What is the verb, which we use to indicate Create operation? (1) GET (2) POST (3) PUT (4) DELETE

Select one:

- ● a. Only (2)
- ○ b. Both of them
- ○ c. None of them
- ○ d. Only (3)

What are the advantages of MVC?

Select one:

- ● a. Presentation is separated from the business logic
- ○ b. All of the others
- ○ c. Event-handling is separated from business logic
- ○ d. Presentation is separated from Event-handling

The basic architecture of the distributed systems is called

Select one:

- a. Client-server architecture
- b. N-tier architecture
- c. 3-tier architecture
- d. Service oriented architecture

Bootstrap is a?

Select one:

- a. Scripting language
- b. Plugin
- ● c. Framework
- d. Library

Which one of the following is not based on GIT?

Select one:

- a. SourceForge
- b. GitHub
- ● c. OneDrive
- d. GitLab

What are the benefits of web services?

1. Static integration

2. Standardized Protocol

3. Interoperability

4. Constant by design

5. Low Cost of communication

Select one:

- a. 1 and 5
- b. 3, 4, and 5
- c. 2, 3, and 5
- d. 1, 2, and 4
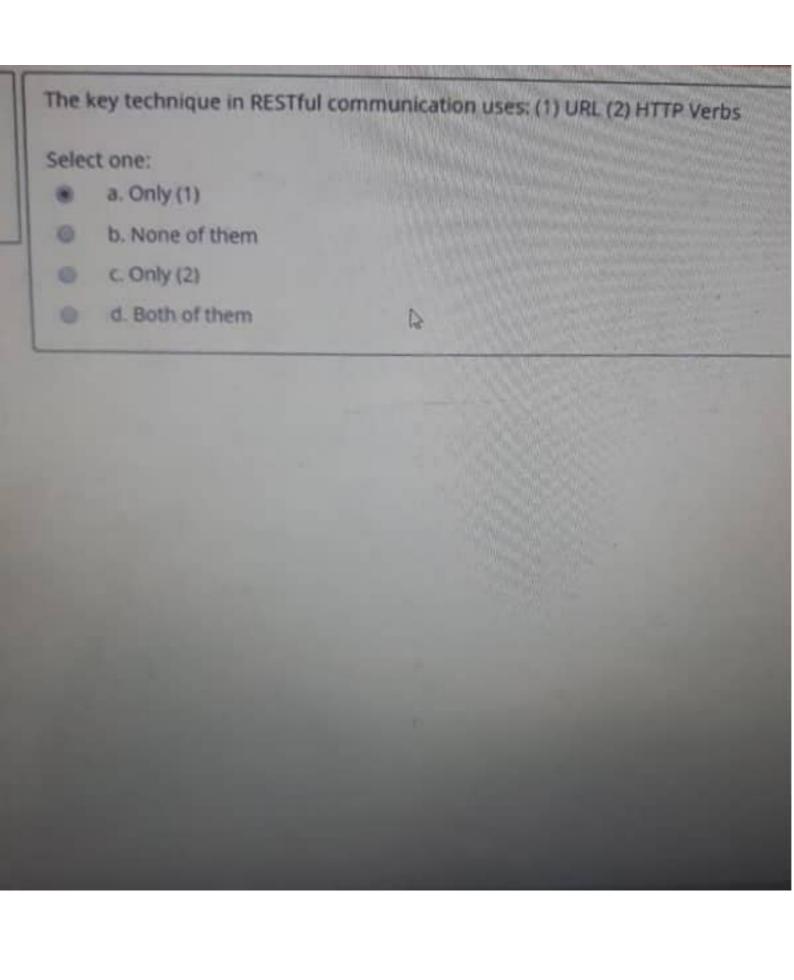
Procedural programming focuses on

Select one:

- ⊙ a. Flow control with GOTO statements
- ⊙ b. Use of namespaces/packages
- ⊙ c. Functions (as in functional programming)
- ⊙ d. Modularity and code reuse

Which one of the following is not a purpose of having a VCS?

Select one:

- a. Restoring previous versions
- b. Backup
- ● c. Code formatting
- d. Collaboration

"In software runtime architecture we may need additional virtualization layers, depending on the type of the system." Between which layers we may need these virtualization layers?

Select one:

- a. Between Operating System and Hardware

- b. Between User and Application

- c. Between User and Hardware

- d. Between Application and Operating System

What is false about Micro-services Architecture?

Select one:

○ a. The system is developed with many components

● b. Can use single database or multiple databases

○ c. May use SOAP or REST for communication

○ d. Made of many web services

The difference between the Servlets and the JSP:

Select one:

- ● a. Servlets are used to develop web applications and JSP is used to develop web sites
- ○ b. JSP is an application and Servlet is a web page
- ○ c. Servlet can generate HTML and JSP can generate JAVA code
- ○ d. JSP is a web page and Servlet is an application

The key technique in RESTful communication uses: (1) URL (2) HTTP Verbs

Select one:

- ● a. Only (1)
- ○ b. None of them
- ○ c. Only (2)
- ○ d. Both of them

Why do centralized control in distributed systems useful to engineers?

