CAPSTONE PROJECT 1

AWS

ARCHITECTURE USED:
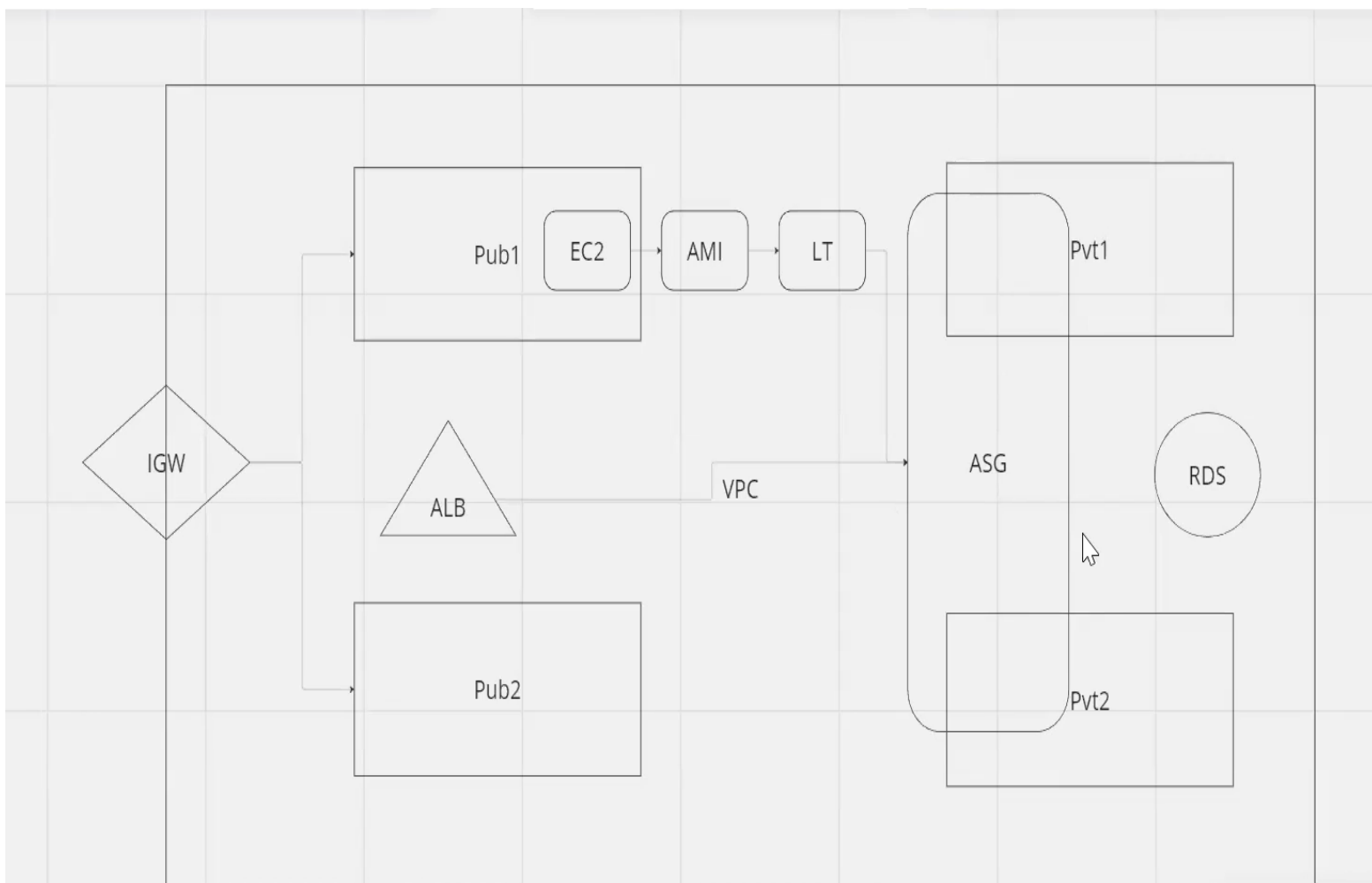
STEPS:

1.LAUNCHING EC2 INSTANCE

2.SECURITY GROUP:

3.VPC CREATION SCREENSHOT and SUBNET SCREENSHOT:

