

1. Layers Pattern doesn't support the reuse of individual layers with well-defined abstractions. (does support)

False

2. A layer in layer pattern has no knowledge of higher layers.

True

3. Software architecture patterns express a fundamental structure for software systems as subsystems with their responsibilities and include strategies for organizing the relationships between subsystems.

True

4. Typed pipes allow data of all types. (Specific type)

False

5. In bounded pipes, the amount of data on each pipe is restricted

True

6. Top-down requests in layer pattern are a chain of actions that starts at layer 1 and reports it to layer 2. (Bottom-up)

False

7. Components in different layers in layer pattern call each other directly or through an interface between the layers

True

8. Each layer in layer pattern may itself consist of one or more entities. (more than 1)

False

9. Layer in layer pattern is a subsystem that uses the services of all other layers to provide services to a higher layer. (only lower)

False

10. Design alternatives are yield due to Quality (and functional) requirements.

True

11. Applying performance factor reduces the number of classes in the design.

True

12. Adaptability is the ease with which software artifacts can be adapted to changing requirements.

True

13. Adaptability model identifies adaptability property such as compile-time adaptable and run-time adaptable only. (and fixed)

False

14. Quality factors can be considered as constraints on the design of the system.

True

15. Alternatives are different shapes for the suggested design of the architecture.

True

16. Each alternative can satisfy only one quality attribute.

False

17. Availability factor might conflict with the safety factor.

True

18. Mapping architecture to design models is controlled by the quality attributes.

True

19. Applying different quality attributes or criteria yields unique alternative architecture.

True

20. Taxonomies allow in some cases to identify the right domain

True

21. The concepts extracted from requirements are incomplete

True

22. The domain analysis process aims to extract the solution concepts helpful to create a stable architecture

23. To measure the knowledge source objectivity, we must know the system domain.

True

24. An expert in computer science is highly objective for an Airplane system

True

25. An architecture is organized into one view of the system.

False

26. In Kruchten's 4+1 views, the deployment view shows hardware implementation using deployment diagrams. (physical view)

False

27. Number and type of views are constant for all systems. (may differ)

False

28. Single process-based system doesn't need a process view.

True

29. Very small system doesn't need an implementation view.

True

30. Single processor-based system doesn't need a deployment view.

True

31. Any software architecture has multiple views because it has many stakeholders with different concerns.

True

32. Each view addresses only one concern of the stakeholders. (one or more)

False

33. Stakeholders' concern is an interest that relates to development, maintenance, operation or any other character of the system.

True

34. Any software architecture can be mapped to design using _____ .

- One to one method.
- Quality attributes-based method
- All the mentioned.

35. Adaptability quality factor might conflict with _____ .

- Safety
- Reuse.
- Availability.
- Time Performance

36. Run-time adaptability can be modeled in design using _____ both a and b are true :)

- Part-of.
- Message passing.
- Inheritance.
- Inlined code.

37. Security factor might conflict with _____ .

- Performance.
- Availability.
- Safety.
- Adaptability.

38. Architectural drivers are defined by stakeholder concerns and consist of just the high-level functional requirements. (also, Technical constraints, Business constraints, and Quality attributes requirements)

False

39. Software architecture provides a common medium for communication among stakeholders.

True

40. Every requirement stated in SRS is one that the software shall meet.

True

41. The exhaustive definition of requirements is the statements that identify the essential needs of a system in order for it to satisfy customer needs. (Restricted) أو (stakeholder) إما

False

42. Stakeholder is a person, group of persons, or organization that has an interest in the application.

True

43. Software architecture design is a freely process that depends only on the software architect.

False

44. All stakeholder concerns carry equal weight.

False

45. Software architecture is NOT flat because _____

- It has multiple architectural views.
- It has multiple components.
- It has multiple relations.
- It has multiple components and relations.

46. _____ are a representation of a system from the perspective of one or more concerns which are held by one or more stakeholders.

Views.

Viewpoints.

Models.

Concerns.

47. Modules and subsystems are models used to represent components in _____ view:

- Process View.
- Scenario view.
- Physical view.
- Development view.

48. Use case view in UML corresponds _____ view in Kruchten's 4+1 views.
- Process View.
 - Physical view
 - **Scenario view**
 - Deployment view.
49. The stakeholders of the logical view are _____ .
- **End-users.**
 - System designer and integrator.
 - Developer and manager.
50. _____ are the models used to represent the components in physical view.
- **Processing Nodes.**
 - Modules and subsystems.
 - Class.
51. Design view in UML corresponds _____ view in Kruchten's 4+1 views.
- Process View.
 - Physical view.
 - **Logical view.**
 - Deployment view.
52. Deployment view in UML corresponds _____ view in Kruchten's 4+1 views.
- Process View.
 - **Physical view.**
 - Logical view.
 - Scenario view.
53. What does software architecture describe?
- The system as a whole, its parts, and how parts communicate to meet the system's goal.
 - The system as a whole.
 - The system's parts and how they are built.
 - **The system's parts and how they behave at run-time.**
54. SRS stands for:
- Standard Requirements Statement.
 - System Resources Statement.
 - Statement of Reliability of System.
 - **Software Requirements Specification.**
55. Software architecture can help in each of the following EXCEPT _____
- **Identifying the requirements.**
 - Communication among different stakeholders.
 - Guides the software development process.
 - Understanding the system.
56. An architecture is influenced by the development organization through:
- Staff skills
 - The development schedule and budget
 - Goals of the organization
 - **All the previous answers.**

57. A concept is in XOR relation with another concept if...

- they must exist together in the system
- they can exist together in the system
- one of the two concept can exist in the system
- the two concept must be absent

58. The commonality analysis process extract the commun concepts identified in

- all the kwnoledge sources
- the highly objective knowledge sources
- the highly relevant knowledge sources
- the highly objective and relevant knowledge sources

59. The knoweledge source objectivity can be identified by

- just the date of publication
- the author hindex
- if it is proven stable and up to date

60. The abstraction quality is concidered high if (one of them)

- the objectivity is high
- the relevance is high
- the objectivity and relevance are both high
- none of the above