Assignment & Boot Camp

Assignment 1

1) Launch EC2 instance in any region

2) Allocate an EIP to this instance

3) Create another 10 GB EBS volume and attach

4) Take a Snapshot of this EBS

5) Restore another volume from Snapshot

6) Stop the instance

Assignment 2

1) Launch EC2 instance (win or linux)

2) Assign a role (EC2 → S3) to EC2

3) Take AMI of this EC2 and Copy to another Region

4) Launch EC2 from AMI and retain the same role there

Assignment 3

1) Launch an Application Load balancer with two EC2 instances as Targets

2) Enable sticky session and Deregistration delay by 300 secs

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Assignment 4

e-Commerce site to be hosted on AWS

Core vcpu8, 16 GB RAM, 150 GB HDD, 5 GB Snapshot, WIN 2016

DB- v16 core, 64 GB RAM, 500 GB HDD, SQL Standard edition license

Best Price- 10 hrs

Assignment 5

1) Deploy Python platfrom by using Beanstalk.

2) Deploy LAMP Stack by using cloudformation.

3) Connect AWS account by CLI and get instance details (aws ec2 describe-instances) if any.

Assignment - 6

1) Launch a MySQL RDS(Aurora) in your VPC(public subnet) followed by Single AZ (t2 instance)

2) Setup a Backup retention as 7 days

3) Backup window 5:30 PM everyday

4) Connect the RDS from your local computer by using Workbench

5) Create a backtrack

Assignment - 7

1) Launch a MySQL RDS in your VPC(private subnet) followed by Single AZ (t2 instance)

2) Setup a Backup retention as 7 days

3) Backup window 5:30 PM everyday

5) Create a snapshot

6)Create a Read Replica and delete primary DB

7) Promote Read Replica as primary

8) Point in time recovery

Assignment - 8

How can you deploy DRP for RDS

What is backtrack?

How can you Migrate DB from on premise to AWS

Serverless/parallel

Replica lag

Assignment - 9

1) Create any three S3 buckets

2) Give Bob permission to access only first S3 bucket

3) Give John permission to access last two buckets

4) Launch S3 browser to upload data

Assignment - 10

1)Create Public and Private Subnet

2) Launch Instances (Windows) in both Pub and Pri subnets

3) Launch a Bastion host (windows)in public subnet

4) Connect Bastion host from your local computer

5) Connect Server that in Pri subnet from bastion host

Assignment - 11

1) Launch a linux instance

2) Create a role (Ec2 to S3 full access)

3) Attach the role to this newly created Linux

4) Login Ec2 and type AWS S3 ls

Assignment-12

1) Connect RDS from EC2

Assignment-13

1) Create S3 lifecycle rule e.g. after 90 days object should go to Glacier

2) Encrypt your bucket

3) If someone deletes any object you will get notified in inbox

4) Create a static website in S3

5) Enable a Cross region replication

6) Change the metadata of an object

7) Change the storage class from standard to One zone IA

8) Enable server access logging and setup

9) Create a bucket policy

11) Connect S3 from S3 browser

12) Create a static website hosting and setup Cname

Assignment-14

1) Buy a domain in godaddy

2) Change the NS record of newly purchased domain to AWS NS

3) Create zone in AWS

4) Create a S3 bucket and make it as Static website platform

5) Create necessary DNS record in R53 and point it to S3 bucket through Alias

6) Browse domain to confirm S3 static website is opening

Assignment-15

1) Create a failover record - If primary server fails then request will go to S3 bucket static website

2) Create latency, Geo (US and India and all other), Simple, Weighted record.

3) Create a failover between two A record

Assignment-16

1) Without R53 how to configure DNS that will point to a website which is running on EC2

Assignment-17

1) Launch EC2 instances in both Public and Private subnet

2) Configure VPC endpoint

3) Connect EC2 that is running on Private subnet

4) Execute AWS S3 ls to see S3 bucket information is listed.

Assignment-18

1) Create a Simple AD and join a windows EC2 in this domain.

