AIP-C01 Dumps

AWS Certified Generative AI Developer - Professional

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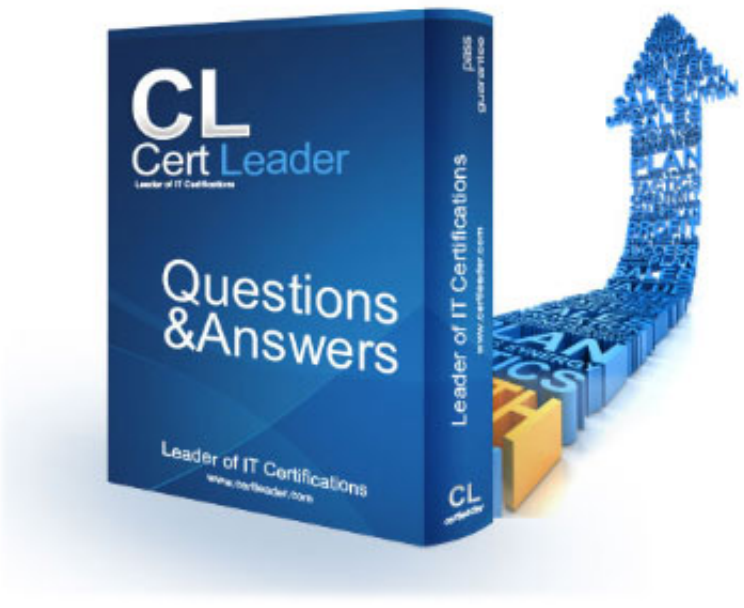

NEW QUESTION 1
An ecommerce company is developing a generative AI application that uses Amazon Bedrock with Anthropic Claude to recommend products to customers. Customers report that some recommended products are not available for sale on the website or are not relevant to the customer. Customers also report that the solution takes a long time to generate some recommendations.
The company investigates the issues and finds that most interactions between customers and the product recommendation solution are unique. The company confirms that the solution recommends products that are not in the company??s product catalog. The company must resolve these issues.
Which solution will meet this requirement?

A. Increase grounding within Amazon Bedrock Guardrail
B. Enable Automated Reasoningcheck
C. Set up provisioned throughput.
D. Use prompt engineering to restrict the model responses to relevant product
E. Use streaming techniques such as the InvokeModelWithResponseStream action to reduce perceived latency for the customers.
F. Create an Amazon Bedrock knowledge bas
G. Implement Retrieval Augmented Generation RA
H. Set the PerformanceConfigLatency parameter to optimized.
I. Store product catalog data in Amazon OpenSearch Servic
J. Validate the model??s product recommendations against the product catalo
K. Use Amazon DynamoDB to implement response caching.

Answer: C

NEW QUESTION 2
A financial services company is deploying a generative AI (GenAI) application that uses Amazon Bedrock to assist customer service representatives to provide personalized investment advice to customers. The company must implement a comprehensive governance solution that follows responsible AI practices and meets regulatory requirements.
The solution must detect and prevent hallucinations in recommendations. The solution must have safety controls for customer interactions. The solution must also monitor model behavior drift in real time and maintain audit trails of all prompt-response pairs for regulatory review. The company must deploy the solution within 60 days. The solution must integrate with the company's existing compliance dashboard and respond to customers within 200 ms.
Which solution will meet these requirements with the LEAST operational overhead?

A. Configure Amazon Bedrock guardrails to apply custom content filters and toxicity detectio
B. Use Amazon Bedrock Model Evaluation to detect hallucination
C. Store prompt- response pairs in Amazon DynamoDB to capture audit trails and set a TT
D. Integrate Amazon CloudWatch custom metrics with the existing compliance dashboard.
E. Deploy Amazon Bedrock and use AWS PrivateLink to access the application securel
F. Use AWS Lambda functions to implement custom prompt validatio
G. Store prompt-response pairs in an Amazon S3 bucket and configure S3 Lifecycle policie
H. Create custom Amazon CloudWatch dashboards to monitor model performance metrics.
I. Use Amazon Bedrock Agents and Amazon Bedrock Knowledge Bases to ground response
J. Use Amazon Bedrock Guardrails to enforce content safet
K. Use Amazon OpenSearch Service to store and index prompt-response pair
L. Integrate OpenSearch Service with Amazon QuickSight to create compliance reports and to detect model behavior drift.
M. Use Amazon SageMaker Model Monitor to detect model behavior drif
N. Use AWS WAF to filter conten
O. Store customer interactions in an encrypted Amazon RDS databas
P. Use Amazon API Gateway to create custom HTTP APIs to integrate with the compliance dashboard.

Answer: A

NEW QUESTION 3
A company uses an AI assistant application to summarize the company??s website content and provide information to customers. The company plans to use Amazon Bedrock to give the application access to a foundation model (FM).
The company needs to deploy the AI assistant application to a development environment and a production environment. The solution must integrate the environments with the FM. The company wants to test the effectiveness of various FMs in each environment. The solution must provide product owners with the ability to easily switch between FMs for testing purposes in each environment.
Which solution will meet these requirements?

A. Create one AWS CDK applicatio
B. Create multiple pipelines in AWS CodePipelin
C. Configure each pipeline to have its own settings for each F
D. Configure the application to invoke the Amazon Bedrock FMs by using the aws_bedrock.ProvisionedModel.fromProvisionedModelArn() method.
E. Create a separate AWS CDK application for each environmen
F. Configure the applications to invoke the Amazon Bedrock FMs by using the aws_bedrock.FoundationModel.fromFoundationModelId() metho
G. Create a separate pipeline in AWS CodePipeline for each environment.
H. Create one AWS CDK applicatio
I. Configure the application to invoke the Amazon Bedrock FMs by using the aws_bedrock.FoundationModel.fromFoundationModelId() metho
J. Create a pipeline in AWS CodePipeline that has a deployment stage for each environment that uses AWS CodeBuild deploy actions.
K. Create one AWS CDK application for the production environmen
L. Configure the application to invoke the Amazon Bedrock FMs by using the aws_bedrock.ProvisionedModel.fromProvisionedModelArn() metho
M. Create a pipeline in AWS CodePipelin
N. Configure the pipeline to deploy to the production environment by using an AWS CodeBuild deploy actio
O. For the development environment, manually recreate the resources by referring to the production application code.

Answer: C

NEW QUESTION 4
A GenAI developer is building a Retrieval Augmented Generation (RAG)-based customer support application that uses Amazon Bedrock foundation models (FMs).

