

BAIT3273 Midterm

Total points 84/100 ?

The respondent's email (**tanmk-wp19@student.tarc.edu.my**) was recorded on submission of this form.

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Programme *

RDS2S3G1



Name *

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Section 2

6 of 10 points



✗ What is the greatest way to express the concept of elasticity? 0/2

- ☒ The ability for a system to grow in size, capacity, and/or scope. ✗
- ☐ The ability for a system to withstand a certain amount of failure and still remain functional.
- ☐ The ability for a system to grow and shrink based on demand.
- ☐ The ability for a system be accessible when you attempt to access it

Correct answer

- ☒ The ability for a system to grow and shrink based on demand.





What AWS service does an Edge Location work with?

2/2

- ☐ Route 53
- ☐ CloudWatch
- ☐ Lambda
- ☒ CloudFront



✗ Low is running a web application with a 0/2 1000-user capacity. Traffic surpasses 1000 users every several days, and any more users are prohibited access. What can Low do to make the process of adding and deleting server capacity in response to traffic demand more efficient?

- ☒ Enable elastic load balancing on his application. ✗
- ☐ Automating this process cannot be done
- ☐ Enable auto scaling on his application.
- ☐ Write a custom script to automate the process

Correct answer



- ☒ Enable auto scaling on his application.

✓ What is the best way to describe the idea of a virtual private cloud? 2/2

- ☐ A private section of AWS in which you control what resources are placed inside.
- ☐ A collection of data centers.
- ☐ A shared section of AWS between you and other AWS account holders.
- ☒ A private section of AWS in which you control what resources are placed inside and who can access those resources. ✓



✓ What is the EC2 AMI Marketplace, and how does it work? 2/2

- ☐ An EC2 instance's storage type is chosen here.
- ☒ A collection of pay-to-use EC2 AMIs that usually include licensed enterprise applications. ✓
- ☐ Where you keep the AMIs you create.
- ☐ Where you choose an EC2 instance's compute capacity.

Section 3

8 of 10 points



✓ What are the advantages of Amazon Web Services Organizations? (Select all that apply) 2/2

☐ Compile a cost analysis for all of your AWS accounts.

☒ Automate the creation and management of AWS accounts. ✓

☒ Centrally manage access polices across multiple AWS accounts. ✓

☐ None of the above



✓ What should you do if you suspect your Amazon Web Services account has been hacked? (Select all that apply) 2/2

- ☒ Remove any resources that you did not create from your account. ✓
- ☒ Use the AWS Support Center to respond to any AWS notifications you've received. ✓
- ☒ Change the passwords of all IAM users. ✓
- ☒ All programmatic (API) access keys should be deleted or rotated. ✓



✓ What is the most accurate description of Amazon Web Services (AWS)? 2/2

☐ AWS only provides compute and storage services.

☐ AWS is the cloud.

☒ AWS is a cloud services provider.



☐ None of the above



✓ Low is in charge of a web application 2/2
that runs on several of Amazon EC2
servers. He is concerned that if
something goes wrong with one of the
servers, he will not be notified promptly.
What solution could you propose to
assist him in staying informed about the
condition of his servers?

- ☐ Set up each EC2 instance with a custom script that sends an email to Low whenever a trouble arises.
- ☐ Set up CloudWatch EC2 metric alarms to trigger RDS notifications.
- ☐ Allow CloudTrail to log and report any problems with the EC2 instances.
- ☒ Set up SNS alerts based on CloudWatch EC2 metric alarms. ✓



✗ Which of the following words best reflects the concept of high availability? 0/2

- ☐ A system's ability to expand and shrink in response to demand.
- ☒ A system's able to handle a specific amount of failure while remaining operational. ✗
- ☐ A system's ability to expand in size, capability, and/or scope.
- ☐ The ability for a system be accessible when you attempt to access it

Correct answer

- ☒ The ability for a system be accessible when you attempt to access it



✓ What is the maximum amount of data you can store in S3? 2/2

- ☐ Up to 1 terabytes of data can be stored.
- ☐ Each account is provided 100 gigabytes of storage space, which cannot be exceeded.
- ☐ You can store up to 1 petabyte of data for free, but after that, you'll have to pay a price.
- ☒ There is essentially no limit to the amount of data that may be stored. ✓



