

## Review of Bachelor's Thesis

**Student:** Muzikář Martin  
**Title:** Tool for Effective Management of Web Application Tests (id 23124)  
**Reviewer:** Kapinus Michal, Ing., DCGM FIT BUT

1. **Assignment complexity** **more demanding assignment**  
I consider this assignment to be of higher complexity, because it requires proper study of GUI design, automated GUI testing and it assumes intensive cooperation with potential expert users, experienced quality engineers.
2. **Completeness of assignment requirements** **assignment fulfilled**
3. **Length of technical report** **in usual extent**
4. **Presentation level of technical report** **90 p. (A)**  
The thesis follows classic structure, starting with description of related theory, followed by solution draft and the implementation itself. Most of the chapters are very well organised. The theoretical part contains enough of relevant information to introduce the reader into the problematics of user interface testing. Chapter 3 presents the solution draft very well and describes the verification of the draft with domain experts in early stage of the design. The only drawback is that the text is very fragmented by using too many 3rd-level titles throughout the text and that there is no image of created interface.
5. **Formal aspects of technical report** **80 p. (B)**  
As far as I can say, the text, written in English, is of high quality, with occasional punctuation errors. The typography of the thesis is above average as well, with only few minor flaws:
  - Inconsistent usage of 3rd and 4th-level titles.
  - Occasional unnecessary blank space (page 11, 24, 25).
  - Sometimes two titles with no text in between (beginning of chapter 2, chapter 3.3).
  - Extended abstract is missing.
  - Some of the figures has label above the figure and some of them bellow.
6. **Literature usage** **75 p. (C)**  
The bibliography contains rather small amount of sources, but the theoretical base for this thesis is sufficiently covered. One of the bibliographic sources is youtube video, which would be better to mention using a footnote.
7. **Implementation results** **90 p. (A)**  
Mr. Muzikář implemented high quality application, which enable the user to interactively create and edit automated web GUI tests. This application consists of GUI, working as both input editor and visualisation of created test, and backend software, responsible for actual interactive execution of created test. Requirements for such an application were thoroughly consulted with domain experts throughout the design process, so the resulted solution is very usable.
8. **Utilizability of results**  
The solution promises high potential to improve quality and user experience in the field of writing and managing automated GUI tests and it is very likely to be used in practice.
9. **Questions for defence**  
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10. **Total assessment** **90 p. excellent (A)**  
Presented thesis is of very high quality, both the technical report and programming solution, which is functional and performs better than currently used methods for writing automated GUI tests. It is obvious, that the author thoroughly designed the solution in cooperation with domain experts, which helped him to understand their needs and to create usable tool.

In Brno 24 June 2020

Kapinus Michal, Ing.  
reviewer