Call for Papers



Ninth International Workshop on Managing Technical Debt

In conjunction with XP2017 in Cologne, Germany, on May 22, 2017

Big design upfront has widely been replaced by iterative and agile development approaches. In some agile environments the architecture is even something that is meant to emerge in the course of the project through continuously revisiting and refactoring the product code. Projects have shown that both approaches lead to insufficiencies in design or implementation over the long term, known as technical debt, which is a metaphor used to communicate key tradeoffs related to release and quality issues.

The Ninth Workshop on Managing Technical Debt will bring together leading software researchers and practitioners especially from the area of iterative and agile software development, for the purpose of exploring theoretical and practical techniques that quantify technical debt. Questions of interest for the workshop include but are not limited to

- What are root causes for technical debt outside of the code, and how do we evaluate them?
- What is the impact of agile and iterative software development approaches on technical debt?
- Are agile techniques and their iterative development potential root causes for the introduction of technical debt?
- Does strategic use of technical debt provide insight into the balance between upfront and emergent design and architecture in an agile environment?
- Can encouraged deprecation mechanisms, versioning, and architectural approaches like microservices help avoid technical debt by simply disposing code?

The Managing Technical Debt workshop series has provided a forum since 2010 for practitioners and researchers to discuss issues related to technical debt, share emerging practices used in software development organizations, and emphasize the need for more research and better means for sharing emerging results. Consensus from our community indicates a need to focus on quantification approaches as well as qualification and measurement of technical debt on higher levels of design and architecture. Contributions from the area of agile and incremental development and their impact on technical debt are of special interest. The following topics are aligned with our theme:

- techniques and tools to managing technical debt in agile and DevOps environments
- techniques and tools for calculating technical debt principal and interest
- technical debt in code, design, architecture, and development and delivery infrastructure
- measurements and metrics for technical debt
- analyzing technical debt
- visualizing technical debt
- empirical studies on technical debt evaluations
- relationship of technical debt to software evolution, maintenance, and aging
- economic models for describing technical debt
- technical debt and software life-cycle management
- technical debt within the software ecosystem
- technical debt in software models
- concrete practices and tools used to measure and control technical debt

We invite submissions of papers in any areas related to the themes and goals of the workshop in the following categories:

- 1. Research Papers: describing innovative and significant original research in the field (up to 8 pages)
- Industrial Papers: describing industrial experience, case studies, challenges, problems, and solutions (up to 8 pages)
- 3. Position and Future Trend Papers: describing ongoing research, new results, and future trends (up to 4 pages)

Submissions should be original and unpublished work. Each submitted paper will undergo a rigorous review process by three members of the program committee. Submissions must be submitted online via <u>easychair.org</u> and conform to <u>ACM's general guidelines for academic publishing</u>. Accepted papers will be presented at the workshop and published in the XP2017 post conference proceedings.

Important Dates:

Paper submissions:NNotification of acceptance:NCamera-ready copy:thWorkshop:N

March 3, 2017 March 24, 2017 tbd May 22, 2017

Organizers:

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For more information see http://www.sei.cmu.edu/community/td2017/