The application needs to process 50 GB of historical customer conversations that are stored in an Amazon S3 bucket as JSON files. The application must use the processed data as its retrieval corpus. The application??s data processing workflow must extract relevant data from customer support documents, remove customer personally identifiable information (PII), and generate embeddings for vector storage. The processing workflow must be cost- effective and must finish within 4 hours.
Which solution will meet these requirements with the LEAST operational overhead?

A. Use AWS Lambda and Amazon Comprehend to process files in parallel, remove PII, and call Amazon Bedrock APIs to generate vector
B. Configure Lambda concurrency limits and memory settings to optimize throughput.
C. Create an AWS Glue ETL job to run PII detection scripts on the dat
D. Use Amazon SageMaker Processing to run the HuggingFaceProcessor to generate embeddings by using a pre-trained mode
E. Store the embeddings in Amazon OpenSearch Service.
F. Deploy an Amazon EMR cluster that runs Apache Spark with user-defined functions (UDFs) that call Amazon Comprehend to detect PI
G. Use Amazon Bedrock APIs to generate vector
H. Store outputs in Amazon Aurora PostgreSQL with the pgvector extension.
I. Implement a data processing pipeline that uses AWS Step Functions to orchestrate a workload that uses Amazon Comprehend to detect PII and Amazon Bedrock to generate embedding
J. Directly integrate the workflow with Amazon OpenSearch Serverless to store vectors and provide similarity search capabilities.

Answer: D

NEW QUESTION 5
A healthcare company is developing a document management system that stores medical research papers in an Amazon S3 bucket. The company needs a comprehensive metadata framework to improve search precision for a GenAI application. The metadata must include document timestamps, author information, and research domain classifications.
The solution must maintain a consistent metadata structure across all uploaded documents and allow foundation models (FMs) to understand document context without accessing full content.
Which solution will meet these requirements?

A. Store document timestamps in Amazon S3 system metadat
B. Use S3 object tags for domain classificatio
C. Implement custom user-defined metadata to store author information.
D. Set up S3 Object Lock with legal holds to track document timestamp
E. Use S3 object tags for author informatio
F. Implement S3 access points for domain classification.
G. Use S3 Inventory reports to track timestamp
H. Create S3 access points for domain classificatio
I. Store author information in S3 Storage Lens dashboards.
J. Use custom user-defined metadata to store author informatio
K. Use S3 Object Lock retention periods for timestamp
L. Use S3 Event Notifications for domain classification.

Answer: A

NEW QUESTION 6
A company has deployed an AI assistant as a React application that uses AWS Amplify, an AWS AppSync GraphQL API, and Amazon Bedrock Knowledge Bases. The application uses the GraphQL API to call the Amazon Bedrock RetrieveAndGenerate API for knowledge base interactions. The company configures an AWS Lambda resolver to use the RequestResponse invocation type.
Application users report frequent timeouts and slow response times. Users report these problems more frequently for complex questions that require longer processing.
The company needs a solution to fix these performance issues and enhance the user experience.
Which solution will meet these requirements?

A. Use AWS Amplify AI Kit to implement streaming responses from the GraphQL API and to optimize client-side rendering.
B. Increase the timeout value of the Lambda resolve
C. Implement retry logic with exponential backoff.
D. Update the application to send an API request to an Amazon SQS queu
E. Update the AWS AppSync resolver to poll and process the queue.
F. Change the RetrieveAndGenerate API to the InvokeModelWithResponseStream AP
G. Update the application to use an Amazon API Gateway WebSocket API to support the streaming response.

Answer: A

NEW QUESTION 7
A medical company is creating a generative AI (GenAI) system by using Amazon Bedrock. The system processes data from various sources and must maintain end-to-end data lineage. The system must also use real-time personally identifiable information (PII) filtering and audit trails to automatically report compliance.
Which solution will meet these requirements?

A. Use AWS Glue Data Catalog to register all data sources and track lineag
B. Use Amazon Bedrock Guardrails PII filter
C. Enable AWS CloudTrail logging for all Amazon Bedrock API calls with Amazon S3 integratio
D. Use Amazon Macie to scan stored data for sensitive information and publish findings to Amazon CloudWatch Log
E. Create CloudWatch dashboards to visualize the findings and generate automated compliance reports.
F. Use AWS Config to track data source configurations and change
G. Use AWS WAF with custom rules to filter PII at the application layer before Amazon Bedrock processes the dat
H. Configure Amazon EventBridge to capture and route audit events to Amazon S3. Use Amazon Comprehend Medical with scheduled AWS Lambda functions to analyze stored outputs for compliance violations.
I. Use AWS DataSync to replicate data sources to track lineag
J. Configure Amazon Macie to scan Amazon Bedrock outputs for sensitive informatio
K. Use AWS Systems Manager Session Manager to log user interaction
L. Deploy Amazon Textract with AWS Step Functions workflows to identify and redact PII from generated reports.

M. Configure Amazon Athena to query data sources to analyze and report on data lineag
N. Use Amazon CloudWatch custom metrics to monitor PII exposure in Amazon Bedrock responses and establish AWS X-Ray tracing to generate an audit trai
O. Use an Amazon Rekognition Custom Labels model to detect sensitive information in the data that Amazon Bedrock processes.

Answer: A

NEW QUESTION 8
A company has set up Amazon Q Developer Pro licenses for all developers at the company. The company maintains a list of approved resources that developers must use when developing applications. The approved resources include internal libraries, proprietary algorithmic techniques, and sample code with approved styling.
A new team of developers is using Amazon Q Developer to develop a new Java-based application. The company must ensure that the new developer team uses the company??s approved resources. The company does not want to make project-level modifications.
Which solution will meet these requirements?

A. Create a Git repository that contains all of the approved internal libraries, algorithms, and code sample
B. Include this Git repository in the application project locally as part of the workspac
C. Ensure that the developers use the workspace context to retrieve suggestions from the Git repository.
D. In the project root folder, create a folder named amazonq/rule
E. Add the approved internal libraries, algorithms, and code samples to the folder.
F. Create a folder in the application project named rule
G. Store the guidelines and code in the folder for Amazon Q Developer to reference for code suggestions.
H. Create an Amazon Q Developer customization that includes the approved data source
I. Ensure that the developers use the customization to develop the application.

