Please indicate your name and your given identifier, and do the same for the essay's author.

| Reviewer's name: | Nicola Meneghetti | Identifier[1]: | 876a5df21ca |
|---|---|---|---|
| Author's name: | Wouter Joosse | Identifier: | 7a4e45277ef |

**Software Quality Management**
**Essay – Peer review**

## Short summary

Please summarise the essay with your own words as you understand now. You should use maximum 100 words.

The essay initially provides a definition of microservices, considering best and worst architectural practices with a focus on antipatterns, how to identify them and their impact in term of development and business costs.

## Rubric table

Please fill in the table. You can approve the various aspects by an 'OK' or write a few words if it is needed.

### Formal requirements

The essay (that is, the Milestone version of the essay that we call simply essay in this document) satisfies the formal requirements.

| | |
|---|---|
| LaTeX template<br>The essay uses the appropriate template and is created by LaTeX. | OK |
| topic identified<br>The essay is explicitly displayed in or under the title. | Topic title is not reported and the subtitle appears as main one. |
| subtitle, author, name, e-mail adapted<br>Besides the default title and topic, the author provided a subtitle. Furthermore, the author and his/her e-mail address are given. | OK |
| structure: abstract, introduction, ideas, references<br>The essay contains all required sections. | OK |
| page limit<br>The essay is not shorter than half a page and not longer than two pages. | OK |

### Writing and content

Here, you assess how well the essay is written. Please fill in this part of the rubric only after reading the entire essay at least once, but preferably twice.

| | |
|---|---|
| introduction is well-written and contains three or four paragraphs<br>The Introduction section should be well written with regard to clarity, paragraph construction and content. With respect to the latter, it is important that the most important concepts of the entire essay are already introduced in this section. (For instance, if the essay is about measuring success of Scrum-managed development projects, the author should explain what it means to measure in this context, how success is defined and what are the most relevant aspects of Scrum here.)<br>You can highlight if some of these aspects are really good or, in the contrary, require further work. (For instance, 'the paragraphs are well-structured and the Introduction is easy to follow' or 'an important concept is not introduced: Scrum'.) | Not all the paragraphs presented in the introduction seem to follow the typical structure provided during the lesson such as:<br>1. Optional connecting sentence<br>2. Topic sentence<br>3. Sustaining sentence(s)<br>4. Conclusion |

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[1] Visit the website http://www.cs.ru.nl/G.Alpar/subs/hash/id.php to generate an identifier.

| | |
|---|---|
| **correctness**<br>The essay contains correct information with regard to the software engineering. If something is not correct, then be specific to help the author improve the essay. | OK |
| **three distinct and clear ideas**<br>The ideas should be research questions. (For instance, 'To what extent can certification be an effective tool to provide trust for webshops when developing for the GDPR?' or 'How can agile methods be used in this context when the customer may not be available in each iteration?') The essay contains exactly three ideas, they are clearly distinguishable in the text and they are not overlapping in content. | OK, the ideas are clear and do not overlap with each other. |
| **ideas explained**<br>The ideas placed in context and explained clearly. | OK, ideas are explained but not in the Introduction section. As far as I understood from the rubric the Ideas section should only provide the 3 questions with optional initial and/or concluding paragraphs. |
| **target audience is fellow students**<br>The essay is not too easy (for instance, too many obvious facts without evidence) and not too difficult (e.g. specific concepts are not explained) to follow for a software engineer. | OK |
| **abstract is concise and complete**<br>The Abstract is between three and eight sentences. It describes what the problem is in the essay and what directions the essay proposes to research that. | The abstract starts very well but it does not describe completely the focus of your essay such as antipatterns, their impact and how to spot them. |
| **used only own words (no plagiarism, appropriate quotes, etc.)**<br>The essay is written by the author and texts are not taken without references and quotation marks. In general, it complies with the ethical requirements of a scientific work. | OK |
| **spelling and grammar**<br>The grammar and the spelling are accurate; the text is easy to follow. | I noticed some spelling errors (one that occurs quite often is area's instead of areas). I believe that some constructs are closer to Dutch than to English. Nonetheless the text is easy to follow and subjects are clear. |

