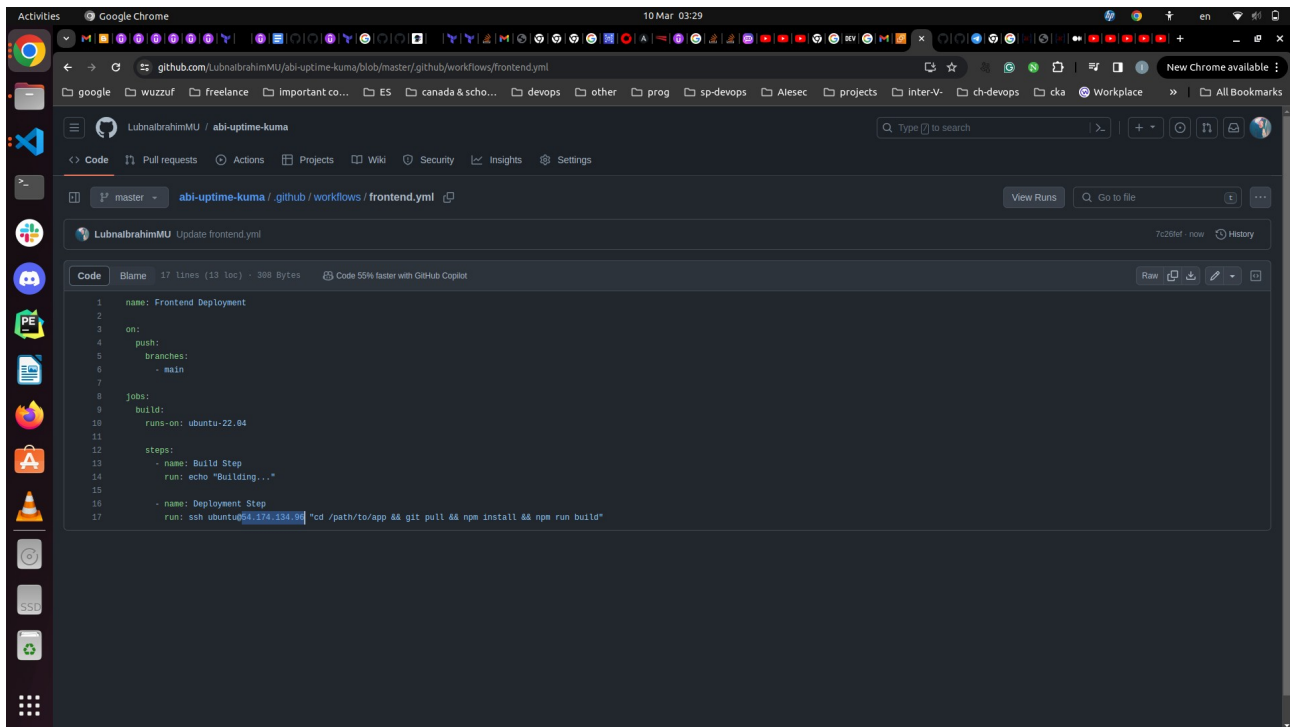
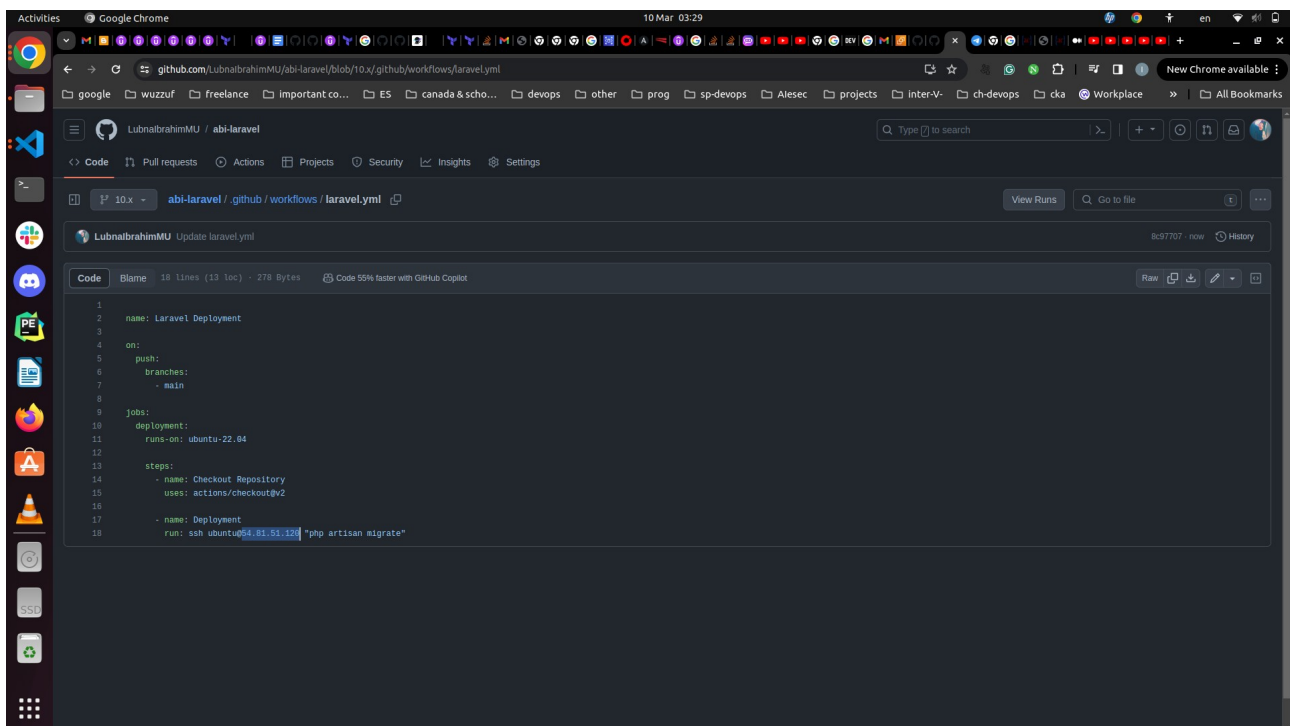


