Appian Senior Developer Practice Test (Sample)

Study Guide

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Questions

1. **What should you avoid when designing queries to prevent performance issues?**

   A. Using primary keys as sort identifiers

   B. Keeping "batchSize" as -1

   C. Implementing filters effectively

   D. Utilizing nested queries

2. **Which of the following is NOT a common method for performing integration over HTTP in Appian?**

   A. REST - Call Integration

   B. SOAP (WSDL) - Call Webservice

   C. FTP - Transfer File

   D. GraphQL - Fetch Data

3. **What is a disadvantage of the Bottom Up approach related to third-party tools?**

   A. They are incompatible with Appian

   B. Knowledge of third-party tools is required

   C. They significantly limit data type options

   D. They cause more complex column naming

4. **Which of the following is part of the Appian File System?**

   A. Archived Process Data

   B. Process Execution Logs

   C. System Configuration Settings

   D. User Roles

5. **What issue arises with long column names in the Top Down data design approach?**

   A. They cannot be used in queries

   B. They are automatically converted to uppercase

   C. They are renamed by dropping vowels

   D. They can only be 27 characters long

6. What does an HTTP status code of 404 signify?

A. Success

B. Unauthorized access

C. Not found

D. Server side error

7. What authentication method is considered the most secure and is also an industry standard?

A. Basic Authentication

B. API Key

C. OAuth 2.0 Client Credentials Grant

D. Cookie-based Authentication

8. Which phase of the Appian delivery methodology involves defining project outcomes?

A. Initiate

B. Build

C. Release

D. Optimize

9. What is not a typical component of process-related information stored in memory?

A. Process Variables

B. Process History

C. Application Logs

D. Task Properties

10. Which file needs to be updated to configure engines, ZooKeeper, and Kafka on different servers?

A. appian-config.xml

B. appian-topology.xml

C. process-models.xml

D. engine-settings.xml

Answers

1. B
2. C
3. B
4. A
5. C
6. C
7. C
8. A
9. C
10. B

Explanations

1. What should you avoid when designing queries to prevent performance issues?

A. Using primary keys as sort identifiers

B. Keeping "batchSize" as -1

C. Implementing filters effectively

D. Utilizing nested queries

Keeping "batchSize" as -1 can lead to performance issues because it instructs the system to retrieve an unlimited number of records in a single query. This can put a significant strain on system resources, leading to memory overflow, increased processing time, and degraded performance, especially when dealing with large datasets. Setting a specific batchSize allows for better control over the number of records processed at one time, helping to optimize performance by reducing the load on the system and enhancing responsiveness. Using primary keys as sort identifiers, for example, is generally a best practice when designing queries because primary keys are indexed, which makes sorting operations faster. Implementing filters effectively is essential as it ensures only relevant data is fetched, thereby improving the efficiency of queries. Utilizing nested queries can sometimes lead to complexities and performance bottlenecks, but when done correctly, they can also be a powerful way to organize and simplify data retrieval processes.

2. Which of the following is NOT a common method for performing integration over HTTP in Appian?

A. REST - Call Integration

B. SOAP (WSDL) - Call Webservice

C. FTP - Transfer File

D. GraphQL - Fetch Data

The correct answer is that FTP - Transfer File is not a common method for performing integration over HTTP in Appian. This is primarily because FTP (File Transfer Protocol) is a protocol used for transferring files rather than facilitating HTTP-based integrations. Appian is more focused on modern web service interactions, which are typically conducted using HTTP-based protocols like REST and SOAP. REST and SOAP are well-supported in Appian for integrating with external systems over HTTP. REST integrations allow for lightweight and stateless communication, while SOAP provides a structured and standards-based approach to web services. GraphQL, while not as traditional as REST or SOAP, is increasingly recognized for querying APIs in a flexible manner, and Appian has mechanisms to integrate with GraphQL endpoints as well. In contrast, FTP is not designed for the same use cases as the other protocols mentioned; rather, it serves a different function focused on file transfers, which is outside the realm of HTTP-based API integrations typically utilized in Appian workflows and applications. Hence, this makes it the option that is not commonly associated with HTTP integration methods in the Appian platform.

3. What is a disadvantage of the Bottom Up approach related to third-party tools?

A. They are incompatible with Appian

B. Knowledge of third-party tools is required

C. They significantly limit data type options

D. They cause more complex column naming

The choice that points out the requirement of knowledge about third-party tools is significant because a Bottom Up approach often involves integrating various systems and components into an overall architecture. This implies that developers need to be well-versed in the specifics of each third-party tool they are incorporating. Without this knowledge, it becomes challenging to effectively utilize and integrate these tools, which can lead to issues in the implementation process and hinder the overall system's functionality. This requirement can create a steep learning curve and could necessitate additional training or research efforts, which may not always be feasible within tight development schedules. Proficiency with third-party tools is essential for optimal use and to mitigate any potential integration problems that could arise from misunderstandings or lack of familiarity with how those tools operate. Understanding these tools allows developers to leverage their capabilities fully, ensuring that the integrated system performs efficiently and meets the project's requirements.

4. Which of the following is part of the Appian File System?

A. Archived Process Data

B. Process Execution Logs

C. System Configuration Settings

D. User Roles

The Appian File System encompasses specific components that are used for data storage and management within the Appian platform. "Archived Process Data" is a correct answer because it refers to the storage of historical process-related information, which is an integral part of how Appian manages and retains process data over time. This archival function allows organizations to retain important operational data for compliance, reporting, or analytical purposes and is typically maintained in a dedicated file system designed for efficient data management. Other components like "Process Execution Logs," while important for monitoring and performance tracking, are not categorized as part of the Appian File System. They serve a different purpose focused on system operations rather than data storage. Similarly, "System Configuration Settings" and "User Roles" relate to the configuration and security of the Appian environment and do not fall under the umbrella of file storage or data archiving. Understanding these distinctions helps clarify the focus of the Appian File System on data retention and management processes.

