

Review of Bachelor's Thesis

Student: Abramov Mikhail, Bc.
Title: Continuous Integration Dashboard (id 24064)
Reviewer: Rychlý Marek, RNDr., Ph.D., DIFS FIT BUT

1. **Assignment complexity** **average assignment**
The assignment is of the moderate complexity. The student is integrating existing CI services with well-known APIs into a single dashboard application.
2. **Completeness of assignment requirements** **assignment fulfilled**
The assignment has been fulfilled.
3. **Length of technical report** **in usual extent**
The technical report consists of 41 pages from the first to the last chapter, and it is of the usual length.
4. **Presentation level of technical report** **75 p. (C)**
The report has a logical structure that follows the development process of the software (technology overview, analysis, design, implementation). The Chap. 3 "Architecture design" is mixing both the analysis and the design and it should be split into two chapters to distinguish between these two development phases. Also, in the last Chap. 4 "System implementation", the thesis should not lack a detailed description of testing (currently, the testing is described just in the last 1-page subsection).
5. **Formal aspects of technical report** **85 p. (B)**
The technical report is written in English and both grammar and style are very good. Also typographical level of the report is good, despite some minor issues, such as usage of a hyphen instead of a dash (page 44).
6. **Literature usage** **80 p. (B)**
The bibliography consists of 20 items: technical documentation (15 items) and five books, which is satisfactory. All items are correctly used in the report and it is easy to distinguish adopted content from original contribution of the student.
7. **Implementation results** **85 p. (B)**
The student implemented a web dashboard to monitor finished (both successfully and failed) private (for LDAP users) and public CI builds on various back-ends, such as Travis or Jenkins. The dash board is implemented in Python with Django framework and ReactJS. The build status is fetched periodically or on request from the CI tools via their HTTP API. While the application supports some CI tools and more are planned, it lacks interfaces or abstract classes to generalize the existing and planned CI tools connections and stabilize their future development (the tools are hard-coded in the source code).
8. **Utilizability of results**
The software is used in the Red Hat Czech company.
9. **Questions for defence**
 - There is a lot of classes described in the thesis, but a class diagram is missing. Can you show the class diagram?
10. **Total assessment** **85 p. very good (B)**
The result of the thesis is a good technical report in English and a working software which is already utilized in a company. In my opinion, the thesis should be graded as a **very good (B)**.

In Brno 3 June 2021

Rychlý Marek, RNDr., Ph.D.
reviewer