Task group B



This screenshot shows a GitHub repository for 'abi-uptime-kuma'. The file 'frontend.yml' is open, showing a workflow for frontend deployment. The workflow is triggered on a push to the 'main' branch. It runs on an 'ubuntu-22.04' runner. The steps include a 'Build Step' that echoes 'Building...' and a 'Deployment Step' that runs an SSH command to pull the code and build it on a remote server.

```
1 name: Frontend Deployment
2
3 on:
4   push:
5     branches:
6       - main
7
8 jobs:
9   build:
10    runs-on: ubuntu-22.04
11
12    steps:
13      - name: Build Step
14        run: echo "Building..."
15
16      - name: Deployment Step
17        run: ssh ubuntu@54.174.134.91 "cd /path/to/app && git pull && npm install && npm run build"
```



This screenshot shows a GitHub repository for 'abi-laravel'. The file 'laravel.yml' is open, showing a workflow for Laravel deployment. The workflow is triggered on a push to the 'main' branch. It runs on an 'ubuntu-22.04' runner. The steps include a 'Checkout Repository' step using 'actions/checkout@v2' and a 'Deployment' step that runs 'php artisan migrate' on a remote server.

```
1 name: Laravel Deployment
2
3 on:
4   push:
5     branches:
6       - main
7
8 jobs:
9   deployment:
10    runs-on: ubuntu-22.04
11
12    steps:
13      - name: Checkout Repository
14        uses: actions/checkout@v2
15
16      - name: Deployment
17        run: ssh ubuntu@54.81.128 "php artisan migrate"
```

Activities Google Chrome 10 Mar 03:38

us-east-1.console.aws.amazon.com/rds/home?region=us-east-1&database-id=myrdsinstance&js-cluster=false

aws Services Search [Alt+S]

Amazon RDS

- Dashboard
- Databases
- Query Editor
- Performance insights
- Snapshots
- Exports in Amazon S3
- Automated backups
- Reserved Instances
- Proxies

