantics Among Heterogeneous Artifacts and Tools Hazeline Asuncion and Richard N. Taylor
- Model Based Traceability Jane Cleland-Huang, Jane Huffman Hayes, and Jean Domel
- Towards Traceability from Project Management to System Models Jonas Helming, Maximilian Koegel, and Helmut Naughton
- TQL: A Query Language to Support Traceability Jonathan Maletic and Michael Collard
Customer specific language for trace query?

- What language for what customer?

How can we go from any artifact to XML?

- Code is ok but if we have other representations? Multi-media data?
Session II - Cont

- Co-change links in the network and users of the traceability documentation system
  - Trace user actions to enrich traceability?
- Rule based system to define rules to capture granularity at different level in different parts
- Push away artifacts definition but keep a clear definition of links
Session III

- Combining Textual and Structural Analysis of Software Artifacts for Traceability Link Recovery
  
  Collin McMillan, Denys Poshvyvanyk, and Meghan Revelle

- Trace Retrieval for evolving artifacts
  
  Stefan Winkler

- Cross-Artifact Traceability Using Lightweight Links
  
  Sukanya Ratanotayanon and Susan Elliott Sim
Session III - Cont

- Does it really help getting extra info from underline implicit structure (aka caller – callee)
  - Which kind of structural information
  - If structural information evolves
  - How to integrate NLP tools and analyses

- Tuning parameters ... how to ...?

- Evolution of links how do we get multiple requirement documents?

- Decentralized, distributed non hierarchical repositories for distributed projects across countries and companies
Session III - Cont

- Cookbook of what to do, when to do and how to do
- Data sets to compare each other
  - Benchmarks are needed
- Traceability challenge can help in comparing each other
  - Proposing it as a stable event at TEFSE?
The need for traceability

- Large project
- Regulation
- Legislation and standard enforcing practices