SlickChair

Olivier Blanvillain
École Polytechnique Fédérale
de Lausanne (EPFL)
1015 Lausanne, Switzerland
olivier.blanvillain@epfl.ch

ABSTRACT

Ut in dolor et magna tincidunt mattis. Proin id pulvinar arcu. Donec ac turpis consectetur, dignissim eros at, mollis orci. Nunc sed tincidunt justo, eu dapibus risus. Vestibulum nisi mi, tempus nec cursus at, accumsan vitae metus. Cras mattis, velit ut convallis lacinia, metus enim rutrum sapien, quis egestas ante ipsum ut lacus. Aliquam erat volutpat. Mauris vitae commodo nisi. Nunc iaculis, enim vulputate cursus interdum, sapien libero sodales diam, viverra molestie diam tellus eu felis. Quisque gravida porttitor vulputate. Duis nec neque facilisis, porttitor ante id, molestie sem. Vivamus pellentesque venenatis est, ut consequat arcu tempus a. Phasellus ullamcorper nunc vel rhoncus suscipit. Curabitur commodo ornare accumsan. Mauris vitae lorem arcu. Mauris vel turpis mi. Fusce faucibus congue ante, eu gravida sem. Cum sociis natoque penatibus et magnis dis.

1. INTRODUCTION

Peer reviewing is a central process in the organisation of scientific conferences. It involves multiple interactions between it's participants: authors share their work with the program committee which is then in charge of reviewing these submissions. A program chair is designated to coordinate the process and decide on final submission acceptance. While this peer review process could be implemented by simply exchanging emails between participants, manually gathering submissions, assigning them to program committee members, aggregating the reviews and finally notifying the authors requires substantial efforts. The use of a dedicated software, called conference management system, can greatly simplifies this process.

Over the last few years, numerous web based conference management systemhave been developed. A recent comparative study [10] shows that Easychair [5] is by large the most popular platform, having been used in about 68% of conferences organized with online conference management system. The following 4 systems in term of number of organized conferences are EDAS [6] with 8.5%, Open Conference Systems [8] with 6%, START V2 [11] with 5.7% and ConfTool [2] with 5.3%. However, out of these 5 systems, only Open Conference Systems is open-source. Easychair and ConfTool offer free licenses of their restricted versions and START V2 and EDAS are only available as a commercial product.

The importance and confidentiality of the data manipulated by a conference management systemimply that security a major concern when working with such system. Closed source solutions are often only available as hosted services, therefore requiring conference organisers to trust the company behind the product not only for the quality of the code, but also for the robustness of the infrastructure and the respect of data privacy. The open-source solutions we considered where not providing satisfactory levels of security. For example, Open Conference Systems sends a copy of the user passwords by email as plain text once the registration is completed. HotCRP [7], another open-source conference management system, has a similar flaw: it sends login links to users with the password as part of the url.

We present SlickChair, an open-source conference management systemwritten in Scala. Build with the Play framework and the Slick database access library, SlickChair provides a highly flexible and extensible solution to manage peer review processes. Our contributions are in particular:

- The plan

2. OVERVIEW OF SLICKCHAIR

This section presents .. from the pov of different actors of the system: authors pcms and program chair. [4]:

- Submission of abstracts and papers by Authors
- Submission of reviews by the Program Committee Members (PCM)
- Download of papers by Program Committee (PC)
- Handling of reviewers preferences and bidding
- Web-based assignment of papers to PCMs for review
- Review progress tracking
- Web-based PC meeting
- Notification of acceptance/rejection
- Sending e-mails for notifications

1. Submission of papers
2. Assignment to reviewers
3. Mailings to PC members
4. Submissions of reviews

5. Reviewer comment threads
6. Distributed PC meeting
7. Letters to authors

Web-based assignment of papersWeb-based assignment of papers

- authors
- pcms
- program chair
- login
- actors
- phases (workflow)

Among his responsibilities, the assignment of submissions to program committee memberscan be a complex task. To be fair to all authors, submissions usually receive the same number of reviews, and this work has to be well distributed among program committee membersso that no one overloaded. Moreover, program committee membersmight have conflicts of interests with certain submissions and different levels of knowledge depending on the topics. These constraints add up for

3. DATA MODEL

[3]

datastorage database do not need transactions for most operations still the go to product because of the abstraction layer, the backup capabilities and the power of the query engine.

- functional, immutable database
- database as a value, queries as a function
- timestamp implementation
- allows for concurrent read/write
- single thread alternative for

4. EVALUATION/WHY SCALA

Some subset of [8], [1], [12], [9]...

- compilers, typechecking everywhere
- server as a function
- case classes all the way

5. FUTURE WORK:

- Macros
- Scala.js

6. CONCLUSION

- ...

7. REFERENCES

[1] Act Website. Available at: `http://act.mongueurs.net/`.

[2] ConfTool Website. Available at: `http://www.conftool.net`.

[3] Datomic. Available at: `http://www.datomic.com/`.

[4] N. Di Mauro, T. M. A. Basile, and S. Ferilli. GRAPE: An expert review assignment component for scientific conference management systems. In *Proceedings of the 18th International Conference on Innovations in Applied Artificial Intelligence*, 2005.

[5] Easy Chair Website. Available at: `http://edas.info/doc`.

[6] EDAS Website. Available at: `http://www.easychair.org`.

[7] HotCRP Website. Available at: `http://read.seas.harvard.edu/~kohler/hotcrp/`.

[8] Open Conference System Website. Available at: `http://pkp.sfu.ca/?q=ocs`.

[9] openconferenceware repository. Available at: `http://github.com/osbridge/openconferenceware`.

[10] L. Parra, S. Sendra, S. Ficarelli, and J. Lloret. Comparison of online platforms for the review process of conference papers. In *The Fifth International Conference on Creative Content Technologies*, 2013.

[11] START V2 Website. Available at: `http://www.softconf.com/`.

[12] Symposion Website. Available at: `http://eldarion.com/symposion/`.