Answer: D

NEW QUESTION 9
A university recently digitized a collection of archival documents, academic journals, and manuscripts. The university stores the digital files in an AWS Lake Formation data lake.
The university hires a GenAI developer to build a solution to allow users to search the digital files by using text queries. The solution must return journal abstracts that are semantically similar to a user's query. Users must be able to search the digitized collection based on text and metadata that is associated with the journal abstracts. The metadata of the digitized files does not contain keywords. The solution must match similar abstracts to one another based on the similarity of their text. The data lake contains fewer than 1 million files.
Which solution will meet these requirements with the LEAST operational overhead?

A. Use Amazon Titan Embeddings in Amazon Bedrock to create vector representations of the digitized file
B. Store embeddings in the OpenSearch Neural plugin for Amazon OpenSearch Service.
C. Use Amazon Comprehend to extract topics from the digitized file
D. Store the topics and file metadata in an Amazon Aurora PostgreSQL databas
E. Query the abstract metadata against the data in the Aurora database.
F. Use Amazon SageMaker AI to deploy a sentence-transformer mode
G. Use the model to create vector representations of the digitized file
H. Store embeddings in an Amazon Aurora PostgreSQL database that has the pgvector extension.
I. Use Amazon Titan Embeddings in Amazon Bedrock to create vector representations of the digitized file
J. Store embeddings in an Amazon Aurora PostgreSQL Serverless database that has the pgvector extension.

Answer: D

NEW QUESTION 10
A healthcare company is using Amazon Bedrock to build a system to help practitioners make clinical decisions. The system must provide treatment recommendations to physicians based only on approved medical documentation and must cite specific sources. The system must not hallucinate or produce factually incorrect information.
Which solution will meet these requirements with the LEAST operational overhead?

A. Integrate Amazon Bedrock with Amazon Kendra to retrieve approved document
B. Implement custom post-processing to compare generated responses against source documents and to include citations.
C. Deploy an Amazon Bedrock Knowledge Base and connect it to approved clinical source document
D. Use the Amazon Bedrock RetrieveAndGenerate API to return citations from the knowledge base.
E. Use Amazon Bedrock and Amazon Comprehend Medical to extract medical entitie
F. Implement verification logic against a medical terminology database.
G. Use an Amazon Bedrock knowledge base with Retrieve API calls and InvokeModel API calls to retrieve approved clinical source document
H. Implement verification logic to compare against retrieved sources and to cite sources.

Answer: B

NEW QUESTION 10
Example Corp provides a personalized video generation service that millions of enterprise customers use. Customers generate marketing videos by submitting prompts to the company??s proprietary generative AI (GenAI) model. To improve output relevance and personalization, Example Corp wants to enhance the prompts by using customer-specific context such as product preferences, customer attributes, and business history.
The customers have strict data governance requirements. The customers must retain full ownership and control over their own data. The customers do not require real-time access. However, semantic accuracy must be high and retrieval latency must remain low to support customer experience use cases.
Example Corp wants to minimize architectural complexity in its integration pattern. Example Corp does not want to deploy and manage services in each customer??s environment unless necessary.
Which solution will meet these requirements?

A. Ensure that each customer sets up an Amazon Q Business index that includes the customer??s internal dat
B. Ensure that each customer designates Example Corp as a data accessor to allow Example Corp to retrieve relevant content by using a secure API to enrich prompts at runtime.
C. Use federated search with Model Context Protocol (MCP) by deploying real-time MCP servers for each custome

D. Retrieve data in real time during prompt generation.
E. Ensure that each customer configures an Amazon Bedrock knowledge bas
F. Allow cross-account querying so Example Corp can retrieve structured data for prompt augmentation.
G. Configure Amazon Kendra to crawl customer data source
H. Share the resulting indexes across accounts so Example Corp can query each customer??s Amazon Kendra index to retrieve augmentation data.

Answer: A

NEW QUESTION 13
A financial services company needs to build a document analysis system that uses Amazon Bedrock to process quarterly reports. The system must analyze financial data, perform sentiment analysis, and validate compliance across batches of reports. Each batch contains 5 reports. Each report requires multiple foundation model (FM) calls. The solution must finish the analysis within 10 seconds for each batch. Current sequential processing takes 45 seconds for each batch.
Which solution will meet these requirements?

A. Use AWS Lambda functions with provisioned concurrency to process each analysis type sequentiall
B. Configure the Lambda function timeouts to 10 second
C. Configure automatic retries with exponential backoff.
D. Use AWS Step Functions with a Parallel state to invoke separate AWS Lambdafunctions for each analysis type simultaneousl
E. Configure Amazon Bedrock client timeout
F. Use Amazon CloudWatch metrics to track execution time and model inference latency.
G. Create an Amazon SQS queue to buffer analysis request
H. Deploy multiple AWS Lambda functions with reserved concurrenc
I. Configure each Lambda function to process different aspects of each report sequentially and then combine the results.
J. Deploy an Amazon ECS cluster that runs containers that process each report sequentiall
K. Use a load balancer to distribute batch workload
L. Configure an auto-scaling policy based on CPU utilization.

Answer: B

NEW QUESTION 18
A company is developing a generative AI (GenAI)-powered customer support application that uses Amazon Bedrock foundation models (FMs). The application must maintain conversational context across multiple interactions with the same user. The application must run clarification workflows to handle ambiguous user queries. The company must store encrypted records of each user conversation to use for personalization. The application must be able to handle thousands of concurrent users while responding to each user quickly.
Which solution will meet these requirements?

A. Use an AWS Step Functions Express workflow to orchestrate conversation flo
B. Invoke AWS Lambda functions to run clarification logi
C. Store conversation history in Amazon RDS and use session IDs as the primary key.
D. Use an AWS Step Functions Standard workflow to orchestrate clarification workflow
E. Include Wait for a Callback patterns to manage the workflow
F. Store conversation history in Amazon DynamoD
G. Purchase on-demand capacity and configure server-side encryption.
H. Deploy the application by using an Amazon API Gateway REST API to route user requests to an AWS Lambda function to update and retrieve conversation contex
I. Store conversation history in Amazon S3 and configure server-side encryptio
J. Save each interaction as a separate JSON file.
K. Use AWS Lambda functions to call Amazon Bedrock inference API
L. Use Amazon SQS queues to orchestrate clarification step
M. Store conversation history in an Amazon ElastiCache (Redis OSS) cluste
N. Configure encryption at rest.

