Custom View Settings

Topic 1 - Single Topic

Question #1 *Topic 1*

What are the four key terms in common definitions of software architecture? (Choose four.)

A. Source code

B. Building Blocks

C. Functionality

D. Relationships

E. Components

F. Requirements

G. Interfaces

Correct Answer: *BDEF*
Reference:
http://www.michael-richardson.com/processes/rup_for_sqa/core.base_rup/guidances/concepts/software_architecture_4269A354.html

EDA2022 1 year, 4 months ago
I think interfaces is a better option rather than requirements because relationships can be dependencies associations interfaces
upvoted 3 times

Question #2 *Topic 1*

What role does understandability play for architecture documentation? (Choose three.)

A. It is desirable, but not essential.

B. It is less important than completeness.

C. It is an important quality characteristic.

D. It is a quality characteristic together with correctness and efficiency.

E. It is a quality characteristic together with simplicity and brevity.

F. It is a quality characteristic together with scope and completeness.

Correct Answer: *CDE*
Reference:
https://courses.cs.vt.edu/~csonline/SE/Lessons/Qualities/index.html

Question #3 *Topic 1*

HOTSPOT -

Which statements regarding top-down and bottom-up design are true? (Assign all answers.)

Hot Area:

true	false	
○	○	A) Top-down and bottom-up design may be employed in the same project.
○	○	B) Top-down requires that details be ignored initially.
○	○	C) Architects leave the bottom-up design to developers.
○	○	D) Generally, architects should work top-down.
○	○	E) Bottom-up design means to proceed from the abstract to the concrete.
○	○	F) Different ideas about top-down and bottom-up approaches constitute a potential for conflict.

Correct Answer:

true	false	
○	○	A) Top-down and bottom-up design may be employed in the same project.
○	○	B) Top-down requires that details be ignored initially.
○	○	C) Architects leave the bottom-up design to developers.
○	○	D) Generally, architects should work top-down.
○	○	E) Bottom-up design means to proceed from the abstract to the concrete.
○	○	F) Different ideas about top-down and bottom-up approaches constitute a potential for conflict.

alper1234455 7 months, 2 weeks ago

T-T-F-T-F-F

upvoted 3 times

Question #4 *Topic 1*

HOTSPOT -

Which statements with regard to project objectives and architectural objectives are true and which are false? (Assign all answers.)

Hot Area:

true	false	
○	○	A) Architectural objectives and project objectives need to be identical.
○	○	B) Most of the time, architectural objectives are of a more long-term nature than project objectives.
○	○	C) Architectural objectives and project objectives need to be negotiated between the concerned parties.
○	○	D) Architectural objectives are a subset of project objectives.

Correct Answer:

true	false	
○	○	A) Architectural objectives and project objectives need to be identical.
○	○	B) Most of the time, architectural objectives are of a more long-term nature than project objectives.
○	○	C) Architectural objectives and project objectives need to be negotiated between the concerned parties.
○	○	D) Architectural objectives are a subset of project objectives.

Question #5 *Topic 1*

HOTSPOT -

How does management and architects work together? Decide which statements are true and which are false. (Assign all answers.)

Hot Area:

true	false	
○	○	A) The project plan from management is influenced by architectural decisions.
○	○	B) Cost estimates are primarily the responsibility of the architect.
○	○	C) Architects advise project management on the definition of work packages.
○	○	D) Management and architects cooperate on handling of technical risks.

Correct Answer:

true	false	
○	○	A) The project plan from management is influenced by architectural decisions.
○	○	B) Cost estimates are primarily the responsibility of the architect.
○	○	C) Architects advise project management on the definition of work packages.
○	○	D) Management and architects cooperate on handling of technical risks.

Mokel 2 weeks, 4 days ago

False - False - True - True

upvoted 1 times

Question #6 *Topic 1*

HOTSPOT -

How are written documentation and verbal communication of software architectures related? Please mark the following statements as true or false. (Assign all answers.)

