SlickChair

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ABSTRACT
Abstract

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 [5] shows that Easychair [2] 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 [3] with 8.5%, Open Conference Systems [4] with 6%, START V2 [6] with 5.7% and ConfTool [1] with 5.3%. However, out of these 5 systems, only Open Conference Systems is open-source, restricted versions of Easychair and ConfTool are available for free while START V2 and EDAS are only available as commercial product.

- Why a new system? Sending passwords by email, hard to modify and maintain

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

5. FUTURE WORK:
- Macros
- Scala.js

6. CONCLUSION
- ...

7. REFERENCES
[1] ConfTool Website. Available at: `http://www.conftool.net`.
[2] Easy Chair Website. Available at: `http://edas.info/doc`.
[3] EDAS Website. Available at: `http://www.easychair.org`.
[4] Open Conference System Website. Available at: `http://pkp.sfu.ca/?q=ocs`.

[5] 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.

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