



Review of M. Sc. Thesis

Nicolas Valentine: Case study: Performance of JavaScript on server side

Examiners: Dr. Antti-Pekka Tuovinen, Professor Tomi Männistö

	1	2	3	4	5
1. Research topic and purpose		x			
2. Knowledge of the research field and related theories as well as use of literature		x			
3. Material, acquisition of material and analyses		x	x (constructive part)		
4. Research results and reporting		x	x (constructive part)		
5. Examination of results (discussion) and conclusions			x		
6. Structure, clarity and general polish of the thesis		x			
7. Work during the thesis process			x		

Tietojenkäsittelytieteen osasto
Matemaattis-luonnontieteellinen tiedekunta

Avdelningen för datavetenskap
Matematisk-naturvetenskapliga fakulteten

Department of Computer Science
Faculty of Science

PL 68 (Pietari Kalmin katu 5), 00014 Helsingin yliopisto
Puhelin (09) 1911, faksi (09) 1915 1120, www.helsinki.fi/fi/tietojenkäsittelytiede

PB 68 (Pehr Kalms gata 5), FIN-00014 Helsingfors universitet
Telefon +358 9 1911, fax +358 9 1915 1120, www.helsinki.fi/sv/datavetenskap

P.O. Box 68 (Pietari Kalmin katu 5), FIN-00014 University of Helsinki
Telephone +358 9 19111, fax +358 9 1915 1120, www.helsinki.fi/en/computer-science



The topic of the thesis is studying the performance impact on a processing intensive component of a node.js application back-end when separated from the main application and run as an independent service in its own server. The topic is relevant for computationally intensive applications that are sensitive for timing issues (e.g. response times) but the topic is not very challenging and the research question is quite simple.

The thesis comprises a literature review of similar or applicable cases and a constructive part where the component is extracted as its own service and its performance is measured both as part of the application and when run as an independent service in a live production environment.

The literature review is done in a semi-systematic form, which is suitable for the topic. However, the scientific quality of the primary studies is not assessed and remains questionable. The references also lack bibliographic details making it difficult to judge the quality of the forums. Otherwise, the literature part is done and documented in a passable manner. The constructive part comprising the measurement is done in a professional manner and appears to be quite solid. The thesis makes no reference to method literature nor does it discuss the application of the methods. Overall, the number of references is small for a thesis.

Results are discussed and presented in an acceptable manner and appropriate conclusions are drawn making a convincing case what comes to the constructive part. It would have been better to describe the results of the literature review separately from the measurements. It is strange that Results chapter does not describe the actual results of the review but just the search for literature.

The thesis looks neat and there are several clear illustrations that support the text well. The language is good.

The thesis is quite short and it leaves a very modest overall impression. However, it fulfills the basic requirements for a master's thesis to an acceptable degree, and is not without some merit. It does show certain professionalism despite its methodological and other weaknesses as a scientific text.

Suggested grade: 2

Pro Gradu -tutkielmat

Valentine Nicolas

: 2

Case study: Performance of JavaScript on server side

Tuovinen Antti-Pekka.

Reviewed by not yet reviewed:

No statement

Männistö Tomi.

Reviewed by not yet reviewed:

No statement