Hot Area:

true	false	
○	○	A) Agile approaches make written documentation unnecessary. In such cases, verbal communication can substitute for documentation.
○	○	B) Written documentation makes verbal reiteration unnecessary.
○	○	C) Despite written documentation, verbal communication of architectural interrelationships is important.
○	○	D) Documentation and communication should use identical terms and rationale.
○	○	E) Documentation should be created primarily for project participants who either cannot or do not want to read the system's source code.
○	○	F) Communication and documentation complement each other: verbal communication helps architects determine what must be recorded in writing.

Correct Answer:

true	false	
○	○	A) Agile approaches make written documentation unnecessary. In such cases, verbal communication can substitute for documentation.
○	○	B) Written documentation makes verbal reiteration unnecessary.
○	○	C) Despite written documentation, verbal communication of architectural interrelationships is important.
○	○	D) Documentation and communication should use identical terms and rationale.
○	○	E) Documentation should be created primarily for project participants who either cannot or do not want to read the system's source code.
○	○	F) Communication and documentation complement each other: verbal communication helps architects determine what must be recorded in writing.

Question #7 *Topic 1*

Name the three most important fields of template-based architecture documentation. (Choose three.)

A. To describe module structures (white boxes)

B. To describe individual architectural modules and their external interfaces (black boxes)

C. To use copyright templates for a consistent description of project/system meta information within documents and source codes

D. To use a standardized document structure

E. To reuse code and test case templates

Correct Answer: *ABD*

Reference:

https://buildmedia.readthedocs.org/media/pdf/roboy-sw-documentation-template/latest/roboy-sw-documentation-template.pdf

Question #8 *Topic 1*

HOTSPOT -

Which characteristics of a black-box building block are you able to specify as an architect? (Assign all answers.)

Hot Area:

predefinable	not predefinable	
○	○	A) Compliance with functional requirements
○	○	B) Compliance with non-functional requirements (i.e. meeting required constraints)
○	○	C) Metrics for its coupling with other building blocks at the same level of abstraction or at the same level of refinement
○	○	D) Purpose and/or responsibility
○	○	E) Method signature of public interfaces
○	○	F) Data formats of public interfaces
○	○	G) Structure of the source code of this building block

Correct Answer:

predefinable	not predefinable	
○	○	A) Compliance with functional requirements
○	○	B) Compliance with non-functional requirements (i.e. meeting required constraints)
○	○	C) Metrics for its coupling with other building blocks at the same level of abstraction or at the same level of refinement
○	○	D) Purpose and/or responsibility
○	○	E) Method signature of public interfaces
○	○	F) Data formats of public interfaces
○	○	G) Structure of the source code of this building block

Mokel 2 weeks, 4 days ago

P - P - NP - P - P - P - NP

upvoted 1 times

Question #9 *Topic 1*

HOTSPOT -

Which characteristics of a building block are only visible in the whitebox view, and for which characteristics does the blackbox view suffice? (Assign all answers.)

Hot Area:

Blackbox	Whitebox	
○	○	A) Public interfaces of the building block
○	○	B) Test coverage based on unit tests for sub building blocks contained in the building block
○	○	C) Test coverage based on integration tests
○	○	D) Code structure of the building block
○	○	E) Algorithms used in the building block
○	○	F) Security requirements of the building blocks
○	○	G) Implementation details for the security requirements of the building blocks

Correct Answer:

Blackbox	Whitebox	
○	○	A) Public interfaces of the building block
○	○	B) Test coverage based on unit tests for sub building blocks contained in the building block
○	○	C) Test coverage based on integration tests
○	○	D) Code structure of the building block
○	○	E) Algorithms used in the building block
○	○	F) Security requirements of the building blocks
○	○	G) Implementation details for the security requirements of the building blocks

Mokel 2 weeks, 4 days ago

B - W - B - W - W - B - W

Not sure about the integration test part though

upvoted 1 times

AWS1306 3 months ago

only testcoverage, code structure, algothism and implemnts security requirements are in the white box

upvoted 1 times

alper1234455 7 months, 2 weeks ago

Test coverage and code structure is viewable in white box

upvoted 2 times

Question #10 *Topic 1*

Which of the following techniques are best suited to illustrate the interaction of runtime building blocks? Select the four most suitable techniques.