Answer: B

NEW QUESTION 19
A company uses Amazon Bedrock to implement a Retrieval Augmented Generation (RAG)- based system to serve medical information to users. The company needs to compare multiple chunking strategies, evaluate the generation quality of two foundation models (FMs), and enforce quality thresholds for deployment.
Which Amazon Bedrock evaluation configuration will meet these requirements?

A. Create a retrieve-only evaluation job that uses a supported version of Anthropic Claude Sonnet as the evaluator mode
B. Configure metrics for context relevance and context coverag
C. Define deployment thresholds in a separate CI/CD pipeline.
D. Create a retrieve-and-generate evaluation job that uses custom precision-at-k metrics and an LLM-as-a-judge metric with a scale of 1–5. Include each chunking strategy in the evaluation datase
E. Use a supported version of Anthropic Claude Sonnet to evaluate responses from both FMs.
F. Create a separate evaluation job for each chunking strategy and FM combinatio
G. Use Amazon Bedrock built-in metrics for correctness and completenes
H. Manually review scores before deployment approval.
I. Set up a pipeline that uses multiple retrieve-only evaluation jobs to assess retrieval qualit
J. Create separate evaluation jobs for both FMs that use Amazon Nova Pro as the LLM-as-a-judge mode
K. Evaluate based on faithfulness and citation precision metrics.

Answer: B

NEW QUESTION 20
A company uses Amazon Bedrock to build a Retrieval Augmented Generation (RAG) system. The RAG system uses an Amazon Bedrock Knowledge Bases that is based on an Amazon S3 bucket as the data source for emergency news video content. The system retrieves transcripts, archived reports, and related documents from the S3 bucket.

The RAG system uses state-of-the-art embedding models and a high-performing retrieval setup. However, users report slow responses and irrelevant results, which cause decreased user satisfaction. The company notices that vector searches are evaluating too many documents across too many content types and over long periods of time.
The company determines that the underlying models will not benefit from additional fine- tuning. The company must improve retrieval accuracy by applying smarter constraints and wants a solution that requires minimal changes to the existing architecture.
Which solution will meet these requirements?

A. Enhance embeddings by using a domain-adapted model that is specifically trained on emergency news content for improved vector similarity.
B. Migrate to Amazon OpenSearch Servic
C. Use vector fields and metadata filters to define the scope of results retrieval.
D. Enable metadata-aware filtering within the Amazon Bedrock knowledge base by indexing S3 object metadata.
E. Migrate to an Amazon Q Business index to perform structured metadata filtering and document categorization during retrieval.

Answer: C

NEW QUESTION 24
A specialty coffee company has a mobile app that generates personalized coffee roast profiles by using Amazon Bedrock with a three-stage prompt chain. The prompt chain converts user inputs into structured metadata, retrieves relevant logs for coffee roasts, and generates a personalized roast recommendation for each customer.
Users in multiple AWS Regions report inconsistent roast recommendations for identical inputs, slow inference during the retrieval step, and unsafe recommendations such as brewing at excessively high temperatures. The company must improve the stability of outputs for repeated inputs. The company must also improve app performance and the safety of the app's outputs. The updated solution must ensure 99.5% output consistency for identical inputs and achieve inference latency of less than 1 second. The solution must also block unsafe or hallucinated recommendations by using validated safety controls.
Which solution will meet these requirements?

A. Deploy Amazon Bedrock with provisioned throughput to stabilize inference latenc
B. Apply Amazon Bedrock guardrails that have semantic denial rules to block unsafe output
C. Use Amazon Bedrock Prompt Management to manage prompts by using approval workflows.
D. Use Amazon Bedrock Agents to manage chainin
E. Log model inputs and outputs to Amazon CloudWatch Log
F. Use logs from Amazon CloudWatch to perform A/B testing for prompt versions.
G. Cache prompt results in Amazon ElastiCach
H. Use AWS Lambda functions to pre- process metadata and to trace end-to-end latenc
I. Use AWS X-Ray to identify and remediate performance bottlenecks.
J. Use Amazon Kendra to improve roast log retrieval accurac
K. Store normalized prompt metadata within Amazon DynamoD
L. Use AWS Step Functions to orchestrate multi-step prompts.

Answer: A

NEW QUESTION 26
A financial services company uses an AI application to process financial documents by using Amazon Bedrock. During business hours, the application handles approximately 10,000 requests each hour, which requires consistent throughput.
The company uses the CreateProvisionedModelThroughput API to purchase provisioned throughput. Amazon CloudWatch metrics show that the provisioned capacity is unused while on-demand requests are being throttled. The company finds the following code in the application:
response = bedrock_runtime.invoke_model(modelId="anthropic.claude-v2", body=json.dumps(payload)
)
The company needs the application to use the provisioned throughput and to resolve the throttling issues.
Which solution will meet these requirements?

A. Increase the number of model units (MUs) in the provisioned throughput configuration.
B. Replace the model ID parameter with the ARN of the provisioned model that the CreateProvisionedModelThroughput API returns.
C. Add exponential backoff retry logic to handle throttling exceptions during peak hours.
D. Modify the application to use the invokeModelWithResponseStream API instead of the invokeModel API.

Answer: B

NEW QUESTION 27
An ecommerce company operates a global product recommendation system that needs to switch between multiple foundation models (FMs) in Amazon Bedrock based on regulations, cost optimization, and performance requirements. The company must apply custom controls based on proprietary business logic, including dynamic cost thresholds, AWS Region-specific compliance rules, and real-time A/B testing across multiple FMs. The system must be able to switch between FMs without deploying new code. The system must route user requests based on complex rules including user tier, transaction value, regulatory zone, and real-time cost metrics that change hourly and require immediate propagation across thousands of concurrent requests.
Which solution will meet these requirements?

A. Deploy an AWS Lambda function that uses environment variables to store routing rules and Amazon Bedrock FM ID
B. Use the Lambda console to update the environment variables when business requirements chang
C. Configure an Amazon API Gateway REST API to read request parameters to make routing decisions.
D. Deploy Amazon API Gateway REST API request transformation templates to implement routing logic based on request attribute
E. Store Amazon Bedrock FM endpoints as REST API stage variable
F. Update the variables when the system switches between models.
G. Configure an AWS Lambda function to fetch routing configuration from the AWS AppConfig Agent for each user reques
H. Run business logic in the Lambda function to select the appropriate FM for each reques
I. Expose the FM through a single Amazon API Gateway REST API endpoint.
J. Use AWS Lambda authorizers for an Amazon API Gateway REST API to evaluate routing rules that are stored in AWS AppConfi
K. Return authorization contexts based on business logi
L. Route requests to model-specific Lambda functions for each Amazon Bedrock FM.

