

Document details

< Back to results | 1 of 1

Export Download Print E-mail Save to PDF Add to List More... >

View at Publisher

Proceedings - International Conference on Information and Communication Technology for the Muslim World 2018, ICT4M 2018

6 December 2018, Article number 8567118, Pages 185-190
2018 International Conference on Information and Communication Technology for the Muslim World, ICT4M 2018; Kuala Lumpur; Malaysia; 23 July 2018 through 25 July 2018; Category numberCFP1854K-ART; Code 143602

Requirements patterns structure for specifying and reusing software product line requirements (Conference Paper)

Ya'u, B.I.^a, Nordin, A.^a, Salleh, N.^a, Aliyu, I.^b

^aDepartment of Computer Science, Kulliyah of Information and Communication Technology (KICT), International Islamic University Malaysia, Gombak, Kuala Lumpur, Malaysia

^bDepartment of Mathematical Sciences, Faculty of Science, Abubakar Tafawa Balewa University, Bauchi, Nigeria

Abstract

View references (29)

A well-defined structure is essential in all software development, thus providing an avenue for smooth execution of the processes involved during various software development phases. One of the potential benefits provided by a well-defined structure is systematic reuse of software artifacts. Requirements pattern approach provides guidelines and modality that enables a systematic way of specifying and documenting requirements, which in turn supports a systematic reuse. Although there is a great deal of research concerning requirements pattern in the literature, the research focuses are not on requirement engineering (RE) activities of SPLE. In this paper, we proposed a software requirement pattern (SRP) structure based on RePa Requirements Pattern Template, which was adapted to best suit RE activities in SPLE. With this requirement pattern structure, RE activities such as elicitation and identification of common and variable requirements as well as the specification, documentation, and reuse in SPLE could be substantially improved. © 2018 IEEE.

SciVal Topic Prominence

Topic: Requirements engineering | Specifications | Requirement patterns

Prominence percentile: 27.255

Author keywords

Requirements patterns Requirements patterns structure Requirements reuse Software product line engineering

Indexed keywords

Engineering controlled terms: Computer software reusability Requirements engineering Rhenium alloys

Engineering uncontrolled terms: Potential benefits Requirement engineering Requirements patterns Requirements reuse Software Product Line Software product line engineerings Software requirements Well-defined structures

Engineering main heading: Software design

Metrics

0 Citations in Scopus
0 Field-Weighted Citation Impact



PlumX Metrics Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert >

Set citation feed >

Related documents

Requirement patterns to support socio-technical system design

Hoffmann, A. , Söllner, M. , Hoffmann, H. (2014) Socio-Technical Design of Ubiquitous Computing Systems

Specification of requirements in the information systems domain with the use of patterns | Especificação de requisitos no domínio de sistemas de informação com o uso de padrões

Barcelos, L. , Penteadó, R. (2016) CIBSE 2016 - XIX Ibero-American Conference on Software Engineering

Software requirement patterns Franch, X. (2013) Proceedings - International Conference on Software Engineering

View all related documents based on references




Find more related documents in Scopus based on:

ISBN: 978-153867525-0
Source Type: Conference Proceeding
Original language: English

DOI: 10.1109/ICT4M.2018.00042
Document Type: Conference Paper
Publisher: Institute of Electrical and Electronics Engineers Inc.

References (29)

[View in search results format >](#)

All | [Export](#)  [Print](#)  [E-mail](#)  [Save to PDF](#) [Create bibliography](#)

-
- 1 Gonzalez-Perez, C., Henderson-Sellers, B.
(2008) *Metamodelling for Software Engineering*. Cited 80 times.
Wiley Publishing
-
- 2 Ya'U, B.I., Nordin, A., Salleh, N.
Investigation of requirements reuse (RR) challenges and existing RR approaches

(2017) *Advanced Science Letters*, 23 (5), pp. 4101-4105.
<http://www.ingentaconnect.com.ezproxy.um.edu.my/contentone/asp/asl/2017/00000023/00000005/art00062>
doi: 10.1166/asl.2017.8232

[View at Publisher](#)
-
- 3 Withall, S.
(2007) *Software Requirement Patterns*. Cited 97 times.
Pearson Education
-
- 4 Palomares, C., Quer, C., Franch, X., Guerlain, C., Renault, S.
A catalogue of non-technical requirement patterns

(2012) *2012 2nd IEEE International Workshop on Requirements Patterns, RePa 2012 - Proceedings*, art. no. 6359969, pp. 1-6. Cited 12 times.
ISBN: 978-146734376-3
doi: 10.1109/RePa.2012.6359969

[View at Publisher](#)
-
- 5 Renault, S., Méndez-Bonilla, Ó., Franch, X., Quer, C.
A Pattern-Based method for building requirements documents in call-for-tender processes

(2009) *International Journal of Computer Science and Applications*, 6 (5), pp. 175-202. Cited 36 times.
<http://www.tmrfindia.org/ijcsa/v6i57.pdf>
-
- 6 Ya'u, B.I., Nordin, A., Salleh, N.
Software requirements patterns and meta model: A strategy for enhancing requirements reuse (RR)

(2016) *Proceedings - 6th International Conference on Information and Communication Technology for the Muslim World, ICT4M 2016*, art. no. 7814900, pp. 188-193.
ISBN: 978-150904521-1
doi: 10.1109/ICT4M.2016.42

[View at Publisher](#)
-