Assignment-19

1) Crate an EFS
2) Attach the EFS volume to multiple EC2 instances
3) Create a file in one of the Ec2 instances and the same file must be replicated across all other Ec2

Assignment-20

VPC transit gateway

Assignment-21

Docker deployment

Assignment-22

1) Create a lifecycle rule for EBS as backup policy (eg. Everyday 13:00)

Assignment-23

1) Create a Lambda function to start and stop instance
2) If someone will upload any content on S3 then this lambda will invoke
3) Create a SNS topic as target lambda- this SNS will trigger as and when lambda will invoke

Assignment-24

1) Create a Lambda function and integrate with API gateway as GET method

Assignment-25

1) Create an AWS backup plan
2) Set Backup policy every day 13:00 for RDS and EC2 instance
3) Retention period should be 7 days
4) Launch WIN EC2 and install IIS there and host a sample website
5) Enable VSS option and execute backup

Assignment-26

1) Create a Dynamo DB table
2) Make some entries and enable Global DB replication

3) Access Dynamo DB table from dynamodb client

Assignment-27

1) Setup and configure proper Discovery service for VM
2) Launch VM in Azure or AWS
3) Use SMS and Cloud Endure for migration
4) Launch EC2 and install MySQL with sample DB
5) Start migration by DMS

Assignment-28

1) Create a VPN Endpoint for S3 interface
2) Login to EC2 of private subnet and execute syntax S3 ls
3) Create two VPC and establish a VPC peering between two VPCs
4) Launch EC2 instances in each VPC and ping each other

Assignment-29

1) Create SNS topic and integrate with EC2 recovery alarm.
2) Create SNS topic and integrate with SQS and HTTP link

Assignment-30

1) Create SSO
2) Create AD and deploy new EC2 under AD

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Assignment-31

1) **Create a dashboard and add line bar widget to monitor EC2 CPU utilisation**
2) **Create another widget for EBS any metric**

3) **Create a Log group and Log stream and push some Lambda/EC2 logs to this log stream and then further analysis through Log Insight**
4) **Create an alarm on EC2 against System State**
5) **Create an Event Rule —> every day 21:00 a certain lambda will invoke.**
6) **Create an Event pattern e.g. if EC2 spot instance gets interrupted then certain Lambda will invoke**

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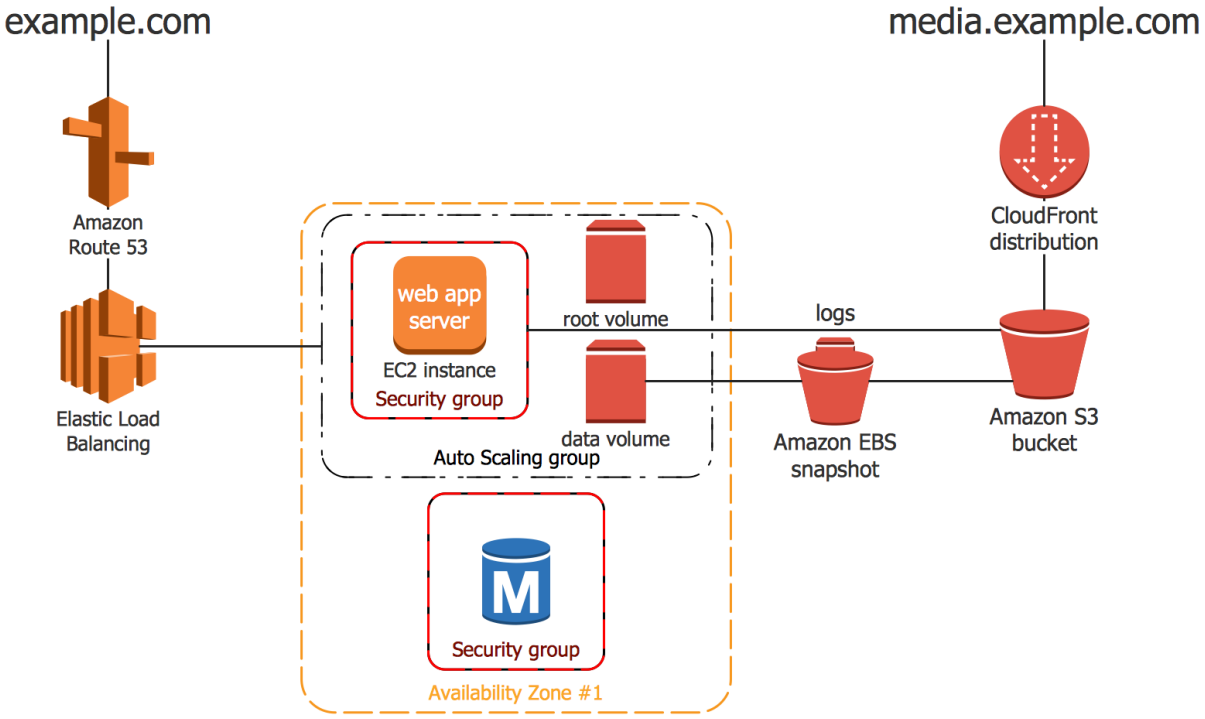
Assignment-32