✓ Which of the following factors will influence the cost of storing objects in S3? Choose the 2 Correct answers: 2/2

- ☐ Encrypting objects stored in S3.
- ☒ The storage class for the objects that are being stored. ✓
- ☐ S3 bucket creation and deletion
- ☒ The total size of all objects stored in S3. ✓



✗ What are the primary advantages of EC2 on demand instances? Choose the 2
Correct answers:

- ☒ They are the most cost-effective purchasing option. ✗
- ☐ It takes 1-2 days to set up and configure them
- ☐ They are the most flexible purchasing choice available
- ☒ Create, start, stop, and terminate at any time ✓

Correct answer

- ☒ They are the most flexible purchasing choice available
- ☒ Create, start, stop, and terminate at any time



✓ Mr. Low is in charge of an on-premises data centre application. What best defines the difficulties he has that an AWS cloud user does not? 2/2

- ☐ He must be able to configure network security properly
- ☐ He must figure out how many servers he'll need to operate his application.
- ☒ He must forecast future growth, which can be expensive and time-consuming.
- ☐ None of the above



✓ What word is used to indicate providing 2/2
an AWS customer with only the services
he requires to complete the task?

☐ The Least Privilege User Principal

☒ The Principal of Least Privilege



☐ The Only Access Principal

☐ None of the above

Section 5

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✓ What is the most popular storage type for Amazon EC2 instances? 2/2

- ☐ EC2 Hard Drives
- ☒ Elastic Block Store (EBS)
- ☐ Magnetic Drive (MD)
- ☐ Elastic File System (EFS)



✓ Low is tasked with importing a massive 2/2 data set into a relational database service. What AWS service can he use to meet his requirements?

- ☒ RDS
- ☐ Redshift
- ☐ DynamoDB
- ☐ NoSQL



✗ Low is having trouble keeping track of 0/2
how much computing power his
application is consuming. He'd like to be
able to track CPU consumption and
receive alerts when it exceeds 70%.
What should Low do to make this
happen?

- ☐ Configure an SNS topic with a CPU utilisation threshold of greater than 70% to generate an alarm.
- ☐ Configure a CloudWatch alarm with an alarm threshold of greater than 70% CPU utilisation to be triggered.
- ☒ Configure a CloudWatch alarm with an alarm threshold of more than or equal to 70% CPU utilisation to be triggered. ✗
- ☐ None of the above



Correct answer

- ☒ Configure a CloudWatch alarm with an alarm threshold of greater than 70% CPU utilisation to be triggered.

✓ What considerations should you make about the data you wish to store before migrating or storing an item in AWS Glacier? 2/2

- ☐ Ascertain that the data is correctly structured for Glacier storage.
- ☐ Make sure the entire amount of data you'll be storing is less than 1 terabyte.
- ☒ Make sure you're okay with the data being stored in Glacier taking at least a few minutes to retrieve. ✓
- ☐ None of the above



✓ CK is in charge of an AWS cloud-based web application. The application's compute platform now consists of ten Amazon EC2 servers. Two of those web servers crashed today, but none of his customers were affected. In this case, what has CK done correctly? 2/2

- ☐ An elastic system that has been properly constructed.
- ☐ A scalable system that has been properly built
- ☒ Build a fault-tolerant system correctly. ✓
- ☐ None of the above



✓ How are you getting charged if you use 2/2
an EC2 instance that is available on
demand?

- ☒ You are charged per second, based on an hourly rate, and there are no termination fees. ✓
- ☐ You are charged by the hour and must pay a partial upfront fee.
- ☐ You must commit to a one or three year term and pay upfront.
- ☐ You are charged per second, based on an hourly rate, and there is a termination fee



✓ Low is creating a website using AWS 2/2
infrastructure. He has a great idea for a
domain name but needs to see whether
it's available and, if it is, register it. What
AWS service would he be able to use to
accomplish this?

- ☐ CloudFront
- ☐ DomainServices
- ☐ CloudWatch
- ☒ Route 53



✓ Low is creating a website that is estimated to have a minimum of 2000 users for the entire 24 hour period. Traffic is estimated to be around 2500 users for 9 hours each day. What EC2 purchasing choices should he choose in order to manage all of the traffic while remaining cost-effective? 2/2

☐ Low should only use spot instances because they are the most cost-effective.