## References

References are important in a scientific context. It should be clear in the text what the reason is for the reference (for instance, a concept was introduced or thoroughly studied in the paper). At the end of the essay, there is a References section containing a list of publications, all complete and well-formatted.

| | |
|---|---|
| **at least four references**<br>The essay has at least four relevant, scientific references. Wikipedia pages and blog posts do not count. (By the way, a URL to a blog post or some online resource should rather be in a footnote.) | The references look ok, my only doubt is about the reference 2. The article, despite being very technical and professional, looks more |

| | |
|---|---|
| | like a blog article than a scientific one. |
| **the fundamental paper is cited**<br>This paper is referred to at a relevant place and it is in the reference list: A. Fuggetta and E. Di Nitto, "Software process," in *Proceedings of the on Future of Software Engineering*. ACM, 2014, pp. 1–12. | OK |
| **references are appropriate in terms of format and content**<br>A reference has three components, all of which should be correct: 1. the author(s) (e.g. *Smith et al.*), 2. the notation in the text (e.g. *[7]*) and 3. the reference at the end. Furthermore, all the references have to be indeed relevant with regard to the text where it is cited. | The format of the references is fine but the way they are cited or the way authors are called in the text seems different from what I have usually seen on other papers. Have a look also at the reference 8, I do not think that is correct saying: "Technical dept is a term introduced by [8] to indicate". A more suitable way to address this could be: "As introduced by Ward Cunningham in his study [8], technical dept is a term used to indicate..." |

## Recommendations

Please provide a list of **constructive feedback** below how the author can improve his/her essay. Your recommendations should consider the content, the understandability, the style, the language, small mistakes and whatever you think important with regard to the quality of the essay.

- Besides all the above recommendations I would suggest using some tools for checking the spelling and the form such as Grammarly (https://www.grammarly.com/), this really helped me a lot and is very reliable.
- As for the paragraph structure, the slides from the third lesson, especially from 20 to 29 helped me tremendously together with this guide: https://www.scribbr.com/research-paper/paragraph-structure/ .

## Closing remark(s)

At the end of the review, summarise it by highlighting something that **you really liked** about the essay.

The essay is clear, your goals are well described and I can clearly notice the funnel structure. I think that your questions are shedding light on some interesting aspects that need indeed more investigation.

# Instructions for the peer review

According to the Oxford Dictionary, a peer is "a person of the same age, status, or ability as another specified person". In an academic setting, you provide a *peer review* (in Dutch, it is often written as one word, *peerreview*) to another professional in your field, a colleague or a fellow student.

This peer review plays an important role in the essay assignment, and it has two objectives. On the one hand, you help your peers to improve their essays. Therefore, it is important that your feedback should be constructive and positive, which encourages the author. On the other hand, a peer-review process enhances your skills too. First of all, you learn from others' essays. Also, you see how other students think and communicate. Furthermore, it forces you to read critically. This, in turn, enhances your ability to read other academic works. As an extra, by reading carefully what your peers have written, makes your written communication also better. When giving feedback, be critical and constructive when filling in the peer review!

The peer review includes four parts; a short summary, the rubric table, some recommendations and closing remarks. [*]

## Short summary

Please summarise the essay with your own words as you understand now. You should use maximum 100 words.

## Rubric table

Please fill in the table. You can approve the various aspects by an 'OK' or write a few words if it is needed.

### Formal requirements
The essay (that is, the Milestone version of the essay that we call simply essay in this document) satisfies the formal requirements.

LaTeX template
> The essay uses the appropriate template and is created by LaTeX.

topic identified
> The essay is explicitly displayed in or under the title.

subtitle, author, name, e-mail adapted
> Besides the default title and topic, the author provided a subtitle.
> Furthermore, the author and his/her e-mail address are given.

structure: abstract, introduction, ideas, references
> The essay contains all required sections.

page limit
> The essay is not shorter than half a page and not longer than two pages.

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[*] All the instructions and remarks that you find from here on in this section, are included in the peer-review document, possibly with small letters.