Answer: C

NEW QUESTION 30
A company uses Amazon Bedrock to generate technical content for customers. The company has recently experienced a surge in hallucinated outputs when the company??s model generates summaries of long technical documents. The model outputs include inaccurate or fabricated details. The company??s current solution uses a large foundation model (FM) with a basic one-shot prompt that includes the full document in a single input.
The company needs a solution that will reduce hallucinations and meet factual accuracy goals. The solution must process more than 1,000 documents each hour and deliver summaries within 3 seconds for each document.
Which combination of solutions will meet these requirements? (Select TWO.)

A. Implement zero-shot chain-of-thought (CoT) instructions that require step-by-step reasoning with explicit fact verification before the model generates each summary.
B. Use Retrieval Augmented Generation (RAG) with an Amazon Bedrock knowledge bas
C. Apply semantic chunking and tuned embeddings to ground summaries in source content.
D. Configure Amazon Bedrock guardrails to block any generated output that matches patterns that are associated with hallucinated content.
E. Increase the temperature parameter in Amazon Bedrock.
F. Prompt the Amazon Bedrock model to summarize each full document in one pass.

Answer: BC

NEW QUESTION 31
A company uses AWS Lambda functions to build an AI agent solution. A GenAI developer must set up a Model Context Protocol (MCP) server that accesses user information. The GenAI developer must also configure the AI agent to use the new MCP server. The GenAI developer must ensure that only authorized users can access the MCP server.
Which solution will meet these requirements?

A. Use a Lambda function to host the MCP serve
B. Grant the AI agent Lambda functions permission to invoke the Lambda function that hosts the MCP serve
C. Configure the AI agent??s MCP client to invoke the MCP server asynchronously.
D. Use a Lambda function to host the MCP serve
E. Grant the AI agent Lambda functions permission to invoke the Lambda function that hosts the MCP serve
F. Configure the AI agent to use the STDIO transport with the MCP server.
G. Use a Lambda function to host the MCP serve
H. Create an Amazon API Gateway HTTP API that proxies requests to the Lambda functio
I. Configure the AI agent solution to use the Streamable HTTP transport to make requests through the HTTP AP
J. Use Amazon Cognito to enforce OAuth 2.1.
K. Use a Lambda layer to host the MCP serve
L. Add the Lambda layer to the AI agent Lambda function
M. Configure the agentic AI solution to use the STDIO transport to send requests to the MCP serve
N. In the AI agent??s MCP configuration, specify the Lambda layer ARN as the comman
O. Specify the user credentials as environment variables.

Answer: C

NEW QUESTION 35
A software company is using Amazon Q Business to build an AI assistant that allows employees to access company information and personal information by using natural language prompts. The company stores this information in an Amazon S3 bucket.
Each department in the company has a dedicated prefix in the S3 bucket. Each object name includes the S3 prefix of the department that it belongs to. Each department can belong to only a single group in AWS IAM Identity Center. Each employee belongs to a single department.
The company configures Amazon Q Business to access data stored in an S3 bucket as a data source. The company needs to ensure that the AI assistant respects access controls based on the user's IAM Identity Center group membership.
Which solution will meet this requirement with the LEAST operational overhead?

A. Create a JSON file named acl.json in each department folde
B. In each file, create access control entries that specify the IAM Identity Center group that should have access to that department's dat
C. Indicate the location of the JSON file in the Access Control section of the data source settings.
D. Create a single JSON file named acl.json at the top level of the S3 bucke
E. Add access control entries that map each department's S3 prefix to its corresponding IAM Identity Center grou
F. Indicate the location of the JSON file in the Access Control section of the data source settings.
G. For each IAM Identity Center group, create a separate permissions set that denies access to all prefixes in the S3 bucke
H. Add a StringNotEquals condition key to the permissions set for each group that specifies the department each group is associated wit
I. Attach the permissions sets to the Identity Center groups.
J. Create a metadata file named metadata.json at the top level of the S3 bucke
K. Add anAccessControlList object to the file that specifies the S3 path of each department's prefi
L. Specify the IAM Identity Center group that should have access to each department's prefi
M. Reference the file location in the data source metadata settings.

Answer: B

NEW QUESTION 39
A company provides a service that helps users from around the world discover new restaurants. The service has 50 million monthly active users. The company wants to implement a semantic search solution across a database that contains 20 million restaurants and 200 million reviews. The company currently stores the data in PostgreSQL.
The solution must support complex natural language queries and return results for at least 95% of queries within 500 ms. The solution must maintain data freshness for restaurant details that update hourly. The solution must also scale cost-effectively during peak usage periods.
Which solution will meet these requirements with the LEAST development effort?

A. Migrate the restaurant data to Amazon OpenSearch Servic
B. Implement keyword-based search rules that use custom analyzers and relevance tuning to find restaurants based on attributes such as cuisine type, features, and locatio
C. Create Amazon API Gateway HTTP API endpoints to transform user queries into structured search parameters.
D. Migrate the restaurant data to Amazon OpenSearch Servic

E. Use a foundation model (FM) in Amazon Bedrock to generate vector embeddings from restaurant descriptions, reviews, and menu item
F. When users submit natural language queries, convert the queries to embeddings by using the same F
G. Perform k-nearest neighbors (k-NN) searches to find semantically similar results.
H. Keep the restaurant data in PostgreSQL and implement a pgvector extensio
I. Use a foundation model (FM) in Amazon Bedrock to generate vector embeddings from restaurant dat
J. Store the vector embeddings directly in PostgreSQ
K. Create an AWS Lambda function to convert natural language queries to vector representations by using the same F
L. Configure the Lambda function to perform similarity searches within the database.
M. Migrate restaurant data to an Amazon Bedrock knowledge base by using a custom ingestion pipelin
N. Configure the knowledge base to automatically generate embeddings from restaurant informatio
O. Use the Amazon Bedrock Retrieve API with built-in vector search capabilities to query the knowledge base directly by using natural language input.

Answer: B

NEW QUESTION 43
A healthcare company is using Amazon Bedrock to build a Retrieval Augmented Generation (RAG) application that helps practitioners make clinical decisions. The application must achieve high accuracy for patient information retrievals, identify hallucinations in generated content, and reduce human review costs.
Which solution will meet these requirements?