☐ Low should purchase enough reserved instance capacity to service all 2500 users, with a little extra capacity purchased just in case.

☒ Low should purchase reserved instances with enough capacity to cover the baseline of 2000 users, then rely on on-demand instances for the daily 9-hour spike in traffic. ✓



- ☐ Low should purchase reserved instances with enough capacity to support the baseline of 2000 users, then use spot instances for the daily 9-hour period of increased traffic.

✗ Low is building up the infrastructure for a that will require four EC2 instances to meet demand. When Low tests the system, he discovers that all traffic is directed to only one of the servers. What AWS functionality should he use in his system to ensure that traffic is delivered uniformly across all four servers?

- ☒ Auto Scaling
- ☐ Route 53
- ☐ Elastic Load Balancer
- ☐ CloudFront

✗

Correct answer

- ☒ Elastic Load Balancer



✓ What are the four main advantages of adopting cloud? 2/2

- ☐ Elasticity, scalability, easy access, limited storage.
- ☐ Unlimited storage, limited compute capacity, fault tolerance, and high availability.
- ☒ Fault tolerance, scalability, elasticity, and high availability. ✓
- ☐ Fault tolerance, scalability, sometimes available, unlimited storage

Section 7

10 of 10 points



✓ Low is using AWS to create a web application. He wants to make sure that his system is highly available to his clients. What AWS cloud infrastructure components enable Low to achieve this goal? (Select the two correct answers.) 2/2

☒ Availability Zones ✓

☐ Regional Zones

☒ Regions ✓

☐ Data Locations



✓ What does AWS' Route 53 service accomplish? Choose the 2 Correct answers:

2/2

☐ Database Management

☒ Domain Registration



☐ Content Caching

☒ Domain Name System (DNS) service



✓ To build a highly available and fault tolerant architecture in AWS, what TWO services/features are required? 2/2

☒ Elastic Load Balancer ✓

☐ CloudFront

☐ ElastiCache

☒ Auto Scaling ✓

✓ What AWS service has built-in DDoS mitigation? 2/2

☐ CloudTrail

☐ EC2



☒ CloudFront



☐ CloudWatch

✓ Low Company is looking into moving their complete on-premises data centre to Amazon Web Services. They're worried about how much it'll cost once all of their IT infrastructure is hosted on AWS. What tool would you recommend for them to use to estimate the cost of using AWS? 2/2

☐ AWS Estimate Calculator

☒ AWS TCO Calculator



☐ AWS Cost Explorer

☐ AWS Migration Cost Calculator



✓ What is the name of the RDS SQL database engine offered by AWS?

2/2

☐ Lightsail

☐ SNS

☐ MySQL

☒ Aurora



✓ Which AWS service should you use to monitor the average CPU utilisation of your EC2 instances?

2/2

☐ CloudMonitor

☐ CloudTrail



- ☒ CloudWatch ✓
- ☐ None of the above

✓ What is the primary distinction between 2/2 AWS' RDS and DynamoDB database services?

- ☐ RDS offers NoSQL database options, and DynamoDB offers SQL database options.
- ☐ RDS offers on SQL database option, and DynamoDB offers many NoSQL database options.
- ☒ RDS offers SQL database options, and DynamoDB offers a NoSQL database option. ✓
- ☐ None of the above



✗ Low CK is connected into his company's 0/2 Amazon Web Services (AWS) account. He tries to connect to EC2 but receives an error. What is the most likely cause of his inability to access EC2?

- ☐ There is not an IAM access policy attached to his IAM user.
- ☐ He is not part of an IAM Group.
- ☐ He does not have multi-factor authentication (MFA) enabled.
- ☒ There is not an IAM access policy attached to his IAM role ✗

Correct answer

- ☒ There is not an IAM access policy attached to his IAM user.