A. Activity diagrams

B. Sequence diagrams

C. State diagram

D. Flowcharts

E. Class diagrams

F. Tabular description of interfaces

G. Depiction of screen flows (sequence of user interactions)

H. Numbered lists of sequential steps

Correct Answer: *ABCE*
Reference:
https://www.smartdraw.com/uml-diagram/

alper1234455 Highly Voted 7 months, 2 weeks ago
A-B-D-H
upvoted 8 times

ahedfi Most Recent 1 year, 5 months ago
Class diagram belongs to static structure. I think the right answer is : A,B,C,D
upvoted 1 times

Question #11 *Topic 1*

Which two of the following statements about quality characteristics are most accurate? (Choose two.)

A. Flexibility reduces testability

B. Increased flexibility improves robustness

C. Simplicity increases comprehensibility

D. Increased efficiency results in reduced performance

Correct Answer: *BC*

alper1234455 Highly Voted 7 months, 2 weeks ago
The answer should be A-C
upvoted 6 times

AWS1306 Most Recent 3 months ago
The answer should be A and B
upvoted 1 times

Question #12 *Topic 1*

For which quality characteristics is the software architect responsible?

Please name the two characteristics that best match the role of the software architect. (Choose two.)

A. The performance of the software

B. The technical quality of the software implementation

C. The suitability of the software design for its purpose

D. The software is free of errors

Correct Answer: *AB*

djcoldbrain 4 months, 2 weeks ago

Selected Answer: AC

It should be A&C based on the book Software architecture fundamentals.
The architect is responsible for:
Suitability
Reliability
Usability
Performance
Security
Maintainability
Compatibility
Portability

upvoted 1 times

anikolov 5 months, 1 week ago

Ans. should be A&C, because related to ISO: https://iso25000.com/index.php/en/iso-25000-standards/iso-25010, the quality characteristics are performance and suitability

upvoted 3 times

alper1234455 7 months, 2 weeks ago

The Answer is B-C

upvoted 4 times

Question #13 *Topic 1*

Which of the following statements regarding iterative and incremental design are correct? Please name the three statements that fit the best. (Choose three.)

A. Iterations help to deal with uncertainties.

B. The iterative approach helps to detect design problems at an earlier stage.

C. If the incremental approach is used, risks are detected at a later stage.

D. Iterative design leads to project delays.

E. If iterative design is used; the customer will be less involved.

F. If incremental design is used; key functionality is considered as early as possible.

Correct Answer: *ABF*

Question #14 *Topic 1*

HOTSPOT -

Which of the following aspects are more of a domain-related nature, and which more of technical nature? (Assign all answers.)

Hot Area:

more technical	more domain-related	
○	○	A) Choosing a database
○	○	B) Modelling a banking account
○	○	C) Legal constraints for the execution of a money transfer
○	○	D) Choosing a layout manager in a GUI
○	○	E) The average number of methods per class
○	○	F) Specification of a calculation formula

Correct Answer:

more technical	more domain-related	
○	○	A) Choosing a database
○	○	B) Modelling a banking account
○	○	C) Legal constraints for the execution of a money transfer
○	○	D) Choosing a layout manager in a GUI
○	○	E) The average number of methods per class
○	○	F) Specification of a calculation formula

jsson Highly Voted 11 months, 3 weeks ago

domain related are in my opinion: modelling a bank account, legal constraints

upvoted 5 times

anikolov Most Recent 4 months, 3 weeks ago

T-D-D-T-T-D, specification of a calculation formula , should comes from business - it is no technical related

upvoted 2 times

ahaboua 5 months, 1 week ago

the answer is almost reversed

upvoted 1 times

Question #15 *Topic 1*

Which four of the following items can be building blocks of a software architecture? (Choose four.)

A. an algorithm

B. a component

C. a test harness

D. a class

E. a processor

F. a method/procedure/function/operation

G. a local variable

H. a package

Correct Answer: *ABDH*

Question #16 *Topic 1*

HOTSPOT -

Which of the following statements regarding the design principle 'information hiding' are true and which are false? (Assign all answers.)