## Writing and content

Here, you assess how well the essay is written. Please fill in this part of the rubric only after reading the entire essay at least once, but preferably twice.

introduction is well-written and contains three or four paragraphs

> The Introduction section should be well written with regard to clarity, paragraph construction and content. With respect to the latter, it is important that the most important concepts of the entire essay are already introduced in this section. (For instance, if the essay is about measuring success of Scrum-managed development projects, the author should explain what it means to measure in this context, how success is defined and what are the most relevant aspects of Scrum here.)
>
> You can highlight if some of these aspects are really good or, in the contrary, require further work. (For instance, 'the paragraphs are well-structured and the Introduction is easy to follow' or 'an important concept is not introduced: Scrum'.)

correctness

> The essay contains correct information with regard to the software engineering. If something is not correct, then be specific to help the author improve the essay.

three distinct and clear ideas

> The ideas should be research questions. (For instance, 'To what extent can certification be an effective tool to provide trust for webshops when developing for the GDPR?' or 'How can agile methods be used in this context when the customer may not be available in each iteration?') The essay contains exactly three ideas, they are clearly distinguishable in the text and they are not overlapping in content.

ideas explained

> The ideas placed in context and explained clearly.

target audience is fellow students

> The essay is not too easy (for instance, too many obvious facts without evidence) and not too difficult (e.g. specific concepts are not explained) to follow for a software engineer.

abstract is concise and complete

> The Abstract is between three and eight sentences. It describes what the problem is in the essay and what directions the essay proposes to research that.

used only own words (no plagiarism, appropriate quotes, etc.)

> The essay is written by the author and texts are not taken without references and quotation marks. In general, it complies with the ethical requirements of a scientific work.

spelling and grammar

> The grammar and the spelling are accurate; the text is easy to follow.

## References

References are important in a scientific context. It should be clear in the text what the reason is for the reference (for instance, a concept was introduced or thoroughly studied in the paper). At the end of the essay, there is a References section containing a list of publications, all complete and well-formatted.

at least four references

> The essay has at least four relevant, scientific references. Wikipedia pages and blog posts do not count. (By the way, a URL to a blog post or some online resource should rather be in a footnote.)

the fundamental paper is cited

> This paper is referred to at a relevant place and it is in the reference list: A. Fuggetta and E. Di Nitto, "Software process," in *Proceedings of the on Future of Software Engineering*. ACM, 2014, pp. 1–12.

references are appropriate in terms of format and content

> A reference has three components, all of which should be correct: 1. the author(s) (e.g. Smith et al.), 2. the notation in the text (e.g. [7]) and 3. the reference at the end.
>
> Furthermore, all the references have to be indeed relevant with regard to the text where it is cited.

## Recommendations

> Please provide a list of constructive feedback below how the author can improve his/her essay. Your recommendations should consider the content, the understandability, the style, the language, small mistakes and whatever you think important with regard to the quality of the essay.

## Closing remark(s)

> At the end of the review, summarise it by highlighting something that you really liked about the essay.

## Final rubric

For your information, you can find the rubric below that will be used to evaluate the final version of the essay. The final mark is computed as Total/40, rounded to the nearest half.

| Aspect | Max | Points received |
| --- | --- | --- |
| Format | 5 | |
| Correct template | 1 | |
| Correct document structure | 1 | |
| Page limits: 2-3 pages | 1 | |
| References and citations are correct | 2 | |
| Content | 20 | |
| Abstract: good summary of the work | 3 | |
| Introduction: quality of the intro to the topic (narrowing from general to the specific topic) | 4 | |
| Main part: Relevance of the ideas | 6 (3*2) | |
| Main part: Level of knowledge reflected in the text | 5 | |
| Future work: relation to the main part | 1 | |
| Future work: quality of content | 1 | |
| Writing | 7 | |
| Abstract: clarity | 1 | |
| Introduction: clarity | 1 | |
| Paragraph structure and logical advance | 3 | |
| Clarity of the text (coherent essay) | 2 | |
| Peer review | 8 | |
| Clear and constructive feedback | 2 | |
| Reviews reflect good knowledge and attitude | 3 | |
| Received feedback is (critically) applied | 3 | |
| | Total | |