A. Use Amazon Comprehend to analyze and classify RAG responses and to extract medical entities and relationship
B. Use AWS Step Functions to orchestrate automated evaluation
C. Configure Amazon CloudWatch metrics to track entity recognition confidence score
D. Configure CloudWatch to send an alert when accuracy falls below specified thresholds.
E. Implement automated large language model (LLM)-based evaluations that use a specialized model that is fine-tuned for medical content to assess all response
F. Deploy AWS Lambda functions to parallelize evaluation
G. Publish results to Amazon CloudWatch metrics that track relevance and factual accuracy.
H. Configure Amazon CloudWatch Synthetics to generate test queries that have known answers on a regular schedule, and track model success rate
I. Set up dashboards that compare synthetic test results against expected outcomes.
J. Deploy a hybrid evaluation system that uses an automated LLM-as-a-judge evaluation to initially screen responses and targeted human reviews for edge case
K. Use a built-in Amazon Bedrock evaluation to track retrieval precision and hallucination rates.

Answer: D

NEW QUESTION 48
A bank is developing a generative AI (GenAI)-powered AI assistant that uses Amazon Bedrock to assist the bank??s website users with account inquiries and financial guidance. The bank must ensure that the AI assistant does not reveal any personally identifiable information (PII) in customer interactions.
The AI assistant must not send PII in prompts to the GenAI model. The AI assistant must not respond to customer requests to provide investment advice. The bank must collect audit logs of all customer interactions, including any images or documents that are transmitted during customer interactions.
Which solution will meet these requirements with the LEAST operational effort?

A. Use Amazon Macie to detect and redact PII in user inputs and in the model response
B. Apply prompt engineering techniques to force the model to avoid investment advice topic
C. Use AWS CloudTrail to capture conversation logs.
D. Use an AWS Lambda function and Amazon Comprehend to detect and redact PI
E. Use Amazon Comprehend topic modeling to prevent the AI assistant from discussing investment advice topic
F. Set up custom metrics in Amazon CloudWatch to capture customer conversations.
G. Configure Amazon Bedrock guardrails to apply a sensitive information policy to detect and filter PI
H. Set up a topic policy to ensure that the AI assistant avoids investment advice topic
I. Use the Converse API to log model invocation
J. Enable delivery and image logging to Amazon S3.
K. Use regex controls to match patterns for PI
L. Apply prompt engineering techniques to avoid returning PII or investment advice topics to customer
M. Enable model invocation logging, delivery logging, and image logging to Amazon S3.

Answer: C

NEW QUESTION 50
A company is using Amazon Bedrock to develop an AI-powered application that uses a foundation model that supports cross-Region inference and provisioned throughput. The application must serve users in Europe and North America with consistently low latency. The application must comply with data residency regulations that require European user data to remain within Europe-based AWS Regions.
During testing, the application experiences service degradation when Regional traffic spikes reach service quotas. The company needs a solution that maintains application resilience and minimizes operational complexity.
Which solution will meet these requirements?

A. Deploy separate Amazon Bedrock instances in North American and European Region
B. Use a custom routing layer that directs traffic based on user locatio
C. Configure Amazon CloudWatch alarms to monitor Regional service usag
D. Use Amazon SNS to send email alerts to the company when usage approaches specified thresholds.
E. Use Amazon Bedrock cross-Region inference profiles by specifying geographical codes in profile IDs when the application calls the InvokeModel AP
F. Configure separate Amazon API Gateway HTTP APIs to direct European and North American users to the appropriate Regional endpoints.
G. Deploy a multi-Region Amazon API Gateway HTTP API and AWS Lambda functions that implement retry logic to handle throttlin
H. Configure the Lambda functions to call the foundation model in the nearest secondary Region when the application reaches service quotas in the primary Regio
I. Use intelligent routing to ensure compliance with data residency requirements.
J. Configure provisioned throughput for Amazon Bedrock in multiple Region
K. Implement failover logic in the application code to switch between Regions when throttling occur
L. Use AWS Global Accelerator to route traffic to the appropriate endpoints based on user location.

Answer: B

NEW QUESTION 52
A financial services company is building a customer support application that retrieves relevant financial regulation documents from a database based on semantic similarity to user queries. The application must integrate with Amazon Bedrock to generate responses. The application must search documents in English, Spanish, and Portuguese. The application must filter documents by metadata such as publication date, regulatory agency, and document type.
The database stores approximately 10 million document embeddings. To minimize operational overhead, the company wants a solution that minimizes management and maintenance effort while providing low-latency responses for real-time customer interactions.
Which solution will meet these requirements?

A. Use Amazon OpenSearch Serverless to provide vector search capabilities and metadata filterin
B. Integrate with Amazon Bedrock Knowledge Bases to enable Retrieval Augmented Generation (RAG) using an Anthropic Claude foundation model.
C. Deploy an Amazon Aurora PostgreSQL database with the pgvector extensio
D. Store embeddings and metadata in table
E. Use SQL queries for similarity search and send results to Amazon Bedrock for response generation.
F. Use Amazon S3 Vectors to configure a vector index and non-filterable metadata field
G. Integrate S3 Vectors with Amazon Bedrock for RAG.
H. Set up an Amazon Neptune Analytics database with a vector inde
I. Use graph-based retrieval and Amazon Bedrock for response generation.

Answer: A

NEW QUESTION 53
A media company is launching a platform that allows thousands of users every hour to upload images and text content. The platform uses Amazon Bedrock to process the uploaded content to generate creative compositions.
The company needs a solution to ensure that the platform does not process or produce inappropriate content. The platform must not expose personally identifiable information (PII) in the compositions. The solution must integrate with the company's existing Amazon S3 storage workflow.
Which solution will meet these requirements with the LEAST infrastructure management overhead?

A. Enable the Enhanced Monitoring too
B. Use an Amazon CloudWatch alarm to filter traffic to the platfor
C. Use Amazon Comprehend PII detection to pre-process the dat
D. Create a CloudWatch alarm to monitor for Amazon Comprehend PII detection event
E. Create an AWS Step Functions workflow that includes an Amazon Rekognition image moderation step.
F. Use an Amazon API Gateway HTTP API with request validation templates to screen content before storing the uploaded content in Amazon S3. Use Amazon SageMaker AI to build custom content moderation models that process content before sending the processed content to Amazon Bedrock.
G. Create an Amazon Cognito user pool that uses pre-authentication AWS Lambda functions to run content moderation check
H. Use Amazon Textract to filter text content and Amazon Rekognition to filter image content before allowing users to upload content to the platform.
I. Create an AWS Step Functions workflow that uses built-in Amazon Bedrock guardrails to filter conten
J. Use Amazon Comprehend PII detection to pre-process the conten
K. Use Amazon Rekognition image moderation.