Hot Area:

true	false	
○	○	A) Adhering to the 'information hiding' principle increases flexibility for modifications.
○	○	B) Information hiding involves deliberately hiding information from callers or consumers of the building block.
○	○	C) Information hiding makes it harder to distinguish between interface and implementation.
○	○	D) Information hiding is a derivative of the approach of incremental refinement along the control flow.
○	○	E) In object-oriented development, information hiding is primarily relevant at class level.

Correct Answer:

true	false	
○	●	A) Adhering to the 'information hiding' principle increases flexibility for modifications.
●	○	B) Information hiding involves deliberately hiding information from callers or consumers of the building block.
●	○	C) Information hiding makes it harder to distinguish between interface and implementation.
○	●	D) Information hiding is a derivative of the approach of incremental refinement along the control flow.
○	●	E) In object-oriented development, information hiding is primarily relevant at class level.

rrhc 3 weeks, 3 days ago

Great, for me it's t-t-f-f-f based on mock exam document version 2020-1 en-rev6

Consistcency in their own answers are just hilarious :D

upvoted 1 times

alper1234455 7 months, 2 weeks ago

T-T-F-F-T this question is Q-17-13-05 from ISAQB Mock Exam

upvoted 2 times

Question #17 *Topic 1*

Which two of the following requirements are examples of quality requirements? (Choose two.)

A. Up to 40,000 requests per day

B. User should be able to select the sort order freely.

C. Spelling is corrected automatically.

D. Failure rate is less than 0.1%.

Correct Answer: *BC*

anikolov 4 months, 3 weeks ago

Selected Answer: AB

A - Performance, B-Usability

upvoted 2 times

alper1234455 7 months, 2 weeks ago

A-D is the answer

upvoted 4 times

Question #18 *Topic 1*

HOTSPOT -

Conway's law sometimes is referred to as `If you have four teams working on the compiler, you'll get a 4-pass compiler.`

Which interpretations of this law are true, which are false? (Assign all answers.)

Hot Area:

true	false	
○	○	A) You need four teams to build a compiler.
○	○	B) Structures of software architecture and associated organisation are congruent.
○	○	C) Software architecture is particularly important when creating compilers.
○	○	D) Certain types of software are not suitable for the use of software architecture.

Correct Answer:

true	false	
○	○	A) You need four teams to build a compiler.
○	○	B) Structures of software architecture and associated organisation are congruent.
○	○	C) Software architecture is particularly important when creating compilers.
○	○	D) Certain types of software are not suitable for the use of software architecture.

Question #19 *Topic 1*

HOTSPOT -

What is the main benefit of the layered architectural pattern? (Assign all answers.)

Hot Area:

	true	false
A) Increasing flexibility	○	○
B) Creating high-performance systems	○	○
C) Being able to use application servers	○	○

Correct Answer:

	true	false
A) Increasing flexibility	○	○
B) Creating high-performance systems	○	○
C) Being able to use application servers	○	○

Question #20 *Topic 1*

In a customer project the architecture shall be based on components. The requirements have not been fully determined yet.
Taking this constraint into account, which three properties of the components developed by you will you pay particular attention to? (Choose three.)

A. meaningful component names

B. weak coupling

C. strong cohesion

D. open for extension

E. small component size

Correct Answer: *CDE*

Theodgeir Highly Voted 1 year, 3 months ago

Selected Answer: BCD

"meaningful component names" and "small component size" don't matter at all, so B, C and D have to be correct and they make sense.

upvoted 8 times

rrhc Most Recent 3 weeks, 3 days ago

for me the right answers are: A B D

upvoted 1 times

Question #21 *Topic 1*

HOTSPOT -
Decide if the following statements are true or false. The performance of a system (response time or throughput) often competes with its`¦ (Assign all answers.)
Hot Area:

true	false	
○	○	A) flexibility
○	○	B) memory usage
○	○	C) on-time completion of the project
○	○	D) adaptability
○	○	E) usability
○	○	F) security
○	○	G) testability

Correct Answer:

true	false	
○	◉	A) flexibility
○	◉	B) memory usage
○	◉	C) on-time completion of the project
○	◉	D) adaptability
◉	○	E) usability
◉	○	F) security
◉	○	G) testability

Reference:
http://www.cs.unb.ca/~wdu/cs3043/a1ans.htm

Question #22 *Topic 1*

Which of the following principles apply to testing? (Choose two.)