1) **Create SNS topic and subscribe both SMS and email protocol**
2) **Create an alarm in CW and set this newly created SNS over there**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Amazon
Route 53
CloudFront
distribution
web app
server
EC2 instance
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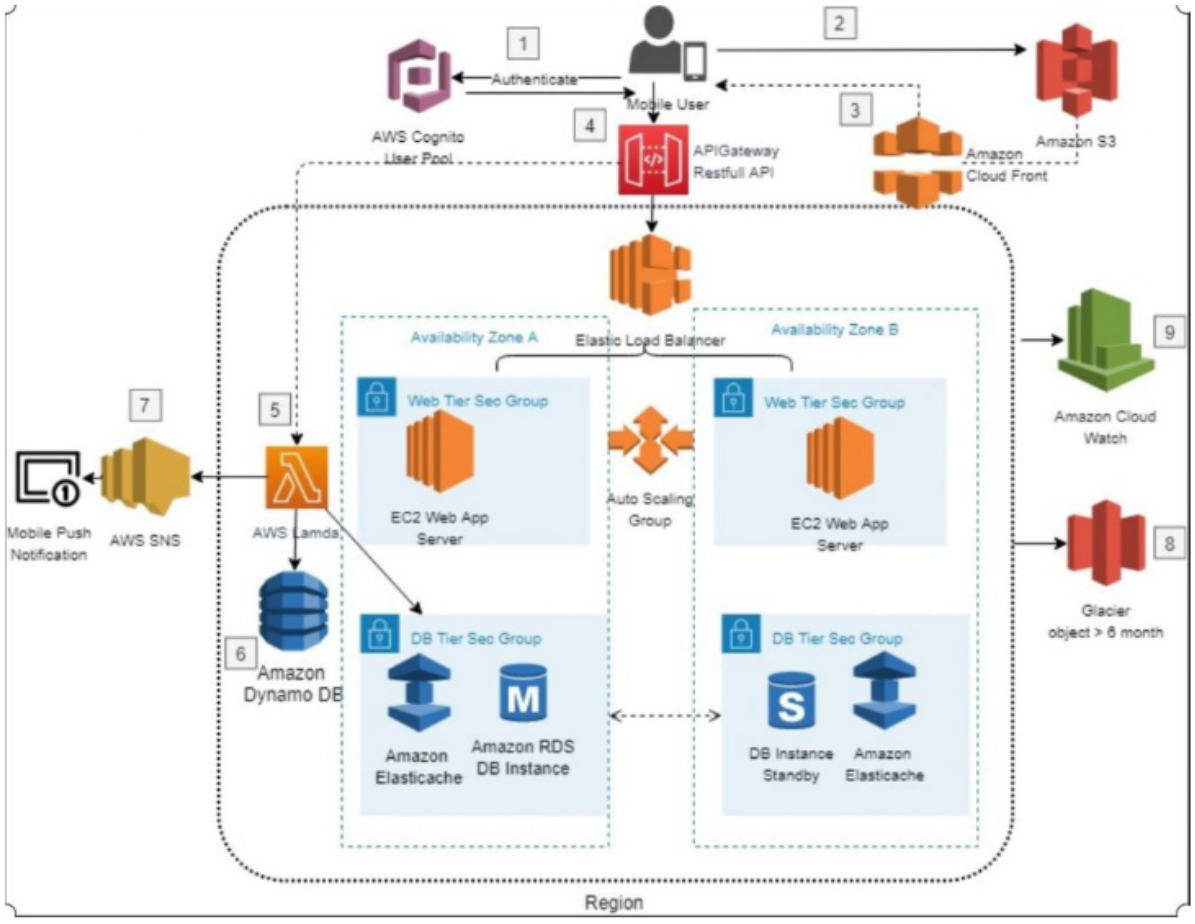
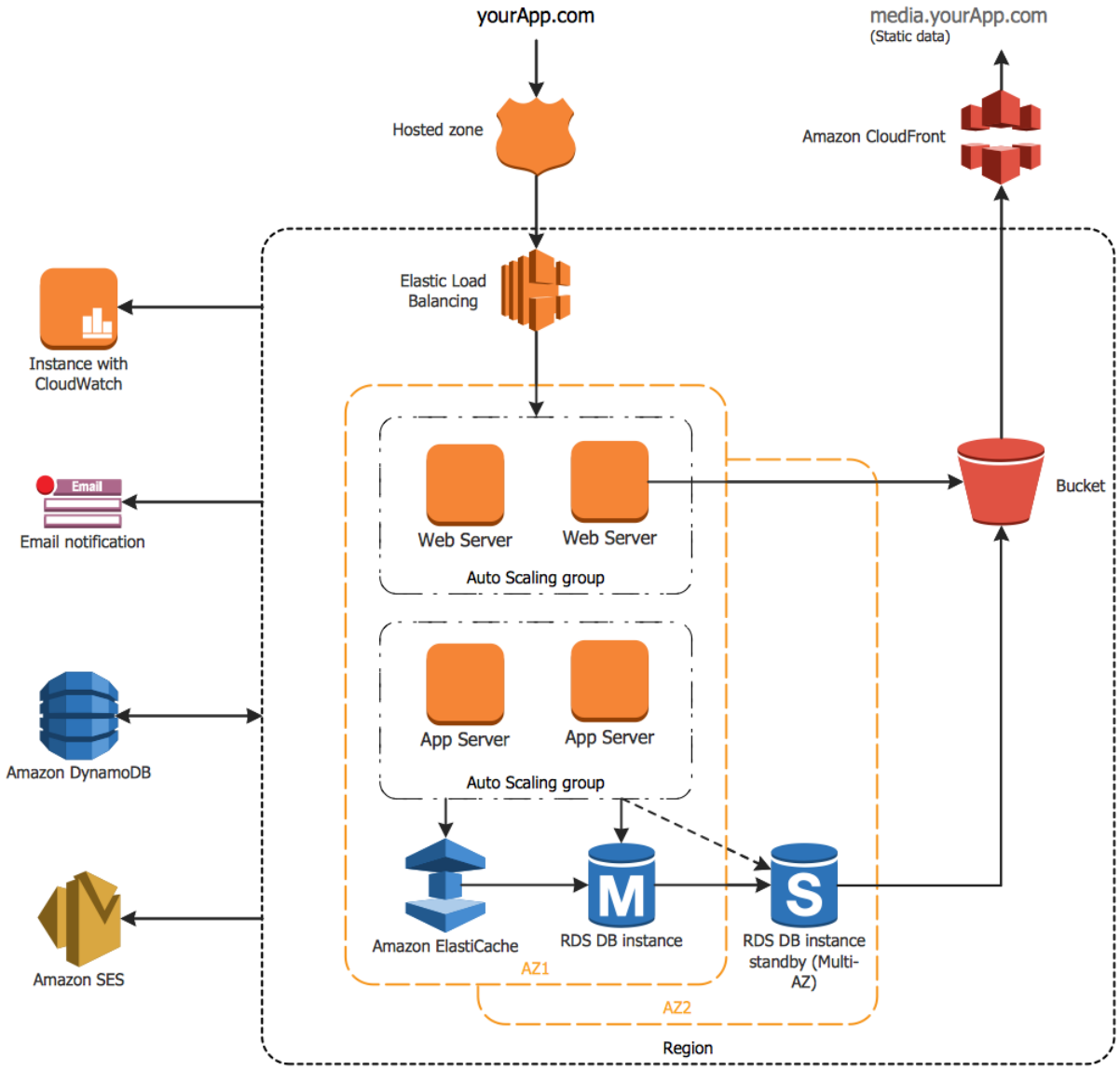
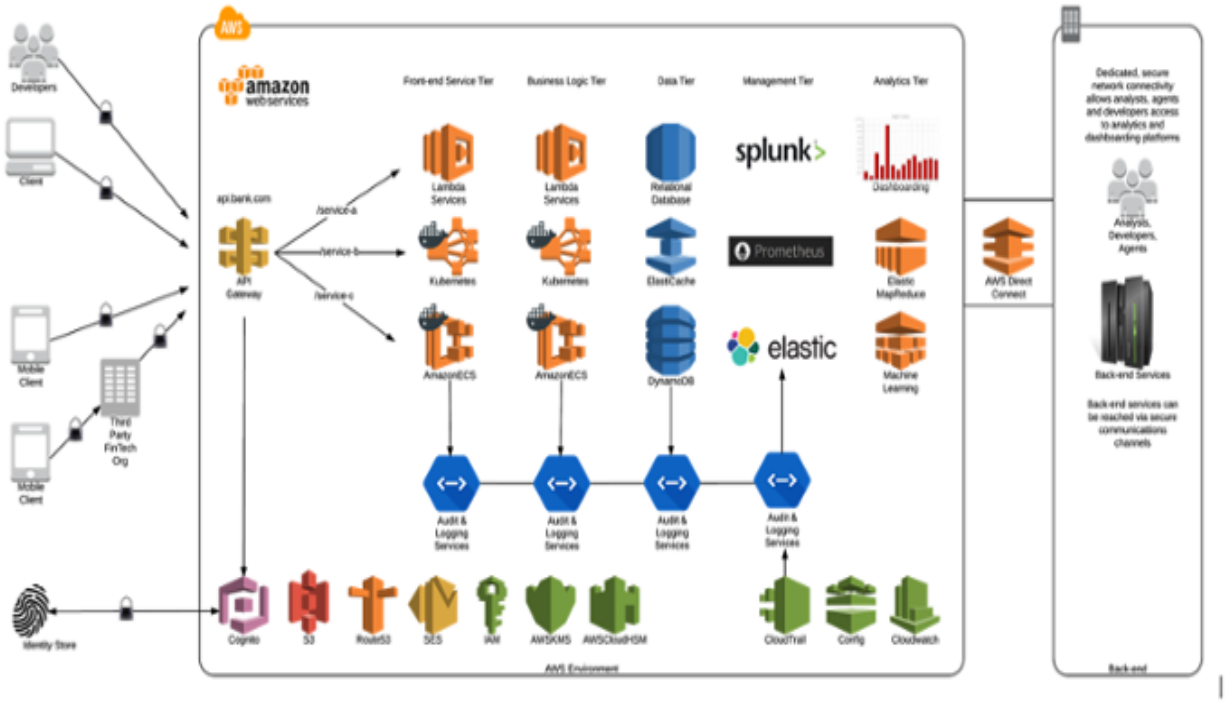
logs
Elastic Load
Balancing
data volume
Amazon EBS
snapshot
Amazon S3
bucket
Auto Scaling group
Security group
Availability Zone #1