- Subnet groups
- Parameter groups
- Option groups
- Custom engine versions
- Zero-ETL Integrations [New](#)

- Events
- Event subscriptions

- Recommendations
- Certificate update

Subnet group: default

Subnets: subnet-045a1684315836c9f, subnet-0cb58608cfd067c6f, subnet-0e0d25f40d31675d7, subnet-01efcf9685c8be73, subnet-0b3da0cc04db16cf8, subnet-0715379695462de302

Network type: IPv4

Publicly accessible: No

Certificate authority: rds-ca-rsa2048-g1

Certificate authority date: May 26, 2061, 02:34 (UTC+03:00)

DB instance certificate expiration date: March 10, 2025, 01:55 (UTC+02:00)

Connected compute resources (2)

Connections to compute resources that were created automatically by RDS are shown here. Connections to compute resources that were created manually aren't shown.

Filter by compute resources

Resource identifier	Resource type	Availability Zone	VPC security group	Compute resource security group	Connected proxy
i-07df8b5d354b346fc	EC2 Instance	us-east-1a	rds-ec2-1	ec2-rds-1	-
i-0bbf1bb315abb0a1	EC2 Instance	us-east-1a	rds-ec2-1	ec2-rds-1	-

Proxies (0)

Filter by proxies

Proxy identifier	Status	Engine family
No proxies		

You don't have any proxies.

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Activities Google Chrome 10 Mar 03:38

us-east-1.console.aws.amazon.com/rds/home?region=us-east-1&database-id=myrdsinstance&js-cluster=false

aws Services Search [Alt+S]

Amazon RDS

- Dashboard
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- Subnet groups
- Parameter groups
- Option groups
- Custom engine versions
- Zero-ETL Integrations [New](#)

- Events
- Event subscriptions

- Recommendations
- Certificate update

Connection setup successfully for RDS database myrdsinstance and EC2 instance i-0bbf1bb315abb0a1

Connection setup successfully for RDS database myrdsinstance and EC2 instance i-07df8b5d354b346fc

RDS > Databases > myrdsinstance

myrdsinstance

Summary

DB Identifier: myrdsinstance	Status: Available	Role: Instance	Engine: MySQL Community	Recommendations
CPU: 5.17%	Class: db.t2.micro	Current activity: 0 Connections	Region & AZ: us-east-1d	

Connectivity & security | Monitoring | Logs & events | Configuration | Zero-ETL Integrations | Maintenance & backups | Tags | Recommendations

Connectivity & security

Endpoint & port Endpoint: myrdsinstance.c10ko6u009or.us-east-1.rds.amazonaws.com Port: 3306	Networking Availability Zone: us-east-1d VPC: vpc-0bb56c78c7b5643a4 Subnet group: default Subnets:	Security VPC security groups: rds-ec2-1 (sg-0dd12ae158c04e757) Active, rds_sg (sg-0df6621d2dc2e7ba) Active Publicly accessible: No Certificate authority: Info
--	---	--

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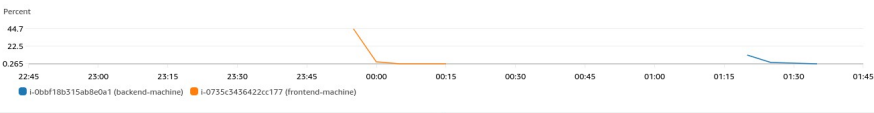
Activities Google Chrome 10 Mar 03:51

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create?--(Page--MetricSelection--AlarmType--MetricAlarm--AlarmData--(Metrics--(-)AlarmName--(-)...