A. In general, exhaustive testing is not possible.

B. Where many errors exist, more errors are usually hidden.

C. Sufficient testing will show that a program is free of errors.

D. Error-free test runs also mean: the software is usable.

Correct Answer: *AC*

Theodgeir 1 year, 3 months ago

Selected Answer: AB

"C" is wrong because testing can only show if errors exist but not that they don't exist
"D" is wrong because only that the tests passed doesn't mean that a software is usable

upvoted 3 times

Question #23 *Topic 1*

Which of the following statements apply to design patterns? (Choose two.)

A. Design patterns are not invented but discovered.

B. Design patterns should always be described alongside the problem they are supposed to solve.

C. Design patterns are formally defined and can thus be proven to be correct.

D. The number of design patterns used is proportional to the software architecture's quality.

Correct Answer: *AB*

Question #24 *Topic 1*

Which of the following statements are correct? (Choose two.)

A. The push operation usually places a new element onto a stack.

B. A stack acts exactly like a queue.

C. A stack is organized according to the FIFO principle.

D. A stack usually only provides access to one element at a time.

Correct Answer: *AD*

Question #25 *Topic 1*

Which of the following statements are covered by the term 'coupling'? (Choose two.)

A. A building block uses an interface of another building block.

B. Two building blocks offer operations with the same name.

C. A building block only contains operations that belong together logically.

D. A building block uses internal data structures of another building block.

Correct Answer: *AC*

alper1234455 7 months, 2 weeks ago

the answer is a-d

upvoted 4 times

Question #26 *Topic 1*

You want to demonstrate to colleagues that certain building blocks are suitable for the implementation of a use-case scenario.
Which of the following UML diagrams is best suited for this?

A. Use-case diagram

B. Sequence diagram

C. Activity diagram

D. Class diagram

Correct Answer: *A*
Reference:
https://www.lucidchart.com/pages/uml-use-case-diagram

Question #27 *Topic 1*

HOTSPOT -

What is the purpose of defining the system context? (Assign all answers.)

Hot Area:

	true	false	
	○	○	A) To illustrate the relationships between internal system components
	○	○	B) To illustrate the system's interfaces with external systems
	○	○	C) To clarify the area of responsibility of the software architect
	○	○	D) To represent the external systems
	○	○	E) To distinguish between infrastructure and application
	○	○	F) To distinguish between the hardware and software of a solution

Correct Answer:

	true	false	
	○	○	A) To illustrate the relationships between internal system components
	○	○	B) To illustrate the system's interfaces with external systems
	○	○	C) To clarify the area of responsibility of the software architect
	○	○	D) To represent the external systems
	○	○	E) To distinguish between infrastructure and application
	○	○	F) To distinguish between the hardware and software of a solution

gewinnen2 4 months, 2 weeks ago

is this answer really correct .. it is confusing? Because context view LG 3-5 is used to differentiate / distiguish between Business (logical / system) and technical context (Hardware. transmission channels). So F E might be true, and D also because in context ciew we represent / include all relevant external systems and the interfaces your system uses or provides

upvoted 1 times

Question #28 *Topic 1*

Which views should software architects document? Select the three most popular views.

A. Deployment view

B. Data view

C. Runtime view

D. Configuration view

E. Non-functional view

F. Link view

G. Stakeholder view

H. Building-block view

I. Interface view

Correct Answer: *ABD*
Reference:
http://www.michael-richardson.com/processes/rup_for_sqa/core.base_rup/guidances/guidelines/software_architecture_document_F4C93435.html

alper1234455 7 months, 2 weeks ago
The Answer is A C H
upvoted 2 times

Question #29 *Topic 1*

Which elements should be defined in the white-box view of a software building block 'foo'? Select the three most important elements. (Choose three.).

