Week 8 Practice Questions

Q1: Choose the important aspects of Web API designs.

- The use of HTTP standards.
- B. The use of standard conventions for listing the data belonging to a particular resource.
- C. Representation of resources and required behavior of clients.
- D. All of the above

Answer: D

Solution: All the given options are considered to be good aspects for implementing a web API.

Q2: Which of the following languages, GraphQL, can be used with?

- A. Python
- B. Java
- C. C++
- D. None of the above

Answer: A, B and C

Solution: GraphQL provides support for many programming languages. You can read the list at GraphQL Code Libraries, Tools and Services

Q3: Which of the following statement(s) is/are true regarding CMS?

- A. A CMS allows an end user to create and manage online contents.
- B. A CMS user must have the knowledge of a frontend and backend language.
- C. WordPress is an example of a CMS.
- D. A CMS must allow user management with in an organization.

Answer: A and C

Solution: A CMS (Content Management System) allows a user to create a website without the knowledge of any programming language. For Ex: WordPress Every CMS does not necessarily allow user management.

Q4: Which of the following statement(s) is/are true regarding REST API?

A. An API is used to decouple the frontend and the backend.

- B. An API is primarily built for and used by an end user.
- C. An API defines multiple endpoints.

D. All of the above

Answer: A and C

Solution: An API is generally implemented for a frontend developer to utilize, which helps in decoupling the frontend from the backend. An API can have multiple endpoints for fetching/creating/updating resources.

Q5: Which of the following statement(s) is/are true regarding RESTful APIs?

- A. A single endpoint generally deals with a single entity.
- B. An endpoint in an API cannot perform a write operation on the database.
- C. An endpoint in an API can just be meant for read only operations.
- D. None of the above

Answer: A and C

Solution: A REST API consists of multiple endpoints, where a single endpoint generally deals with a single entity or resources. An API endpoint can be meant for reading or writing operations on the database.

Q6: Which of the following statement(s) is/are false in the context of REST?

- A. The HTTP GET method should not trigger a write operation on the database.
- B. The HTTP POST method should not trigger a write operation on the database.
- C. The HTTP DELETE method should be safe.
- D. The HTTP PATCH method requests are not cacheable.

Answer: B and C

Solution: These are the convention, which a developer should adhere to while implementing and API. A GET request is meant for a reading operation, but a POST or PATCH request creates resources or make changes in the database.

Q7: Which of the following can be considered the best practices for defining the endpoints in a REST API?

- A. The HTTP verbs are discouraged, and nouns should be used.
- B. The appropriate HTTP status codes should be used while sending back the responses.
- C. The JSON format should not be used for sending or receiving the data.
- D. The documentation need not list all the available endpoints.

Answer: A and B

Solution: These are the convention, which a developer should keep in mind to while implementing and API.

Q8: Which of the following statements is false regarding permalinks?

- A. A permalink is a permanent link which is not expected to change throughout the lifetime of a resource.
- B. A permalink is always human-readable.
- C. A permalink can be used to identify a resource uniquely.
- D. An access link to a Google Doc is an example of a permalink.

Answer: B

Solution: A permalink (also known as permanent link) is meant to be the same throughout the lifetimes of the resource. They are not always human-readable, and can consist of arbitrary characters. Google Doc access link is an example of permalink, as it never gets changed after its creation.