CloudWatch Alarms Create alarm

Step 1 Specify

Select metric

Untitled graph 

1h 3h 12h 1d 3d 1w Custom UTC timezone Line

Percent

44.7

22.5








0.265

23:00 23:15 23:30 23:45 00:00 00:15 00:30 00:45 01:00 01:15 01:30 01:45


I-0bbf18b515at8e0a1 (backend-machine) I-0735c3436422cc177 (frontend-machine)

Browse Multi source query Graphed metrics (2) Options Source

Add math Add query

<input type="checkbox"/>	frontend-machine	I-0735c3436422cc177	NetworkOut  No alarms
<input checked="" type="checkbox"/>	frontend-machine	I-0735c3436422cc177	CPUUtilization  No alarms
<input type="checkbox"/>	frontend-machine	I-0735c3436422cc177	NetworkIn  No alarms
<input type="checkbox"/>	frontend-machine	I-0735c3436422cc177	DiskReadBytes  No alarms
<input type="checkbox"/>	frontend-machine	I-07df8b5d354b346fc	MetadataNoToken  No alarms
<input type="checkbox"/>	frontend-machine	I-07df8b5d354b346fc	CPUUtilization  No alarms
<input type="checkbox"/>	frontend-machine	I-07df8b5d354b346fc	NetworkPacketsIn  No alarms

Cancel

Amazon Q  Preview

Hello! I'm Amazon Q, your AWS generative AI assistant.

Ask me anything about AWS services and features or choose a sample question below to start a conversation.

Why can't I SSH to my EC2 instance?

What is the CLI command to list all the t3.micro instances in my account?

How can I deploy a containerized web application to AWS?

I'm learning more every day. Help me improve by providing feedback. Visit the Amazon Q documentation for more information.

Select a single metric to continue

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Activities Google Chrome 10 Mar 03:53

us-east-1.console.aws.amazon.com/cloudwatch/home?region=us-east-1#alarmsV2:create?--(Page--MetricSelection--AlarmType--MetricAlarm--AlarmData--(Namespace--AWS/2EC2--M...