A. The dependencies of the internal building blocks of 'foo'

B. The legal contracts with the suppliers of the internal building blocks of 'foo'

C. The algorithms of the internal building blocks of 'foo'

D. The internal building blocks of 'foo'

E. The rationale for the decomposition of the building block

F. The sizes (in lines of code) of the internal building blocks of 'foo'

Correct Answer: *BCE*

Question #30 *Topic 1*

Which three artifacts does the assessment team create when conducting an ATAM evaluation? (Choose three.)

A. Architecture-specific chapters of the quality management manual

B. The concrete quality tree

C. Description of quality scenarios

D. A quality model

E. Architecture documentation

F. Selection of the quality attributes of the architectural building blocks

G. List of the architectural risks

Correct Answer: *CEG*

anikolov 5 months, 1 week ago

Selected Answer: BCG

Quality Tree with scenarios and risks (B,C,G)

upvoted 1 times

Question #31 *Topic 1*

HOTSPOT -

You are supposed to choose a software-architecture modeling tool for a software-development project. You create a suitable criteria catalogue for the choice of appropriate tools.

Which of the following factors can play a role in this? (Assign all answers.)

Hot Area:

true	false	
○	○	A) Multi-user capability
○	○	B) Support of UML 2.x and SysML
○	○	C) Document generation
○	○	D) Support of model transformations in preparation of the code generation
○	○	E) Support of code generation
○	○	F) Compliance with standards
○	○	G) Purchase and licensing costs

Correct Answer:

true	false	
○	◉	A) Multi-user capability
◉	○	B) Support of UML 2.x and SysML
○	◉	C) Document generation
○	◉	D) Support of model transformations in preparation of the code generation
◉	○	E) Support of code generation
○	◉	F) Compliance with standards
○	◉	G) Purchase and licensing costs

Reference:

http://ceur-ws.org/Vol-1134/paper6.pdf

Question #32 *Topic 1*

HOTSPOT -

You are responsible for the documentation of the software architecture of a large development project. The project consists of three teams, each with its own architect, but with you as the person having overall responsibility of the entire project's software architecture.

Which of the following measures are beneficial? (Assign all answers.)

Hot Area:

beneficial	not beneficial	
○	○	A) As a first step, you divide the whole architecture documentation into sub-documents for each of the three sub-projects and then leave it up to each sub-project to define the internal structure of the respective architecture documentation.
○	○	B) You predefine the structure of the entire architecture documentation. The sub-teams must adhere to the predefined document structures.
○	○	C) You leave the decision regarding the documentation structure to the team that first begins the documentation of its sub-project.
○	○	D) You reject using word processing for the documentation because it is not connected with the source code.
○	○	E) The developers should document their parts of the architecture documentation using source code.

Correct Answer:

beneficial	not beneficial	
○	○	A) As a first step, you divide the whole architecture documentation into sub-documents for each of the three sub-projects and then leave it up to each sub-project to define the internal structure of the respective architecture documentation.
○	○	B) You predefine the structure of the entire architecture documentation. The sub-teams must adhere to the predefined document structures.
○	○	C) You leave the decision regarding the documentation structure to the team that first begins the documentation of its sub-project.
○	○	D) You reject using word processing for the documentation because it is not connected with the source code.
○	○	E) The developers should document their parts of the architecture documentation using source code.

Question #33 *Topic 1*

HOTSPOT -

You are the software architect on a large development project and are entrusted with the task of building a tool chain for continuous architecture evaluation and analysis.

Which of the following statements regarding this tool selection are correct/incorrect? (Assign all answers.)

Hot Area:

correct	incorrect	
○	○	A) Tools for static code analysis find all dependencies in the source code.
○	○	B) Several tools for static code analysis can be used to verify compliance with architectural rules.
○	○	C) Tools for static code analysis can reliably measure cohesion.
○	○	D) Tools for static code analysis can also be used to optimize runtime efficiency by highlighting dependencies.
○	○	E) Tools for dynamic analysis, such as profilers, cannot be used to optimize static structures.