VPC > Your VPCs > vpc-0cfe017fbb8ec31fd

vpc-0cfe017fbb8ec31fd / PROJECT1

Actions

Details Info

VPC ID	State	DNS hostnames	DNS resolution
vpc-0cfe017fbb8ec31fd	⊘ Available	Disabled	Enabled
Tenancy	DHCP option set	Main route table	Main network ACL
Default	dopt-05e3b810309d49eb5	rtb-08efd9ddbcbacc18f	acl-06ab0c895a42c31e9
Default VPC	IPv4 CIDR	IPv6 pool	IPv6 CIDR (Network border group)
No	10.0.0.0/16	–	–
Network Address Usage metrics	Route 53 Resolver DNS Firewall rule groups	Owner ID	
Disabled	–	891377323684	

Subnets (4) Info

Last updated 6 minutes ago   Actions ▼   Create su

🔍 Find resources by attribute or tag

VPC : vpc-0cfe017fbb8ec31fd ✕   Clear filters

< 1 >

☐	Name ▽	Subnet ID ▽	State ▽	VPC ▽	IPv4 CIDR
☐	ab-pub1	subnet-04512662ed8722254	⊘ Available	vpc-0cfe017fbb8ec31fd | PROJ...	10.0.0.0/18
☐	ab-pvt1	subnet-01748370f96ebe274	⊘ Available	vpc-0cfe017fbb8ec31fd | PROJ...	10.0.128.0/18
☐	ab-pub2	subnet-0ce1658f7a57db48e	⊘ Available	vpc-0cfe017fbb8ec31fd | PROJ...	10.0.64.0/18
☐	ab-pvt2	subnet-04b06a4dceeb27126	⊘ Available	vpc-0cfe017fbb8ec31fd | PROJ...	10.0.192.0/18

4.DATABASE CREATED:

RDS > Databases > ab-project-db

ab-project-db

Modify   Actions ▼

Summary
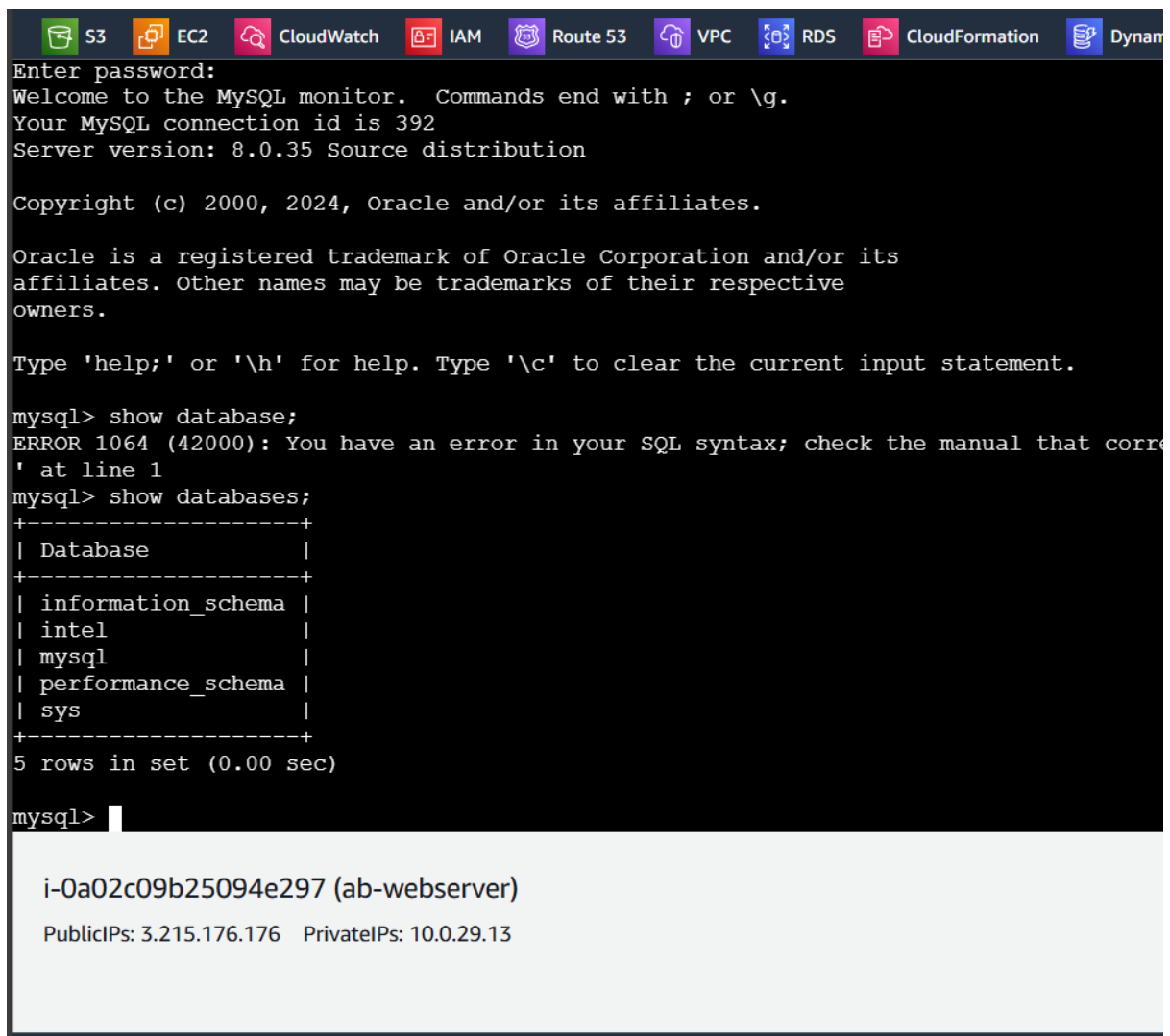
DB identifier	Status	Role	Engine	Recommendations
ab-project-db	⊘ Available	Instance	MySQL Community	
CPU	Class	Current activity	Region & AZ	
▬ 3.15%	db.t3.micro	▭ 0 Connections	us-east-1a	