1
Authenticate
2
Mobile User
AWS Cognito
User Pool
4
APIGateway
Restfull API
3
Amazon
Cloud Front
Amazon S3
Elastic Load Balancer
Availability Zone A
Availability Zone B
Web Tier Sec Group
EC2 Web App
Server
Auto Scaling
Group
Web Tier Sec Group
EC2 Web App
Server
9
Amazon Cloud
Watch
7
5
Mobile Push
Notification
AWS SNS
AWS Lamda
8
Glacier
object > 6 month
6
Amazon
Dynamo DB
DB Tier Sec Group
Amazon
Elasticache
Amazon RDS
DB Instance
DB Tier Sec Group
DB Instance
Standby
Amazon
Elasticache
Region


yourApp.com
media.yourApp.com
(Static data)
Hosted zone
Amazon CloudFront
Elastic Load Balancing
Instance with CloudWatch
Email
Email notification
Web Server
Web Server
Auto Scaling group
Bucket
App Server
App Server
Auto Scaling group
Amazon DynamoDB
Amazon ElastiCache
M
RDS DB instance
S
RDS DB instance standby (Multi-AZ)
Amazon SES
AZ1
AZ2
Region



For Office Use only

Assignment Tracking

70	65	61															
	1,03,13 2,5	1,4 16,5,2 3,29,EC2,3															

Topics Tracking

65	Bastion	Lightsail	SSM	Trusted Advisor													
65																	