Correct Answer:

correct	incorrect	
○	○	A) Tools for static code analysis find all dependencies in the source code.
○	○	B) Several tools for static code analysis can be used to verify compliance with architectural rules.
○	○	C) Tools for static code analysis can reliably measure cohesion.
○	○	D) Tools for static code analysis can also be used to optimize runtime efficiency by highlighting dependencies.
○	○	E) Tools for dynamic analysis, such as profilers, cannot be used to optimize static structures.

Question #34 *Topic 1*

HOTSPOT -

Which information is presented in the building-block view? Rate the alternatives below as either true or false. (Assign all answers.)

Hot Area:

true	false	
○	○	A) Which building blocks the software is composed of
○	○	B) How the building blocks interact during run time
○	○	C) How the building blocks are hierarchically decomposed
○	○	D) How the building blocks are distributed in a distributed system
○	○	E) The dependencies between the building blocks

Correct Answer:

true	false	
○	○	A) Which building blocks the software is composed of
○	○	B) How the building blocks interact during run time
○	○	C) How the building blocks are hierarchically decomposed
○	○	D) How the building blocks are distributed in a distributed system
○	○	E) The dependencies between the building blocks

alper1234455 7 months, 2 weeks ago

D is in deployment view not BB View

upvoted 1 times

Question #35 *Topic 1*

HOTSPOT -

In your project, three architects and seven developers are working on the documentation of the software architecture.

Which methods are appropriate in order to achieve a consistent and adequate documentation, and which are not? (Assign all answers.)

Hot Area:

appropriate	not appropriate	
○	○	A) The chief architect creates the documentation.
○	○	B) Identical templates are used for the documentation.
○	○	C) All parts of the architecture documentation are automatically extracted from the source code.

Correct Answer:

appropriate	not appropriate	
○	○	A) The chief architect creates the documentation.
○	○	B) Identical templates are used for the documentation.
○	○	C) All parts of the architecture documentation are automatically extracted from the source code.

rrhc 3 weeks, 3 days ago

according to official solution Appr Appr, nonappr

upvoted 1 times

alper1234455 7 months, 2 weeks ago

Only B is appropriate

upvoted 4 times

Question #36 *Topic 1*

What do you have to take into account when designing external interfaces? (Choose three.)

A. Volatility of neighbouring systems

B. Adequate usage of the broker pattern

C. Protocols enforced by neighbouring systems

D. Expected amount of parallel calls

E. Ease of implementation

F. Effect on the coupling in the building block view

Correct Answer: *CEF*

Question #37 *Topic 1*

HOTSPOT -

Which of the following statements about the coupling between building blocks are correct? (Assign all answers.)

Hot Area:

true	false	
○	○	A) A high degree of coupling of a building block reduces its reusability.
○	○	B) Low coupling of a building block improves the ability to meet functional requirements.
○	○	C) Low cohesion often leads to high coupling.
○	○	D) Loose coupling often leads to less effort for making changes.
○	○	E) For call dependencies, the degree of coupling is independent of the direction of the call.
○	○	F) In object-oriented programming languages, inheritance reduces coupling.

Correct Answer:

true	false	
○	○	A) A high degree of coupling of a building block reduces its reusability.
○	○	B) Low coupling of a building block improves the ability to meet functional requirements.
○	○	C) Low cohesion often leads to high coupling.
○	○	D) Loose coupling often leads to less effort for making changes.
○	○	E) For call dependencies, the degree of coupling is independent of the direction of the call.
○	○	F) In object-oriented programming languages, inheritance reduces coupling.

alper1234455 7 months, 2 weeks ago

C-D-E is correct

upvoted 2 times

Question #38 *Topic 1*

HOTSPOT -

You are the software architect of a system that has run for many years and been extended repeatedly. An analysis of the source code has revealed a multitude of dependencies between the classes.

Which of the following measures are possible solutions? (Assign all answers.)

