The aim of the Transformation Tool Contest (TTC) series is to compare the expressiveness, the usability, and the performance of transformation tools along a number of selected case studies. A deeper understanding of the relative merits of different tool features will help to further improve transformation tools and to indicate open problems.

These proceedings gather the cases and solutions developed by the contest participants of the thirteenth and fourteenth editions. Both editions were part of the Software Technologies: Applications and Foundations (STAF) federation of conferences during 2020 and 2021. Teams from the major international players in transformation tool development participated in an online setting owing to the pandemic. Thus, these are the pandemic proceedings of the TTC series.

In order to facilitate the comparison of transformation tools, our steering committee selected three challenging cases via single blind reviews for which there were together ten solutions. The cases involved: round-trip migration of object-oriented data model instances for the evolution of web-based services; incremental recompilation of laboratory worflows in order to repurpose laboratory instruments to cope with sudden surges of demand, like the need for testing capacity at the start of the pandemic; a compilation process from OCL queries to PSQL, exploring the expressivity power of transformation tools.

These proceedings comprise descriptions of these case studies and of all of the accepted solutions. In addition to the solution descriptions contained in these proceedings, the implementation of each solution (tool, project files, documentation) is made available in public version control repositories.

All cases were reviewed by the steering committee, judging the significance of the problem statement, and appropriateness of the evaluation methodology. Both TTC 2020 and TTC 2021 involved open (i.e., non anonymous) peer reviews for case solutions in a first round. The purpose of this round of reviews was for the participants to gain as much insight into the competitors' solutions as possible and also to identify potential problems. At the workshop, the solutions were presented. The expert audience judged the solutions along a number of case-specific categories, and prizes were awarded to the highest scoring solutions in each category. Finally, the conceptual contribution of each solution was written in a paper taking into account the insights gained at the workshop. The articles appearing in these post-proceedings were selected by our programme committee via single blind reviews and each paper was reviewed by two to three members of the programme committee. The full results of the contest are published on our website[1].

The contest organisers thank all authors for submitting cases and solutions, the contest participants, the STAF local organisation team, the STAF general chair Adrian Rutle, the steering committee and the program committee for their support.

25 June 2021                                                              Artur Boronat
Bergen, Norway (virtually)                              Antonio García-Domínguez
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[1]https://www.transformation-tool-contest.eu/