Select one:

- ○ a. Maintaining the system is easier
- ● b. All of the others
- ○ c. Easier to update
- ○ d. Easier to modify and extend

The communication techniques in distributed systems can be categorized as

Select one:

○ a. RPC, RMI, and CORBA

● b. Functional oriented, Message oriented, and Resource oriented

○ c. RPC/RMI, SOAP, and DC

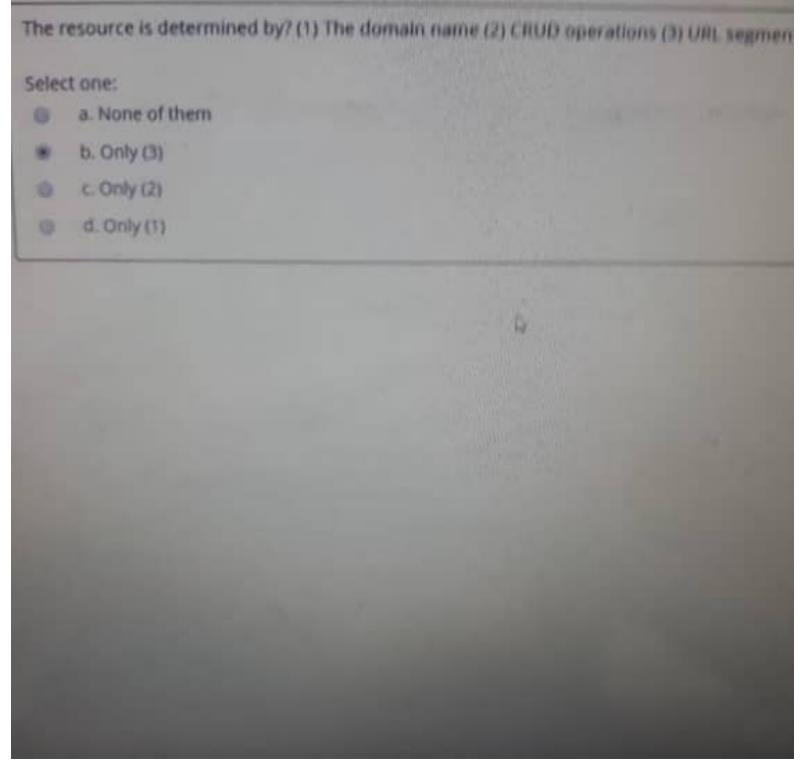○ d. Delta-Communication, SOAP communication, and RESTful communication

Which one is the true statement regarding systems with web-services?

Select one:

- ●   a. Supports dynamic integration of components

- ○   b. Use proprietary protocols for communication

- ○   c. Web services always use monolithic architecture

- ○   d. Web services are about user to program interaction

Programming languages provide

Select one:

- ○ a. Semantics and functions
- ○ b. Syntax and procedures
- ○ c. Syntax and functions
- ● d. Syntax and semantics

Identify correct ways to maintain the quality of the code:

1. Documenting the code

2. Functional testing

3. Regular code reviews

4. Clear requirements

Select one:

- a. Only (2) and (3)
- b. Only (1) and (3)
- c. Only (2) and (4)
- d. All (1), (2), (3), and (4)

Refactoring is one of the aspect of quality code. What does it mean?

Select one:

- ● a. Re-arrange the code to improve efficiency
- ○ b. Manage the configurations
- ○ c. Extending the code
- ○ d. Test and fix the bugs

What is the operation for HTTP verb PUT? (1) Create (2) Update

Select one:

- a. None of them
- b. Only (1)
- c. Only (2)
- d. Both of them

The resource is determined by? (1) The domain name (2) CRUD operations (3) URL segmen

Select one:

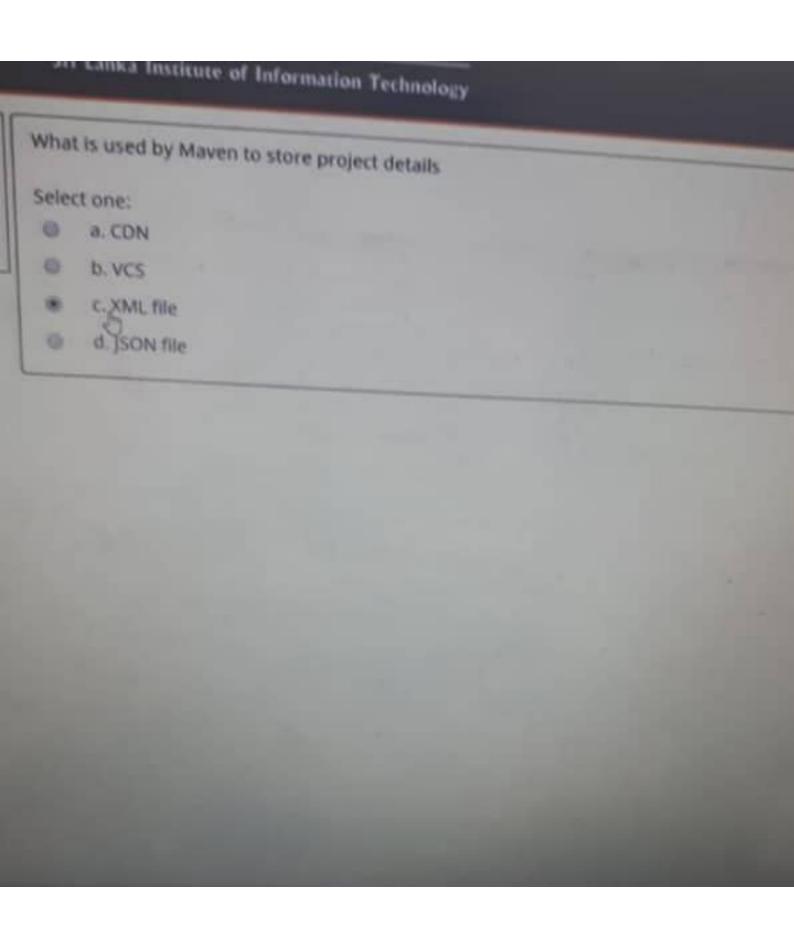- a. None of them
- b. Only (3)
- c. Only (2)
- d. Only (1)