Hot Area:

true	false	
○	○	A) The dependencies between classes are the responsibility of the developers. No measures are required within the architecture.
○	○	B) Loosening of direct dependencies between classes through the introduction of interfaces
○	○	C) Loosening of direct dependencies between classes through the introduction of factories

Correct Answer:

true	false	
○	●	A) The dependencies between classes are the responsibility of the developers. No measures are required within the architecture.
●	○	B) Loosening of direct dependencies between classes through the introduction of interfaces
○	●	C) Loosening of direct dependencies between classes through the introduction of factories

Question #39 *Topic 1*

Select the two most appropriate methods for evaluating the reliability of a software system. (Choose two.)

A. Determining the number of 'lines of code'

B. Measurement of 'Mean-Time-between-Failure'

C. Execution of performance tests

D. Determination of the cyclomatic complexity

E. Conducting an ATAM evaluation

Correct Answer: *BC*

alper1234455 7 months, 2 weeks ago

B-E, C is irrelevant here

upvoted 2 times

Question #40 *Topic 1*

What are known patterns for the adaptation of interfaces? (Choose two.)

A. Bridge

B. Tower

C. Observer

D. Fa§ade

E. Wall

Correct Answer: *AC*
Reference:
http://www.cs.fsu.edu/~myers/cop3331/notes/patterns2.html

alper1234455 7 months, 2 weeks ago
Observer and Facade
upvoted 3 times

Question #41 *Topic 1*

Which of the following statements about (crosscutting) concepts are most appropriate? (Select four.)

A. The definition of appropriate concepts ensures the conceptual integrity of the architecture.

B. Concepts are a means to increase consistency.

C. For each quality goal there should be an explicitly documented concept.

D. Uniform exception handling is most easily achieved when architects agree with developers upon a suitable concept prior to implementation.

E. A concept might be implemented by a single building block.

F. Uniform usage of concepts reduces coupling between building blocks.

G. A concept can define constraints for the implementation of many building blocks.

Correct Answer: *ABDG*

anikolov 5 months, 1 week ago
Selected Answer: BDEG
B,D,E,G
upvoted 3 times

Question #42 *Topic 1*

Choose the most desirable characteristics of interfaces. (Choose three.)

A. Easy to extend

B. Geared towards the capabilities of the provider

C. Clear descriptions of assertions and prerequisites

D. As few parameters as possible

E. Scalable to many consumers

F. Remotely callable

G. Hard to misuse

Correct Answer: *BCF*

anikolov 5 months, 1 week ago

Selected Answer: ACG

based on isaqb should be A,C,G

upvoted 1 times

Question #43 *Topic 1*

HOTSPOT -

Concerning external interfaces, Postel's law suggests: "Be conservative in what you do, be liberal in what you accept from others." Assume that Postel's law has been consistently applied in your system. (Assign all answers.)

Hot Area:

true	false	
○	○	A) Response time of the system is reduced
○	○	B) Implementation effort increases
○	○	C) Usability of the system is reduced
○	○	D) Robustness of the system is increased
○	○	E) The integrity of the data transferred via interfaces is increased
○	○	F) Availability of the system is reduced due to potentially bad quality of input data

Correct Answer:

true	false	
○	○	A) Response time of the system is reduced
○	○	B) Implementation effort increases
○	○	C) Usability of the system is reduced
○	○	D) Robustness of the system is increased
○	○	E) The integrity of the data transferred via interfaces is increased
○	○	F) Availability of the system is reduced due to potentially bad quality of input data

rrhc 3 weeks, 3 days ago

a - True (The response time of the system is reduced as the system is lenient in accepting various input formats and can handle them more efficiently.)

b - False (The implementation effort may be reduced as the system is designed to be tolerant of different input formats.)

c - False (The usability of the system is not necessarily reduced, as it can handle a wider range of input formats.)

d - True (The robustness of the system is increased because it can handle a variety of input formats, even if they are not strictly compliant.)

e - False (The integrity of the data transferred via interfaces may be compromised if the system accepts and processes data with potential errors or variations.)

f - False (The availability of the system is not necessarily reduced due to potentially bad quality of input data. The system is designed to handle various input formats, and it should not lead to reduced availability on its own.)

upvoted 1 times

alper1234455 7 months, 2 weeks ago

Response time also increases

upvoted 1 times