

1. Which component is typically, the most reusable?
 - ☐ Model
 - ☐ View
 - ☐ Controller
 - ☐ All of the above
2. The code which manages data persistence would be in which component?
 - ☐ Model
 - ☐ View
 - ☐ Controller
 - ☐ All of the above
3. Which of the following is the best description for the Controller in MVC?
 - ☐ It represents the application data domain
 - ☐ It separates the data from the business logic from the display
 - ☐ Respond to user interactions with the view
 - ☐ Represents the user interface which the end user interacts with
4. Which of the following is an advantage of MVC?
 - ☐ Decreased complexity - new developers have a pattern to follow
 - ☐ Easier to debug due to the event-driven nature of the UI code
 - ☐ Similar derivations exist, like MVVM, so you learn them by learning MVC
 - ☐ Faster development process
5. When users are involved in complex tasks, which of following demands can be significant?
 - ☐ Short-term memory
 - ☐ Shortcuts
 - ☐ Objects that appears on the screen
 - ☐ All of the above
6. Which of the following option is not considered by the interface design?
 - ☐ The design of interfaces between software components
 - ☐ The design of interfaces between the software and end users
 - ☐ The design of interface between two computers
 - ☐ All of the above
7. Which of the following is a golden rule for interface design?
 - ☐ Place the user in control
 - ☐ Reduce the user's memory load
 - ☐ Make the interface consistent
 - ☐ All of the above

8. Which of the following is not a design principle that allows the user to maintain control?
- ☐ Provide for flexible interaction
 - ☐ Allow user interaction to be interrupt-able and undo-able
 - ☐ Show technical internals from the casual user
 - ☐ Design for direct interaction with objects that appear on the screen
9. The process in which users prove their identity is known as:
- ☐ Authentication
 - ☐ Authorisation
 - ☐ Identification
 - ☐ Recognition
10. A website which allows users to enter any text, and then stores it and later displays it to other users, is potentially vulnerable to what kind of attack?
- ☐ Two-factor authentication
 - ☐ Cross-site request forgery
 - ☐ Cross-site scripting
 - ☐ Man-in-the-middle
11. Which type of attack is where the end user is forced to execute unwanted actions on a web application which they are currently authenticated?
- ☐ Two-factor authentication
 - ☐ Cross-site request forgery
 - ☐ Cross-site scripting
 - ☐ Man-in-the-middle
12. The process of using two independent factors to identify a user is known as
- ☐ Two-factor authentication
 - ☐ Cross-site request forgery
 - ☐ Cross-site scripting
 - ☐ Man-in-the-middle
13. Which process happens first?
- ☐ Authentication
 - ☐ Authorisation
 - ☐ They can be done at the same time
 - ☐ The two processes are not connected, so it doesn't matter
14. What are the advantages of using a one time password?
- ☐ It is easily generated on demand
 - ☐ It cannot be shared
 - ☐ It is unique for every access
 - ☐ It uses polynomial based algorithms which means that it is hard to deduce

15. Which of the following is not a best practice for unit tests?
- ☐ Clean up - tests should tear down before the next test it run
 - ☐ Repeatable - tests should obtain the same result every time
 - ☐ Self-validating - tests should be fully automated
 - ☐ None of the above
16. In which integration test method, do we test all components at once?
- ☐ Fully-inclusive testing
 - ☐ Combinatorial testing
 - ☐ Big bang testing
 - ☐ Polynomial testing
17. In terms of incremental approach, which of the following is false?
- ☐ Two different methods of incremental approach include bottom-up and top-down
 - ☐ Testing is done by joining two or more modules that are logically related, and repeated until all modules are joined and tested together.
 - ☐ Fault localisation is more difficult than the method in which we test all components at once
 - ☐ None of the above
18. What is an object that has a fully working implementation but takes some shortcut which makes them not suitable for production known as?
- ☐ A test double
 - ☐ A dummy
 - ☐ A mock
 - ☐ A fake
19. Which of the following is not a major objective of acceptance testing?
- ☐ Confirming that the system meets the agreed upon criteria
 - ☐ Identify and resolve discrepancies, if there is any
 - ☐ Determine the readiness of the system for cut-over to live operations
 - ☐ Making sure that the critical module is bug free
20. The user must assign the criteria the software must meet to be deemed acceptance, which stage is this included in?
- ☐ Software Requirements Specification
 - ☐ Project Plan
 - ☐ Use Cases
 - ☐ None of the above
21. Which tests are done to ensure that existing features are not affected by new changes?
- ☐ Recursive testing
 - ☐ Unit testing
 - ☐ White-box testing
 - ☐ Regression testing

22. What are the types of integration testing?
- ☐ Big Bang Testing
 - ☐ Bottom Up Testing
 - ☐ Top Down Testing
 - ☐ All of the above
23. Which of these is not a benefit of TDD?
- ☐ Documents your code better than documentation
 - ☐ Decreases the chance of regressions
 - ☐ Encourages design for testability
 - ☐ Makes legacy code much easier to maintain
24. Which of the following protocol is used by RESTful web services as a medium of communication between client and server?
- ☐ SSH
 - ☐ FTP
 - ☐ SSL
 - ☐ None of the above
25. In a REST architecture, which of the following is true?
- ☐ The REST server provides access to resources and presents the resources
 - ☐ The REST client provides access to the resources
 - ☐ The REST client accesses and presents the resources
 - ☐ None of the above
26. Which of the following is true about URI in RESTful web services?
- ☐ Each resource in REST architecture is identified by its URI
 - ☐ The purpose of the URI is so that the REST client can perform DNS lookup
 - ☐ The URI's purpose is to give the 400 HTTP status code for a Bad Request
 - ☐ None of the above
27. Which of the following is a common API security hack?
- ☐ Cross-site Request Forgery
 - ☐ Denial of Service
 - ☐ SQL Injection
 - ☐ All of the above
28. Which of the following is false about the REST architecture style?
- ☐ REST is naturally stateless
 - ☐ REST uses HTTP and basic CRUD operations
 - ☐ The REST server can only return JSON or XML
 - ☐ All of the above

29. Which of the following are idempotent?
- ☐ GET
 - ☐ PUT
 - ☐ DELETE
 - ☐ All of the above
30. Which feature can be used to state that resources need to re-fetched?
- ☐ HATEOAS
 - ☐ Idempotent actions, such as GET
 - ☐ HTTP Cache-Control headers
 - ☐ The URI
31. Which of the following is not a best practice when designing RESTful web services?
- ☐ URI should be descriptive and easily understood
 - ☐ Pass the secure tag in the header if you are to pass sensitive data through the URL
 - ☐ Every input on the server should be validated
 - ☐ For any session, the user should be authenticated
32. Which of the following statements are false?
- ☐ GET is a read only operation which fetches some information
 - ☐ POST can only be used to creating new resources
 - ☐ POST is idempotent but PUT is not-idempotent
 - ☐ DELETE is used to delete any resource on the server