CloudWatch Alarms Create alarm

Step 1 Specify

Select metric

Untitled graph 

1h 3h 12h 1d 3d 1w Custom UTC timezone Line

Percent

11.8

5.98

0.166

23:00 23:15 23:30 23:45 00:00 00:15 00:30 00:45 01:00 01:15 01:30 01:45








CPUUtilization

Browse Multi source query Graphed metrics (1) Options Source

Add math Add query

Add dynamic label

Statistic: Average Period: 5 minutes Clear graph

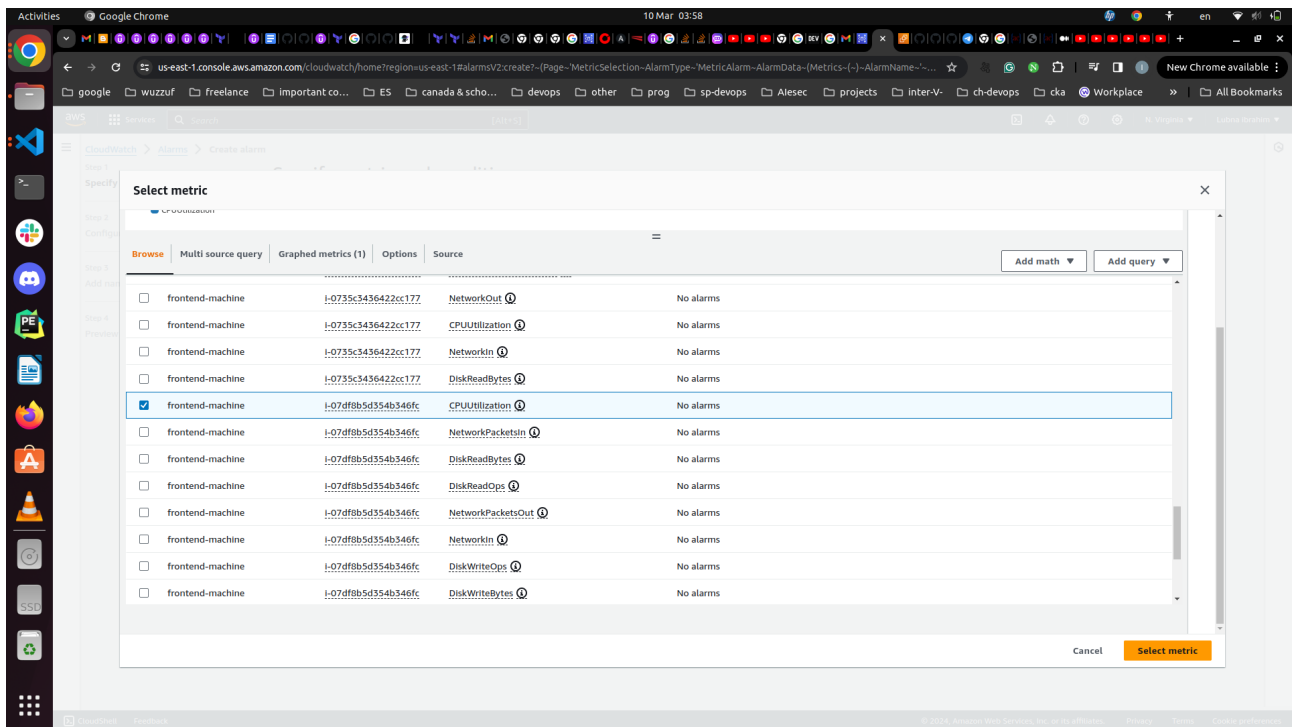
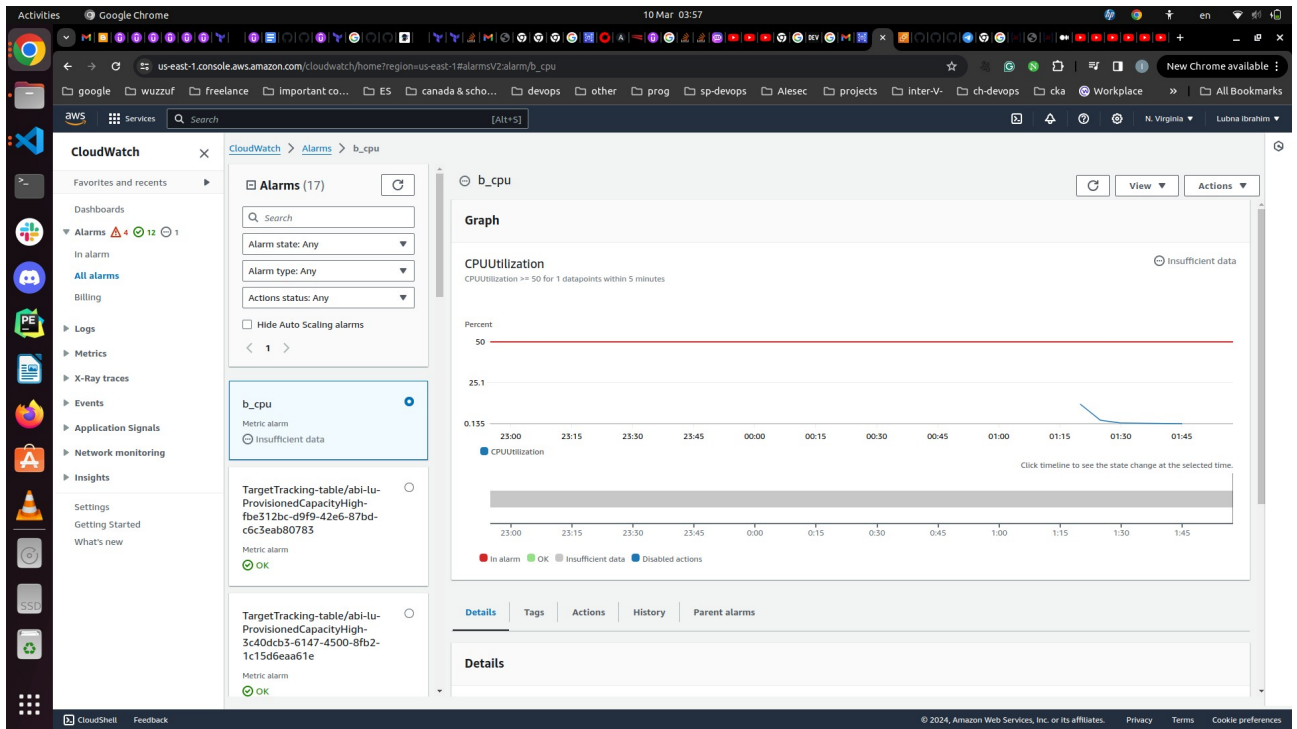
	Label	Details	Statistic	Period	Y axis	Actions
<input checked="" type="checkbox"/>	CPUUtilization 	EC2 • CPUUtilization • InstanceId: I-0bbf1 	Average	5 minutes	 	  

