Charter for

International Workshop on Refactoring (IWoR)

June 27, 2020

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This document serves as the charter of IWoR to create consistent processes for the management and execution of the workshop. The following regulations of IWoR can be changed by a simple majority of the vote of the steering committee (SC) in which the chair is both a normal voting member and also has the casting vote in the case of a tie.

The charter of IWoR draws on the principles described in the charters of other conferences, such as SSBSE, ICSME, MSR and ICST, in order to define specific rules that seek to ensure that the management of the workshop series will be transparent, democratic and open and to maximize the scientific value of the series of events to the research and practitioner community that it serves. This charter is effective upon the vote scheduled at the last session of IWoR2020

1. Motivations and Scope of IWoR

Successful software products evolve through a process of continuous changes, including bug fixes, new feature additions, performance and maintainability improvements. Typically, software changes are performed by several geographically distributed developers, and not necessarily by the original code authors. Poorly planned changes typically lead to poor design quality, which can result in reduced productivity, decreased system performance, increased fault-proneness, thus making software more costly to develop and maintain.

Refactoring supports this extremely volatile software life-cycle, and provides a way to reduce and manage the growing complexity of software systems and improve developer productivity. In essence, refactoring improves the internal structure of a software system without altering its external behavior. In general, refactoring can be performed at various levels of abstraction including requirements, design, architecture or source code level.

Today, software refactoring is an established research field with hundreds of publications in various conferences and journals including TSE, ICSE, FSE, ASE, ICSME, OOPSLA, ECOOP, SANER and TOSEM. Due to the growing complexity of software systems, in the last ten years we have seen a dramatic increase and industry demand for tools and techniques on software refactoring. The purpose of this workshop is to provide a common forum for this important research area as it continues to grow in application breadth and technical depth. The goal is to bring together researchers and practitioners to evaluate the current state of research, discuss common problems and emerging directions (such as refactoring recommendation, current refactoring practice, refactoring analysis in software evolution, effect of refactoring on software quality), to exchange ideas and discover new opportunities for collaboration, to explore and envision new applications and areas of research, and to present and discuss new empirical results, new insights and new approaches. In particular, we expect the in-depth analysis of use cases and experiences of refactoring in practice to further shape our research.

The International Workshop on Refactoring (IWoR) has four editions by 2020, two of them co-located with the IEEE/ACM International Conference on Automated Software Engineering (ASE) in 2016 and 2018 then the last two editions with ICSE 2019 and ICSE 2020. As the community continues to grow, we do expect that the workshop will be transformed into a symposium.

2. Regulations

2.1 Steering Committee (SC)

2.1.1 Role and Composition

- The SC has the responsibility to strategically lead the workshop in the long term. This responsibility includes implementing this charter, selecting future workshops, and setting the overall goals for the directions of the workshop and the technical community. While the primary task of the SC is governance of the workshops, it also takes on the role of mentoring.
- Member tenure: 3 years
- Maximum number of consecutive terms of a member: 2
- Size in steady state: 9
- New members are selected by election (see next subsection).
- Elections are administered by the SC chair or his or her appointee.

The current 2020 SC members are:

1. Marouane Kessentini, Chair
2. Ali Ouni,
3. Mel Ó Cinnéide,
4. Danny Dig,
5. Nikolaos Tsantalis,
6. Francesca Arcelli
7. Gustavo Pinto,
8. Manuel Wimmer
9. Simon Thompson

2.1.2 Election of Steering Committee Members

This election of new members to the SC shall normally take place at the workshop itself in an open meeting. In exceptional circumstances, the SC chair may make alternative arrangements for the election. This should only be considered when the normal open meeting process is impossible.

2.1.3 Election of the Steering Committee Chair (SCC)

- The SCC is elected by the Steering Committee.
- Steering Committee Chair is elected (or re-elected) for 3 years with a maximum of 2 terms.

2.2 Website

The SC is responsible for maintaining a website with relevant statistics on past workshops and an updated version of the present charter.