Some applications developed using particular programming languages can be directly run on the OS with

Select one:

- ●   a. This statement is true
- ○   b. Cannot validate the statement without knowing the OS
- ○   c. This statement is not conclusive
- ○   d. This statement is false

What are the example for data representational elements in HTML?

Select one:

- a. Tables. Input
- b. Lists. Tables
- c. Input. Buttons
- d. Buttons. Tables

What is used by Maven to store project details

Select one:

- a. CDN
- b. VCS
- c. XML file
- d. JSON file

Which of the following is incorrect about JAX-RS annotations?

Select one:

- a. PATH - Relative path of the resource class/method
- b. POST - Create a new resource
- c. PUT - Used to add resources
- d. HEAD - Get status about method availability

The CRUD operations are determined by?

1. Read & Create

2. PUT & DELETE

3. HTTP verb

4. All of them

Select one:

- ⦿ a. Only (3)
- ○ b. Only (4)
- ○ c. Only (2)
- ○ d. Only (1) and (2)

What is not related to the scalability?

Select one:

○ a. Distribution of the components

● b. Testing

○ c. Number of users

○ d. Concurrent access

What modules are implemented on the server-side of BAW-MVC?

1. Component

2. Controller

3. View

4. Model

Select one:

- a. Only (1) and (2)

- b. Only (1), (2), and (3)

- c. Only (3) and (4)

- d. All of them

Which one of the following is not a benefit of CDN?

Select one:
- a. Reducing bandwidth costs
- b. Improving the security of the system
- c. Support collaboration
- d. Improving system's loading time

Which one of the following is not a VCS model?

Select one:

- ⦿ a. Centralized version control systems
- ⦿ b. Local version control systems
- ⦿ c. Distributed Version Control Systems
- ⦿ d. Global version control systems

Which language supports both procedural and object oriented programming?

Select one:

○ a. Java

○ b. C

● c. C++

○ d. C#

Which is NOT correct about the View development in web-based applications?

Select one:
- ○ a. View is deployed to the client's computer
- ○ b. View should be loaded to the client's browser
- ○ c. Server-side code in View may execute in server-side
- ● d. View should communicate with model to load the data from database

Which cannot be used to develop the server-model?

Select one:

- a. PHP
- b. HTML
- c. Node.JS
- d. JAVA

What are the languages, which can be used to write code in an HTML page, which can

Select one:

- a. CSS, Java
- b. None of the above
- c. JS, Java
- d. CSS, JS

What is NOT a correct statement about CSS?

Select one:

- ○ a. None of the others
- ○ b. Eliminate HTML formatting tags
- ○ c. Save work and time by reusing style sheets
- ● d. Slow down loading

What HTTP verb is used for Read operation?

(1) GET

(2) POST

(3) PUT

(4) DELETE

Select one:

- a. (1) and (2) only

- b. All of them

- ● c. Only (1)

- d. only (2)

Evaluate WSDL

Select one:

- ●   a. All of others

- ○   b. WSDL helps in dynamic service integration

- ○   c. WSDL is a contract between the Web service and the client

- ○   d. WSDL describes a web service

Which of the following is not correctly defining loosely coupled architecture of web service?

Select one:

- a. services can be independently updated
- b. software systems become more manageable
- c. allows integration between different systems
- d. Low scalability

the Model-View-Controller (MVC) architectural style, the model defines the

elect one:
- a. Interfaces
- b. Presentation
- c. Business-logic
- d. Communication model

"There is a gap between development and implementation environments, such as having different platfo

Which one of the following helps us to overcome these issues?

Select one:

- ○ a. Version controlling
- ○ b. CDN
- ○ c. Dependency management
- ⦿ d. Virtualization

Which of the following is not a software category?

Select one:

- ○ a. CASE tools
- ○ b. Utilities
- ○ c. System software
- ● d. Cloud computing

CSS can be written as

Select one:

- ● a. all of other answers
- ○ b. Inline CSS
- ○ c. External CSS sheets
- ○ d. Internal CSS sheets