Answer: D

NEW QUESTION 54
An enterprise application uses an Amazon Bedrock foundation model (FM) to process and analyze 50 to 200 pages of technical documents. Users are experiencing inconsistent responses and receiving truncated outputs when processing documents that exceed the FM's context window limits.
Which solution will resolve this problem?

A. Configure fixed-size chunking at 4,000 tokens for each chunk with 20% overla
B. Use application-level logic to link multiple chunks sequentially until the FM's maximum context window of 200,000 tokens is reached before making inference calls.
C. Use hierarchical chunking with parent chunks of 8,000 tokens and child chunks of 2,000 token
D. Use Amazon Bedrock Knowledge Bases built-in retrieval to automatically select relevant parent chunks based on query contex
E. Configure overlap tokens to maintain semantic continuity.
F. Use semantic chunking with a breakpoint percentile threshold of 95% and a buffer size of 3 sentence
G. Use the RetrieveAndGenerate API to dynamically select the most relevant chunks based on embedding similarity scores.
H. Create a pre-processing AWS Lambda function that analyzes document token count by using the FM's tokenize
I. Configure the Lambda function to split documents into equal segments that fit within 80% of the context windo
J. Configure the Lambda function to process each segment independently before aggregating the results.

Answer: C

NEW QUESTION 59
A company is using Amazon Bedrock to build a customer-facing AI assistant that handles sensitive customer inquiries. The company must use defense-in-depth safety controls to block sophisticated prompt injection attacks. The company must keep audit logs of all safety interventions. The AI assistant must have cross-Region failover capabilities.
Which solution will meet these requirements?

A. Configure Amazon Bedrock guardrails with content filters set to high to protect against prompt injection attack
B. Use a guardrail profile to implement cross-Region guardrail inferenc
C. Use Amazon CloudWatch Logs with custom metrics to capture detailed guardrail intervention events.
D. Configure Amazon Bedrock guardrails with content filters set to hig
E. Use AWS WAF to block suspicious input
F. Use AWS CloudTrail to log API calls.
G. Deploy Amazon Comprehend custom classifiers to detect prompt injection attack
H. Use Amazon API Gateway request validatio
I. Use CloudWatch Logs to capture intervention events.
J. Configure Amazon Bedrock guardrails with custom content filters and word filters set to hig
K. Configure cross-Region guardrail replication for failove
L. Store logs in AWS CloudTrail for compliance auditing.

Answer: A

NEW QUESTION 62
A company is using AWS Lambda and REST APIs to build a reasoning agent to automate support workflows. The system must preserve memory across interactions, share relevant agent state, and support event-driven invocation and synchronous invocation. The system must also enforce access control and session-based permissions.
Which combination of steps provides the MOST scalable solution? (Select TWO.)

A. Use Amazon Bedrock AgentCore to manage memory and session-aware reasonin
B. Deploy the agent with built-in identity support, event handling, and observability.
C. Register the Lambda functions and REST APIs as actions by using Amazon API Gateway and Amazon EventBridg
D. Enable Amazon Bedrock AgentCore to invoke the Lambda functions and REST APIs without custom orchestration code.
E. Use Amazon Bedrock Agents for reasoning and conversation managemen
F. Use AWS Step Functions and Amazon SQS for orchestratio
G. Store agent state in Amazon DynamoDB.
H. Deploy the reasoning logic as a container on Amazon ECS behind API Gatewa
I. Use Amazon Aurora to store memory and identity data.
J. Build a custom RAG pipeline by using Amazon Kendra and Amazon Bedroc
K. Use AWS Lambda to orchestrate tool invocation
L. Store agent state in Amazon S3.

Answer: AB

NEW QUESTION 65
An elevator service company has developed an AI assistant application by using Amazon Bedrock. The application generates elevator maintenance recommendations to support the company??s elevator technicians. The company uses Amazon Kinesis Data Streams to collect the elevator sensor data.
New regulatory rules require that a human technician must review all AI-generated recommendations. The company needs to establish human oversight workflows to review and approve AI recommendations. The company must store all human technician review decisions for audit purposes.
Which solution will meet these requirements?

A. Create a custom approval workflow by using AWS Lambda functions and Amazon SQS queues for human review of AI recommendation
B. Store all review decisions in Amazon DynamoDB for audit purposes.
C. Create an AWS Step Functions workflow that has a human approval step that uses the waitForTaskToken API to pause executio
D. After a human technician completes a review, use an AWS Lambda function to call the SendTaskSuccess API with the approval decisio
E. Store all review decisions in Amazon DynamoDB.
F. Create an AWS Glue workflow that has a human approval ste
G. After the human technician review, integrate the application with an AWS Lambda function that calls the SendTaskSuccess AP
H. Store all human technician review decisions in Amazon DynamoDB.
I. Configure Amazon EventBridge rules with custom event patterns to route AI recommendations to human technicians for revie
J. Create AWS Glue jobs to process human technician approval queue
K. Use Amazon ElastiCache to cache all human technician review decisions.

Answer: B

NEW QUESTION 69
A company provides a service that helps users from around the world discover new restaurants. The service has 50 million monthly active users. The company wants to implement a semantic search solution across a database that contains 20 million restaurants and 200 million reviews. The company currently stores the data in a PostgreSQL database.
The solution must support complex natural language queries and return results for at least 95% of queries within 500 ms. The solution must maintain data freshness for restaurant details that update hourly. The solution must also scale cost-effectively during peak usage periods.
Which solution will meet these requirements with the LEAST development effort?

A. Migrate the restaurant data to Amazon OpenSearch Servic
B. Implement keyword-based search rules that use custom analyzers and relevance tuning to find restaurants based on attributes such as cuisine type, feature, and locatio
C. Create Amazon API Gateway HTTP API endpoints to transform user queries into structured search parameters.
D. Migrate the restaurant data to Amazon OpenSearch Servic
E. Use a foundation model (FM) in Amazon Bedrock to generate vector embeddings from restaurant descriptions, reviews, and menu item
F. When users submit natural language queries, convert the queries to embeddings by using the same F
G. Perform k-nearest neighbors (k-NN) searches to find semantically similar results.
H. Keep the restaurant data in PostgreSQL and implement a pgvector extensio
I. Use a foundation model (FM) in Amazon Bedrock to generate vector embeddings from restaurant dat
J. Store the vector embeddings directly in PostgreSQ
K. Create an AWS Lambda function to convert natural language queries to vector representations by using the same F
L. Configure the Lambda function to perform similarity searches within the database.
M. Migrate the restaurant data to an Amazon Bedrock knowledge base by using a custom ingestion pipelin
N. Configure the knowledge base to automatically generate embeddings from restaurant informatio
O. Use the Amazon Bedrock Retrieve API with built-in vector search capabilities to query the knowledge base directly by using natural language input.