2.3 General Chair (GC) and Program Chairs (PCs)

- A member of the community wishing to serve as a future GC should submit a proposal to chair a workshop to the chair of the SC. The GC should preferably have prior leadership experience in a similar role that led to a successful research/scientific event.
- The GC should recommend PCs for approval to the SC as part of the proposal. Normally, two PCs will be selected to ensure a degree of coverage not obtainable with a single PC and also to help to manage any potential conflicts on interest in the reviewing process. Where is more than one PC, there will be a clear distinction of roles for each PC.
- The Technical Program Committee (TPC) membership should change yearly, balancing a desire to bring in new people and maintain continuity (see next section on forming the TPC).
- The role of the GC and PC is to execute the specific workshop they are chosen to lead. The GC and PC of a future year must normally be active in the current (or prior) year's workshop, in some capacity, so as to gain experience.
- The GC and PC will be responsible and accountable for the planning and execution of an IWoR workshop.

- GC and PC should normally have served as a program committee member to qualify.
- Workshop selection can be up to 3 years in advance, and no less than one year. The minimum period is designed to ensure that the community is informed well in advance of the location of future events and composition of organizing committee.
- The GC shall issue periodic reports on the status of the planning and execution of the workshop to the SC. The GC and PC should use the SC for advice in planning for the workshop.
- For the IWoR instance for which they hold their position as GC or PC, GCs and PCs are forbidden from submitting papers to the workshop.

2.4 Technical Program Committee Selection

The composition of a technical program committee is one of the most important factors in determining the quality of a workshop and the quality of the papers it accepts. This in turn reflects on the long-term prestige of the workshop and ultimately on the impact it is able to have. The quality of reviews is an important concern for the IWoR workshop. Reviewing should beseen as a primary scientific service provided by IWoR to the community as a whole. The PCs should pay particular attention to ensuring that reviews are fair, sufficiently detailed and that points made by reviewers are justified in the review. TPC members will be selected for their expertise and ability to reliably and consistently perform the role of expert and fair reviewer.

The Steering Committee has thus adopted a set of guidelines for use by Program Chairs in assembling a technical program committee (guidelines provided in next section). Program Chairs are asked to submit their list of prospective TPC members to the Steering Committee Chair at least one month prior to the desired date for sending out invitations to the TPC.

If a prospective TPC member, or the list of members as a whole, does not meet these guidelines, the Program Chairs should indicate this, and provide arguments for these cases. The Steering Committee will consider, on a case-by-case basis, such arguments, as it evaluates the TPC list as a whole. The Steering Committee reserves the right to require changes in TPC composition based on these guidelines.

3. Guidelines

3.1 Guidelines to Form a Technical Program Committee

- Reviewers need to be able to judge whether research submitted to IWoR is technically sound, contributes to the field, and is novel with respect to previous work. To ensure that reviewers have this qualification, IWoR requires that to serve on the IWoR TPC, a person must have had an active role in the field of software engineering, software maintenance or software artifacts transformation Research in the preceding 5 years.

- Technical program committees require continuity to ensure that the workshop goals can continue to be met. It is also important, however, that TPCs make room for new members, and that Program Chairs do not feel obliged to retain, for historical reasons, committee members. In particular, those TPC members who fail to meet the high standards of reviewing expected by IWoR, should not be included for the following year's TPC. Incoming PCs should request an indication of performance of the TPC members form the outgoing PCs to ensure that this information is passed on. It should be treated as confidential and sensitive information and therefore passed on in strictest confidence, including only the outgoing and incoming PCs and GCs and the SC. No lasting record other than the communication between the outgoing and incoming PCs is to be retained. We recommend that TPCs explicitly incorporate a process of rotating members on and off of the TPC, as follows:

  TPC members shall normally serve on no more than three consecutive TPCs, following which they must be omitted from the TPC for at least one year.

  On each TPC, between 25% and 30% of the members shall be new with respect to the preceding year's TPC.

  Given the desire to continue to project IWoR as an international and inclusive workshop, Program Chairs should make every effort to achieve diversity on the TPC with respect to gender, geographic distribution, technical expertise, scientific and engineering viewpoint, experience, and industry versus academic experience etc.

  To determine the size of a TPC, calculate an estimate of paper submissions E given the submission numbers from the preceding two workshops, and determine the number of TPC members necessary to handle E papers, consistent with having 3-4 reviewers per paper, and a reviewing load of between 4 to 7 papers per member.

3.2 Location and Schedule

- The location should be practical to facilitate growth and quality of the workshop.
- It is anticipated that at least on odd numbered years IWoR will be co-locate with ICSE. Like all guidelines of this charter, this guiding principle can be changed by the SC at its discretion following a majority vote to do so, but such a decision should be recorded through the mechanism of an updater to the charter.