5. What issue arises with long column names in the Top Down data design approach?

A. They cannot be used in queries

B. They are automatically converted to uppercase

C. They are renamed by dropping vowels

D. They can only be 27 characters long

In the context of the Top Down data design approach, long column names can lead to issues due to the way that names are handled within the system. When long column names are processed, they may be automatically renamed by dropping vowels to create shorter, more manageable names. This renaming process can arise as a way to meet system constraints or to ensure compatibility with other features or tools that may have limitations on name lengths. This specific approach to renaming helps maintain a level of readability while reducing the complexity that can come from extremely lengthy identifiers. It is crucial for developers to be mindful of this behavior, as it can lead to confusion if the resulting column names after vowel omission are not clearly documented or understood. In contrast, options that suggest issues such as uppercase conversion, limitations on use in queries, or character constraints might not align with the specific challenges encountered when dealing with long column names in this design methodology.

6. What does an HTTP status code of 404 signify?

A. Success

B. Unauthorized access

C. Not found

D. Server side error

An HTTP status code of 404 signifies "Not Found." This code is returned when the server cannot find the requested resource. Essentially, it indicates that the user has requested a URL that does not exist on the server. This could happen for a variety of reasons, such as a mistyped URL, a broken link, or the resource having been moved or deleted. In web development and API contexts, understanding the meaning of a 404 status code is crucial for diagnosing problems with resource access and improving user experience by allowing developers to handle these errors gracefully, such as by displaying a custom "Page Not Found" message. Other status codes have their specific meanings: a success status indicates that a request has been fulfilled, an unauthorized access status indicates lack of proper credentials, and a server-side error code signals an issue on the server itself. Each status code provides important feedback for both users and developers regarding the status of web requests and resources.

7. What authentication method is considered the most secure and is also an industry standard?

A. Basic Authentication

B. API Key

C. OAuth 2.0 Client Credentials Grant

D. Cookie-based Authentication

OAuth 2.0 Client Credentials Grant is recognized as one of the most secure authentication methods and has become an industry standard for various applications, particularly in scenarios where access to APIs is required. This method employs a token-based system, which enhances security by allowing clients to obtain access tokens rather than sending sensitive information such as usernames or passwords with each request. The process involves an application (client) authenticating with an authorization server to receive a token, which can then be used for accessing protected resources. This minimizes the risk associated with credential management and mitigates potential interception of user credentials. Such token-based interactions also support finer granularity in permissions, ensuring that applications can only access specific resources that they have the right to. This method is widely adopted in modern web and mobile applications, especially for microservices architectures where components may need to communicate securely with one another. Additionally, it facilitates better scalability and supports different types of clients, such as web apps and mobile apps, while maintaining high security standards. In contrast, the other options are considered less secure for various reasons; for instance, Basic Authentication involves transmitting credentials with every request, which can be intercepted without secure transmission methods. API Keys, while convenient, can be easily compromised as they are often hard

8. Which phase of the Appian delivery methodology involves defining project outcomes?

A. Initiate

B. Build

C. Release

D. Optimize

The phase of the Appian delivery methodology that involves defining project outcomes is the Initiate phase. During this critical first stage, project stakeholders come together to identify and articulate the goals, objectives, and expected outcomes of the project. This phase sets the foundation for the entire project by ensuring that all team members have a clear understanding of what success looks like and what specific deliverables are needed to achieve that success. By outlining the expected results upfront, teams can avoid scope creep and misalignment later in the project, making it easier to plan effectively for the subsequent phases, such as Build, Release, and Optimize. In contrast, the Build phase focuses on developing the application based on defined requirements, the Release phase involves deploying the application to production, and the Optimize phase is about improving and refining the delivered solution based on user feedback and performance metrics.

9. What is not a typical component of process-related information stored in memory?

A. Process Variables

B. Process History

C. Application Logs

D. Task Properties

Application Logs are not typically classified as a component of process-related information stored in memory during a process execution context. Instead, they serve a different purpose, primarily focusing on logging system events and application-specific activity for debugging and monitoring purposes. The other options represent direct components of process management within an application. Process Variables are used to store data relevant to the current state of the process execution. Process History captures the history of a process instance, documenting various stages and statuses throughout its lifecycle. Task Properties hold the details of tasks within a process, such as assignment, deadlines, and current status. Therefore, while Application Logs provide valuable insights into application behavior, they do not directly relate to the immediate processing and management of ongoing processes in memory.

10. Which file needs to be updated to configure engines, ZooKeeper, and Kafka on different servers?

A. appian-config.xml

B. appian-topology.xml

C. process-models.xml

D. engine-settings.xml

To configure engines, ZooKeeper, and Kafka on different servers within the Appian platform, it's essential to focus on the appian-topology.xml file. This file plays a critical role in defining the topology of the Appian application server, including the configuration of various nodes in a clustered environment. When deploying Appian in a distributed setup, it is necessary to specify how different components communicate, including which servers handle specific roles like executing engine tasks or managing messaging through Kafka. The appian-topology.xml allows administrators to delineate these roles and ensure that each component, such as engines and ZooKeeper, operates on the designated server. In contrast, other options serve different purposes. The appian-config.xml is mainly for general configuration settings, process-models.xml pertains to the definitions of individual process models, and engine-settings.xml customizes particular engine configurations but does not manage the broader topology. Thus, for the task of setting up a distributed architecture with the necessary configurations, the appian-topology.xml is the correct file to update.