✓ What is the relational database service offered by AWS? 2/2

- ☐ Redshift
- ☐ DymamoDB
- ☐ ElastiCache
- ☒ RDS



Section 9

10 of 10 points



✓ What you create and S3 bucket, what rules must be followed regarding the bucket name? Choose the 2 Correct answers: 2/2

☒ Bucket names must be unique across all of AWS. ✓

☒ Bucket names must be between 3-63 characters in length. ✓

☐ Bucket names must contain at least one uppercase letter

☐ Bucket names can be formatted as IP addresses



✓ What are some common uses of AWS? 2/2
(Select all that apply)

- | | | |
|-------------------------------------|----------------|---|
| <input checked="" type="checkbox"/> | Networking | ✓ |
| <input checked="" type="checkbox"/> | Analytics | ✓ |
| <input checked="" type="checkbox"/> | Storage | ✓ |
| <input checked="" type="checkbox"/> | Virtualization | ✓ |



✓ What standards must be followed when naming an S3 bucket that you create? 2/2
Choose the 2 Correct answers:

☒ Bucket names must be unique across all of AWS. ✓

☒ Bucket names must be between 3-63 characters in length. ✓

☐ At least one uppercase letter is required in bucket names.

☐ The names of buckets can be represented as IP addresses.



✓ What is one of the most significant advantages of consolidated billing? 2/2

- ☐ Faster response from AWS technical support.
- ☒ Gain a volume discount for usage across all your AWS accounts. ✓
- ☐ Access to a higher support plan level.
- ☐ None of the above.



✓ What best describes the objective of each AWS region having several Availability Zones? 2/2

☐ Multiple Availability Zones allow for fault tolerance but not high availability.

☐ Because of the competition between them, multiple Availability Zones allow for lower prices.

☒ Multiple Availability Zones allow for duplicate and redundant compute, and data backups. ✓

☐ None of the above



✓ What AWS resource should you consult 2/2
for further information on how to create,
maintain, and attach IAM access
policies to IAM users?

- ☐ AWS How-To-Help Section
- ☒ AWS Service Documentation
- ☐ AWS Whitepapers
- ☐ None of the above



✓ You want to upload a batch of data to an S3 bucket; however, when you go to the AWS dashboard and pick S3, you get a message saying you don't have permission to access S3. What is the most likely reason for this error? 2/2

- ☐ Getting access to S3 takes 24 hours.
- ☐ The S3 service is temporarily unavailable due to scheduled maintenance.
- ☐ Your manager hasn't given you the right bucket permissions.
- ☒ Your IAM user does not have an S3 access policy attached to it. ✓





What S3 storage class should you select to store a set of regularly visited files that are used on a daily basis?

2/2



Infrequent Access



Reduced Redundancy



Standard



Fast Access



✓ What advantages does AWS' Relational Database Service (RDS) provide? 2/2
(Choose all of the options that apply.)

☒ Capacity that can be resized ✓

☒ Patches and backups that are automated ✓

☒ Budget-friendly ✓

☐ None of the above



✓ You notice that two of your nine S3 buckets are missing from your account, and you think they've been purged. You have no idea who removed them, and no one is willing to take blame. What should you do to find out who removed the S3 buckets and investigate? 2/2

- ☐ Look at the S3 logs.
- ☒ Look at the CloudTrail logs.
- ☐ Look at the CloudWatch Logs.
- ☐ Look at the SNS log



✓ What AWS service is used to manage consolidated billing? 2/2

- ☐ AWS TCO
- ☐ AWS Billing Manager
- ☐ AWS Consolidated Management
- ☒ AWS Organizations



✓ Which Amazon Web Services service makes use of both publishers and subscribers? 2/2

- ☒ SNS
- ☐ RDS
- ☐ EC2
- ☐ Lambda



✗ In the AWS Shared Responsibility Model, 0/2 what is AWS responsible for? Choose the 2 Correct answers:

- ☒ Physical security of the AWS data centers ✓
- ☒ Server-side encryption ✗
- ☐ Network level security
- ☐ The maintenance of the hosts virtualization software

Correct answer

- ☒ Physical security of the AWS data centers
- ☒ The maintenance of the hosts virtualization software



✓ Where will you obtain information on AWS architectural or security best practises? 2/2

- ☐ AWS Yellow Pages
- ☐ AWS Console Info Section
- ☒ AWS White Papers
- ☐ AWS Service Documentation



✓ In what situations would you use the Amazon Web Services CloudTrail service? 2/2

- ☐ When you want to collect and view resource metrics.
- ☒ When you want to log what actions various IAM users are taking in your AWS account. ✓
- ☐ When you need a serverless compute platform
- ☐ If you want to send SMS notifications in response to occurrences in your account.

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