

List of quality attributes for AAL software systems

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Table ?? lists the 97 quality attributes that were found at conducting the systematic review about quality attributes and quality models for AAL software systems.

Table 1: List of quality attributes

ID	Attributes	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	(#)	(%)	
1	Safety	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	52,9
2	Security	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	52,9
3	Usability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	52,9
4	Availability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8	47,1
5	Efficiency	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	41,2
6	Reliability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	41,2
7	Accuracy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	35,3
8	Robustness	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	35,3
9	Maintainability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	29,4
10	Accessibility	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	23,5
11	Adaptivity	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	23,5
12	Confidentiality	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	23,5
13	Integrity	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	23,5
14	Resource consumption	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	23,5
15	Timeliness	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	23,5
16	Effectiveness	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	17,6
17	Extensibility	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	17,6
18	Installability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	17,6
19	Natural, anticipatory HCI ¹	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	17,6
20	Performance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	17,6
21	Usefulness	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	17,6
22	User acceptance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	17,6
23	Acceptability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
24	Adaptability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
25	Adequacy for small devices	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
26	Certainty	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
27	Changeability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
28	Communication overhead	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
29	Ease of use	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
30	Encryption	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
31	Flexibility	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
32	Heterogeneity	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8
33	Integrability	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	11,8

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¹Human Computer Interaction

Table 1 – Continued from previous page

ID	Attributes	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	(#)	(%)
34	Interoperability																1	1	2	11,8
35	Learnability				1													1	2	11,8
36	Portability												1				1	2	11,8	
37	Presence of SPoF ²					1												1	2	11,8
38	Privacy															1	1	2	11,8	
39	Productivity				1								1						2	11,8
40	Profile definition					1											1	2	11,8	
41	Recoverability					1											1	2	11,8	
42	Safety pattern usage					1											1	2	11,8	
43	Satisfaction				1									1				2	11,8	
44	Suitability		1							1								2	11,8	
45	User role					1											1	2	11,8	
46	Analysability											1						1	5,9	
47	Authentication									1								1	5,9	
48	Awareness					1												1	5,9	
49	Compatibility with standards																1	1	5,9	
50	Completeness									1								1	5,9	
51	Conformity											1						1	5,9	
52	Context consistency									1								1	5,9	
53	Context correctness									1								1	5,9	
54	Contextual knowledge																1	1	5,9	
55	Data volume									1								1	5,9	
56	Delay time									1								1	5,9	
57	Dependability																	1	5,9	
58	Development time and cost															1		1	5,9	
59	Ease of maintenance															1		1	5,9	
60	Evolvability																1	1	5,9	
61	Extrapolation											1						1	5,9	
62	Feasibility									1								1	5,9	
63	Fulfillment					1												1	5,9	
64	Functionality												1					1	5,9	
65	Generality									1								1	5,9	
66	Identification									1								1	5,9	
67	Information processing																1	1	5,9	
68	Interface compatibility															1		1	5,9	
69	Invisibility															1		1	5,9	

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²Single Point of Failure

Table 1 – Continued from previous page

ID	Attributes	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	(#)	(%)	
70	Manageability																1		1	5,9	
71	Modifiability											1								1	5,9
72	Multi user									1										1	5,9
73	Obrusiveness or integration																1			1	5,9
74	Personalization					1														1	5,9
75	Precision								1											1	5,9
76	Proceeding speed					1														1	5,9
77	Quality of data																	1		1	5,9
78	Relevance		1																	1	5,9
79	Replicability																1			1	5,9
80	Responsiveness					1														1	5,9
81	Reusability																1			1	5,9
82	Run-time behavior											1								1	5,9
83	Scalability										1									1	5,9
84	Self-configuration																			1	5,9
85	Self-maintenance																			1	5,9
86	Self-optimization																			1	5,9
87	Stability												1							1	5,9
88	Sustainability																1			1	5,9
89	Testability												1							1	5,9
90	Time accuracy											1								1	5,9
91	Trustfulness																			1	5,9
92	Universal access														1					1	5,9
93	Universality																			1	5,9
94	Unobtrusiveness															1				1	5,9
95	Upgradability																	1		1	5,9
96	User centric																		1	1	5,9
97	User's autonomy																1			1	5,9
Total by study		13	10	10	10	13	10	16	4	7	11	13	9	14	10	3	16	22	28		