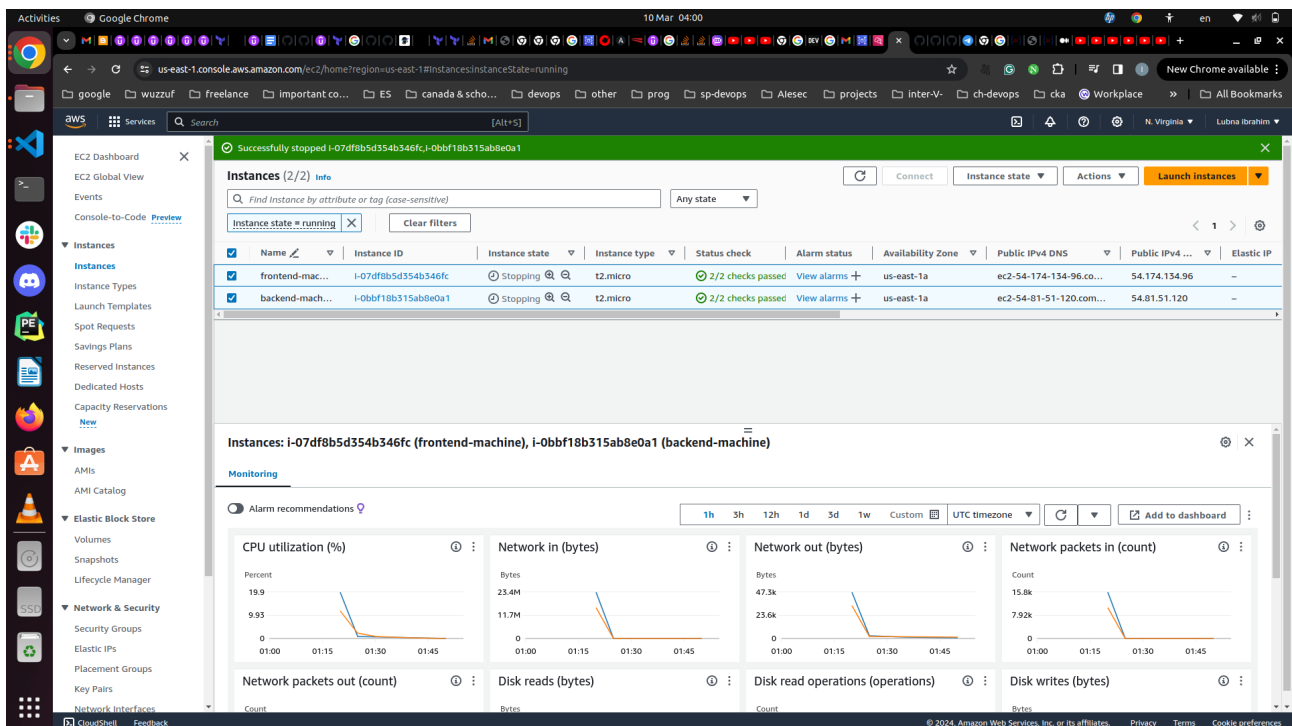
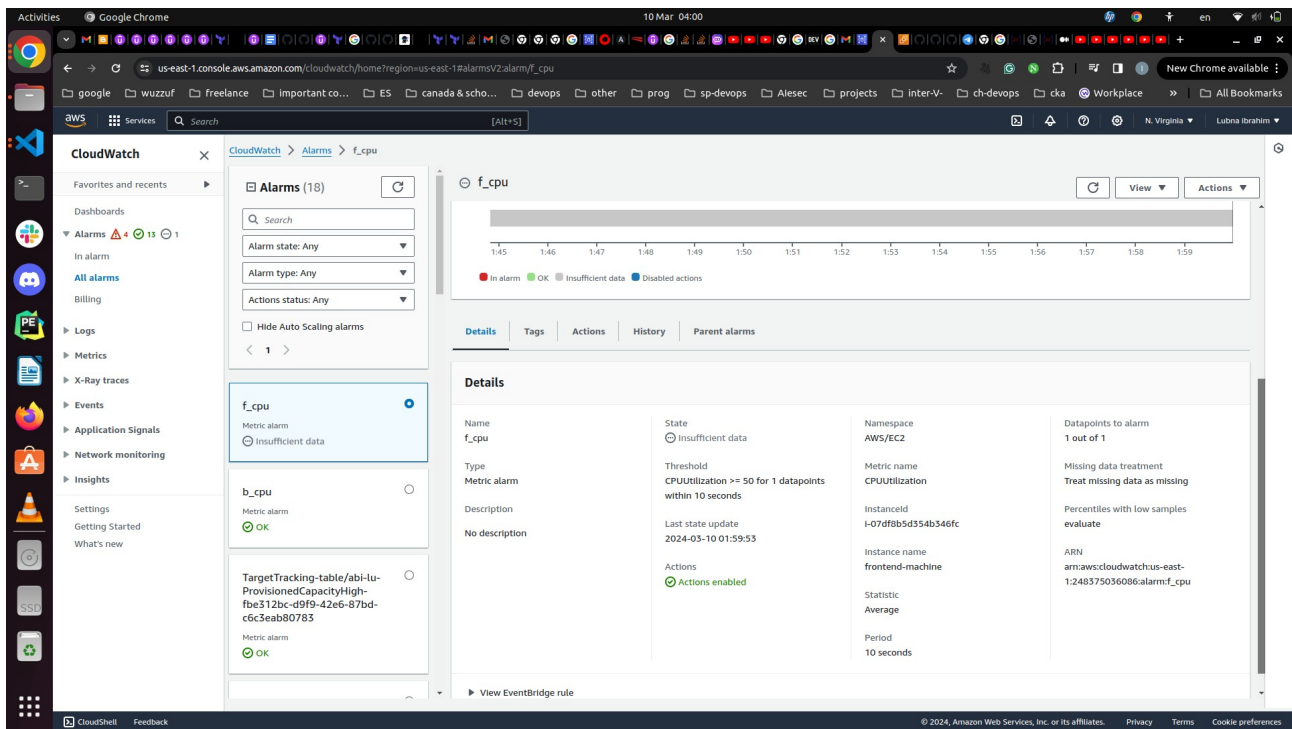
Cancel Select metric