Answer: D

NEW QUESTION 71
A company is developing a customer support application that uses Amazon Bedrock foundation models (FMs) to provide real-time AI assistance to the company??s employees. The application must display AI-generated responses character by character as the responses are generated. The application needs to support thousands of concurrent users with minimal latency. The responses typically take 15 to 45 seconds to finish.
Which solution will meet these requirements?

A. Configure an Amazon API Gateway WebSocket API with an AWS Lambda integratio
B. Configure the WebSocket API to invoke the Amazon Bedrock InvokeModelWithResponseStream API and stream partial responses through WebSocket

connections.
C. Configure an Amazon API Gateway REST API with an AWS Lambda integratio
D. Configure the REST API to invoke the Amazon Bedrock standard InvokeModel API and implement frontend client-side polling every 100 ms for complete response chunks.
E. Implement direct frontend client connections to Amazon Bedrock by using IAM user credentials and the InvokeModelWithResponseStream API without any intermediate gateway or proxy layer.
F. Configure an Amazon API Gateway HTTP API with an AWS Lambda integratio
G. Configure the HTTP API to cache complete responses in an Amazon DynamoDB table and serve the responses through multiple paginated GET requests to frontend clients.

Answer: A

NEW QUESTION 72
A financial services company is developing a customer service AI assistant application that uses a foundation model (FM) in Amazon Bedrock. The application must provide transparent responses by documenting reasoning and by citing sources that are used for Retrieval Augmented Generation (RAG). The application must capture comprehensive audit trails for all responses to users. The application must be able to serve up to 10,000 concurrent users and must respond to each customer inquiry within 2 seconds.
Which solution will meet these requirements with the LEAST operational overhead?

A. Enable tracing for Amazon Bedrock Agent
B. Configure structured prompts that direct the FM to provide evidence presentation
C. Integrate Amazon Bedrock Knowledge Bases with data sources to enable RA
D. Configure the application to reference and cite authoritative conten
E. Deploy the application in a Multi-AZ architectur
F. Use Amazon API Gateway and AWS Lambda functions to scale the applicatio
G. Use Amazon CloudFront to provide low- latency delivery.
H. Enable tracing for Amazon Bedrock agent
I. Integrate a custom RAG pipeline with Amazon OpenSearch Service to retrieve and cite source
J. Configure structured prompts to present retrieved evidenc
K. Deploy the application behind an Amazon API Gateway REST AP
L. Use AWS Lambda functions and Amazon CloudFront to scale the application and to provide low latenc
M. Store logs in Amazon S3 and use AWS CloudTrail to capture audit trails.
N. Use Amazon CloudWatch to monitor latency and error rate
O. Embed model prompts directly in the application backend to cite source
P. Store application interactions with users in Amazon RDS for audits.
Q. Store generated responses and supporting evidence in an Amazon S3 bucke
R. Enable versioning on the bucket for audit
S. Use AWS Glue to catalog retrieved document
T. Process the retrieved documents in Amazon Athena to generate periodic compliance reports.

Answer: A

NEW QUESTION 73
A company is developing a generative AI (GenAI) application by using Amazon Bedrock. The application will analyze patterns and relationships in the company??s data. The application will process millions of new data points daily across AWS Regions in Europe, North America, and Asia before storing the data in Amazon S3. The application must comply with local data protection and storage regulations. Data residency and processing must occur within the same continent. The application must also maintain audit trails of the application??s decision-making processes and provide data classification capabilities.
Which solution will meet these requirements?

A. Deploy the application in each Region with local IAM policie
B. Use Amazon Bedrock cross-Region inference to distribute the workloa
C. Use Amazon CloudWatch to log AI decision-making processe
D. Manually track compliance certifications across Regions.
E. Use SCPs with AWS Organizations to manage location-specific permission
F. Use AWS CloudTrail immutable logs to audit decision-making processe
G. Import a custom model into Amazon Bedrock and deploy the model to each Region.
H. Use Amazon S3 Object Lock with Region-specific S3 bucket policie
I. Pre-process the data points within the Region based on geographic origin before sending the data points to Amazon Bedroc
J. Use Amazon Macie to classify the dat
K. Use AWS CloudTrail immutable logs to audit the decision-making processes.
L. Create separate AWS accounts for each Region with individual compliance framework
M. Use Amazon SageMaker AI with custom monitorin
N. Create manual compliance reports for each regulatory jurisdiction.

Answer: C

NEW QUESTION 78
A company is using Amazon Bedrock to develop an AI-powered application that uses a foundation model (FM) that supports cross-Region inference and provisioned throughput. The application must serve users in Europe and North America with consistently low latency. The application must comply with data residency regulations that require European user data to remain within Europe-based AWS Regions.
During testing, the application experiences service degradation when Regional traffic spikes reach service quotas. The company needs a solution that maintains application resilience and minimizes operational complexity.
Which solution will meet these requirements?

A. Deploy separate Amazon Bedrock instances in North American and European Region
B. Use a custom routing layer that directs traffic based on user locatio
C. Configure Amazon CloudWatch alarms to monitor Regional service usag
D. Use Amazon SNS to send email alerts when usage approaches thresholds.
E. Use Amazon Bedrock cross-Region inference profiles by specifying geographical codes in profile IDs when calling the InvokeModel AP
F. Configure separate Amazon API Gateway HTTP APIs to direct European and North American users to the appropriate Regional endpoints.

G. Deploy a multi-Region Amazon API Gateway HTTP API and AWS Lambda functions that implement retry logic to handle throttlin
H. Configure the Lambda functions to call the FM in the nearest secondary Region when quotas are reached.
I. Configure provisioned throughput for Amazon Bedrock in multiple Region
J. Implement failover logic in application code to switch Regions when throttling occur
K. Use AWS Global Accelerator to route traffic based on user location.

Answer: B

NEW QUESTION 83
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