Instructions

Time Remaining: 02:52:52 Submit Assessment

Q1. Your application provides data transformation services. Files containing data to be transformed are first uploaded to Amazon S3 and then transformed by a fleet of Spot EC2 Instances. Files submitted by your premium customers must be transformed with the highest priority. How would you implement such a system?

Options

- ○ Use a DynamoDB table with an attribute defining the priority level. Transformation instances will scan the table for tasks, sorting the results bypriority level.
- ○ Use Route 53 latency-based routing to send high priority tasks to the closesttransformation instances.
- ◉ Use two SQS queues, one for high priority messages, the other for default priority. Transformation instances first poll the high priority queue; if there is no message, they poll the default priority queue.
- ○ Use a single SQS queue. Each message contains the priority level. Transformation instances poll high-priority messages first.

Q2. An application allows a manufacturing site to upload files. Each uploaded 3 GB file is processed to extract metadata, and this process takes a few seconds per file. The frequency at which the uploads happen is unpredictable. For instance, there may be no updates for hours, followed by several files being uploaded concurrently. What architecture addresses this workload in the most cost efficient manner?

Options

- ○ Usea Kinesis Data Delivery Stream to store the file. Use Lambda for processing.
- ○ Use an SQS queue to store the file, to be accessed by a fleet of EC2 Instances.
- ○ Store the file in an EBS volume, which can then be accessed by another EC2 Instance for processing.
- ◉ Store the file in an S3 bucket. Use Amazon S3 event notification to invoke aLambda function for file processing.

Q3. A company needs to monitor the read and write IOPS metrics for their AWS MySQL RDS instance and send real-time alerts to their Operations team. Which AWS services can accomplish this?

Options

- We can use Amazon Simple Email Service, AWS SES is a cost-effective, flexible, and scalable email service that enables developers to send mail from within any application.The email authentication options would help drive higher deliverability
- We can use combination of Amazon CloudWatch and AWS SQS. Amazon CloudWatch may be used to monitor IOPS metrics from the RDS instance and Amazon Simple Queue Service, can push it to FIFO queue.
- We can use combination of Amazon CloudWatch and AWS SNS. Amazon CloudWatch may be used to monitor IOPS metrics from the RDS instance and Amazon Simple Notification Service, to send the notification if any alarm is triggered.