Vidyavardhini's College of Engineering and Technology
Department of Artificial Intelligence & Data Science

AY: 2024 - 25

Class:	TE	Semester:	V
Course Code:	CSC502	Course Name:	Web Computing

Name of Student:	Sainath Khot
Roll No. :	20
Assignment No.:	1
Title of Assignment:	Web programming fundamental
Date of Submission:	
Date of Correction:	

Evaluation

Performance Indicator	Max. Marks	Marks Obtained
Completeness	5	3
Demonstrated Knowledge Legibility	3	3
Legibility	2	2
Total	10	8

Performance Indicator	Exceed Expectations (EE)	Meet Expectations (ME)	Below Expectations (BE)
Completeness	5	3-4	1-2
Demonstrated Knowledge Legibility	3	2	1
Legibility	2	1	0

Checked by

Name of Faculty   : Miss Kshitija Gharat

Signature   : Gharat

Date   : 8/8/24

Q. Explain DOM

The Document object model (DOM) is a programming interface for web document. It represents the structure of a document as a tree of object, where each node comprands to a part of the document, such as an element, attribute a text. The DOM allows developers to interrad with and manipulate the content and structure of a webpage using language like Java script. for example you can use the DOM and change text, add or remove elements and respond to user.

Q2 Compare 2 protocols used for formatting & transmitting the messages over internet with encryption, authentication, integrity & application

Aspect	HTTPS	SMTP with STARTTLS
Encryption	Uses TLS/SSL to encrypt HTTP data in transit	STARTTLS upgrads SMTP to use TLS encryption for emails
Authentication	Uses digital certification authoritie (CAS) to authenticate server	Typically relies on SMTP authentication mechanisms but itself does not handle authentication

Integrity	Employs hashing & MACs to ensure data has not been tampered with during transmission	Uses TLS to ensure data integrity by encrypting the communication chanel, protecting against tampering
Application	Secures web traffic between browsers & servers (eg: HTTPs for websites	features email communication between mail servers & mail client & server

Q3 Identify and explain different methods To retrieve resource, or create new resource, update the resource, modify the resources & delete the resource which using the REST style

Ans In RESTFULL web Services, CRUD create, read, update, delete. Operations on resources are typically handled using standard HTTP methods. Here's an Overview of how each method is used To manage resources

① Retrive Resources: The 'GET' method retrieves data from a server without modifying it. It is used To request a representation of a resource such as retrieving a web page or an API resource

Eg:- GET / users / 123 retrives the resource representing the user with is 123

2. Create New Resource
   - The 'POST' method is used to create a new resource on the server. The client sends data to the server, which processes the data and creates a new resource
   Eg: 'POST / users' with a request body containing user details

3. Update Resource
   - The 'PUT' method updates an existing resource or creates a resource if it does not exist. It replaces the entire resource with the data provided in the request body
   Eg:- 'POT/users/123' with a request body containing updated user details replace

4. Modify Resource
   - The 'PATCH' method is used to used make partial updates to an existing resource. It modifies only the specified fields rather than replacing the entire resource.
   Eg:- 'PATCH'/user/123, with a request body containing chasue update only the specified parts of the user resource with 123

5. Delete Resource
- The Delete method remove a resource from the server. It delets the resource identify by the URL.

Eg 'Delete / user / 123' removes the user resource with ID 123 from the server.