

Criteria for

Certified Professional for
Software Architecture (CPSA)[®]
Expert Level

2023.1-RC1 - EN-20231117



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Training Provider

TODO

Training Facilitators

Criteria for a new Topic

A new topic must meet the following criteria:

| Criterion | Requirement | Description |
|-----------------|-------------|--|
| Originality | Must | Will the topic group provide new knowledge or insights to the community? Is the topic not yet completely and publicly worked on (e. B. Wikipedia)? |
| Relevance | Must | Is the topic interesting for a larger group of people? |
| Innovation | Must | Does the topic generate new ideas and new knowledge that are of general interest? |
| Creativity | Shall | Does the topic show creativity, e.g. through synergies, analogies, ideas? |
| Effectiveness | Shall | Is it to be expected that the work in software architecture can be simplified or accelerated in the future by working on the topic? |
| Problem solving | Must | Can recurring and previously insurmountable problems in the software architecture be solved by topic processing? Examples: <ul style="list-style-type: none">• Improve communication between management and software architects• Introduction of new methods, like e.g. architecture management, Domain-Driven Design, Green-IT, ... |

Criteria for New Applicants

TODO

Criteria for New Moderators

TODO

Criteria for a Roadmap

| Criterion | Requirement | Description |
|---------------------|-------------|---|
| Objective, mission | Essential | <ul style="list-style-type: none"> • Are the objective and mission of the topic working group described comprehensibly? |
| Topic working group | Essential | <ul style="list-style-type: none"> • Are the contact details of all members of the topic working group stated? |
| Procedure | Essential | <ul style="list-style-type: none"> • Are the roles and tasks of the members of the topic working group described? • Is a timetable with milestones provided? • Are the times and locations for the optional in-person meetings stated? • Are the times and resources for the virtual meetings stated? • Are the tools for electronic communication listed? • Are work packages and responsibilities defined? • Is the review process determined? |
| Literature | Essential | <ul style="list-style-type: none"> • Is there a bibliography? • Does the bibliography comprise at least 7 sources? • Are the sources of academic value? |
| Results | Essential | <ul style="list-style-type: none"> • Is the mandatory article discussed? • Is at least one additional result stated (e.g., instructions, example, ...)? • Are the form and structure discussed for each result? • Does the topic working group attempt to present the results at at least one conference? • Does the topic working group attempt to publish the results in at least one trade publication? |

Formal Criteria

| Criterion | Requirement | Description |
|-----------|-------------|---|
| Article | Essential | <p>Does the article have the following structure and content?</p> <ol style="list-style-type: none"> 1. Title <ol style="list-style-type: none"> a. Does the title suit the topic discussed? 2. Authors <ol style="list-style-type: none"> a. Are the authors named? b. Are the authors' e-mail addresses listed? 3. Abstract <ol style="list-style-type: none"> a. Is the problem described briefly? b. Does the abstract describe the main theses or results? c. Is the description short and understandable? 4. Introduction <ol style="list-style-type: none"> a. Does the introduction describe the current state of knowledge? b. Is the motivation discussed? c. Is there a description of the existing knowledge gaps that are to be filled by this academic article? d. Is there a description of the research questions that are to be answered in the article? |

| Criterion | Requirement | Description |
|-------------------|-------------|--|
| | | <p>5. Main section (chapter name(s) can be chosen freely)</p> <p>a. Materials and methods</p> <p>i. Is there a description of the information sources?</p> <p>ii. Is there a description of the methods used to answer the research question?</p> <p>b. Results</p> <p>i. Is there a description of the findings?</p> <p>ii. Are the findings substantiated with sufficient plausible data?</p> <p>c. Discussion</p> <p>a. Is there a description of how the findings are interpreted?</p> <p>b. Is there a discussion of questions that arise from the results?</p> <p>c. Is there a discussion of the impacts that the findings have in practice?</p> <p>6. Summary</p> <p>a. Is there a brief summary of all of the research questions and their answers?</p> <p>b. Is there a brief discussion of the effects of the findings?</p> <p>7. Acknowledgments</p> <p>a. Are supporters mentioned?</p> <p>8. Conflicts of interest</p> <p>a. Are conflicts of interest mentioned?</p> <p>9. Bibliography</p> <p>a. Is there a list of all of the literature used?</p> <p>b. Is the literature cited correctly?</p> |
| Additional result | Essential | <ul style="list-style-type: none"> • Do the form and content fulfill the purpose of the result (e.g., a new pattern according to the pattern language context, problem, solution)? • Is there a comprehensible description of the result? • Is it evident that at least two person weeks were necessary for the creation of the additional result? |
| Submissions | Desired | <ul style="list-style-type: none"> • Has the topic working group submitted a talk or a workshop to at least one conference? • Has the topic working group attempted to publish the results in at least one trade publication? |

| Criterion | Requirement | Description |
|-------------------|-------------|---|
| Experience report | Essential | <ul style="list-style-type: none">• Has each member of the topic working group submitted an experience report?• Are all the points in the experience report completed? |
| Collaboration | Essential | <ul style="list-style-type: none">• The topic moderator confirms that, according to their perception, all members of the topic working group have contributed to approximately the same degree.• All members of the topic working group each present a work log, in which they have logged their activities. |

If the formal criteria are fulfilled, the topic moderator passes the results on to the certifying body selected by the topic working group.

Content Criteria

| Criterion | Assessment Scheme |
|--------------------------------------|--|
| Importance for theory and practice | 10 - Outstanding importance 08 - Important 06 - Not unimportant 04 - Rather weak importance 02 - Of low importance 00 - Absolutely no relevance |
| Originality and degree of innovation | 10 - An important and meaningful contribution to the topic area 08 - A clear contribution to the topic area. 06 - A small contribution to the topic area. Added value may result from it in the future. 04 - There is better work on this topic. 02 - Already said many times. 00 - Contributes little or nothing at all to the topic area. |
| Quality of the presentation | 10 - Excellently written 08 - Well written 06 - Readable 04 - Should be edited 02 - Still significant work required 00 - Unacceptable |