Threshold type

Static Anomaly detection

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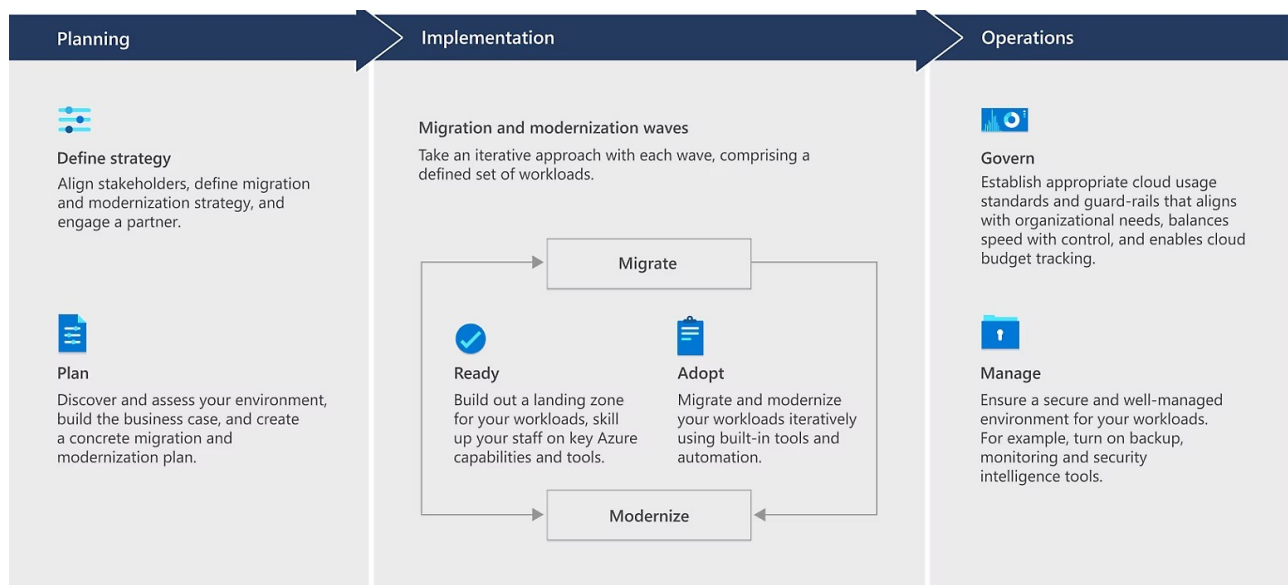
First automate the deployment of the application by configure github actions, github workflow for 2 repos

second using cloud cloudwatch metrics for cpu utilization and sending mails if it's above or equal the average 50%

Task group C:

first I knew about the competition recently, so I have just one day to start and finish it. Due to my volunteering work, I intend to study Azure soon, so I still don't have enough experience.

second, Cloud migration and modernization is a continuous process that involves significant organizational change management spanning people, processes, and technology. Taking a holistic approach will help you navigate the journey successfully but also help ensure that your organization realizes new benefits—including efficiency, agility, and scale—once your workloads are running in the cloud.



It requires careful planning and execution to minimize downtime. Here's a detailed plan to achieve this task efficiently:

1. Evaluate the new cloud platform: Conduct a thorough assessment of the new cloud platform to understand its capabilities, services, and compatibility with your application and database requirements. Identify any differences or gaps compared to Azure and plan for any necessary adjustments.

2. Set up the new cloud account: configure the necessary networking, security, and access controls. Set up virtual machines (VMs) or containers that match the specifications of your existing infrastructure on Azure.

3. Replicate the application: Migrate your application code and assets (product images, PDFs, etc.) from Azure to the new cloud platform. This can involve transferring files using tools like rsync or leveraging cloud storage services for efficient data transfer. Ensure that the application is properly configured and accessible in the new environment.

4. Set up the database: Create a new database instance on the new cloud platform that matches the specifications.

5. Migrate the database: Depending on the database size and complexity, there are different migration approaches:

Online migration

Offline migration

6. Update application configuration: Modify the application configuration to point to the new database and other relevant services on the new cloud platform. Update connection strings, API endpoints, and any other necessary settings to ensure the application can interact with the new infrastructure.

7. Testing and validation: Thoroughly test the application functionality and performance on the new cloud platform. Validate that the database records, product images, PDFs, and other assets have been successfully migrated and are accessible. Perform integration testing, load testing, and any other necessary tests to ensure the application is working as expected.

8. DNS and traffic switch: Once testing is complete and you are confident in the new infrastructure's stability and performance, update the DNS records to point to the new cloud platform. This switch will direct incoming traffic to the new environment. Monitor the traffic closely to ensure that all requests are being handled properly and that there are no issues.

9. Monitor and optimize: After the migration is complete and traffic is fully switched to the new cloud platform, closely monitor the application and database performance. Fine-tune any settings, optimize resource allocation, and address any issues that may arise during the transition. Keep an eye on monitoring metrics, logs, and user feedback to ensure a smooth operation.

Note: It's important to customize this plan based on the specific requirements, configurations, and constraints of your application and the new cloud platform you are migrating to. Consider engaging cloud migration specialists or consulting with experts in the target cloud platform to ensure a successful and efficient migration.