‹ **Connectivity & security**   Monitoring   Logs & events   Configuration   Zero-ETL integrations   Maintenance & backups   Tags ›

Connectivity & security

Endpoint & port	Networking	Security
Endpoint	Availability Zone	VPC security groups
ab-project-db.cx20meyk2a7x.us-east-1.rds.amazonaws.com	us-east-1a	raj-db-sg (sg-0cd52a129dad33bf9)
	VPC	⊘ Active

5.DATABASE IN PUBLIC INSTANCE:


```
S3    EC2    CloudWatch    IAM    Route 53    VPC    RDS    CloudFormation    Dynam

Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 392
Server version: 8.0.35 Source distribution

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show database;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corre
' at line 1
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| intel              |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.00 sec)

mysql>
```

i-0a02c09b25094e297 (ab-webserver)

PublicIPs: 3.215.176.176   PrivateIPs: 10.0.29.13

6.Security group for ec2 to rds connection:

sg-00c8a30dc84c816d8 - ab-Project-sg

Actions ▼

Details

Security group name	Security group ID	Description	VPC ID
ab-Project-sg	sg-00c8a30dc84c816d8	launch-wizard-3 created 2024-07-09T18:31:16.712Z	vpc-0cfe017fbb8ec31fd ↗

Owner	Inbound rules count	Outbound rules count	
891377323684	2 Permission entries	1 Permission entry	

Inbound rules | Outbound rules | Tags

Inbound rules (2)

🔍 Search

C | Manage tags | Edit inbound rules

< 1 > ⚙

	Name ▽	Security group rule... ▽	IP version ▽	Type ▽	Protocol ▽	Port range ▽	Source
☐	–	sgr-0d79f06d8ad9cadae	IPv4	HTTP	TCP	80	0.0.0.0/
☐	–	sgr-080ef4065d6f41d62	IPv4	SSH	TCP	22	0.0.0.0/

7.All traffic to EC2 instance:

Inbound rules | **Outbound rules** | Tags

Outbound rules (1)

🔍 Search

C | Manage tags | Edit outbound rules

< 1 > ⚙

	Name ▽	Security group rule... ▽	IP version ▽	Type ▽	Protocol ▽	Port range ▽	Destinatio
☐	–	sgr-0c617f514f8888b7a	IPv4	All traffic	All	All	0.0.0.0/0

8.AUTO SCALING WORKING ON PRIVATE INSTANCES:

Details | Activity | Automatic scaling | **Instance management** | Monitoring | Instance refresh

Instances (3)

🔍 Filter instances

C | Actions ▼

< 1 > ⚙

	Instance ID ▲	Lifecycle ▽	Instanc... ▽	Weight... ▽	Launch... ▽	Availab... ▽	Health ... ▽
☐	i-02b124da3c3472f3c ↗	InService	t2.micro	-	ab-LP ↗ | Vers	us-east-1a	✓ Healthy
☐	i-0aae2305baabbdb51 ↗	InService	t2.micro	-	ab-LP ↗ | Vers	us-east-1b	✓ Healthy
☐	i-0e602b6beacad6a12 ↗	InService	t2.micro	-	ab-LP ↗ | Vers	us-east-1a	✓ Healthy

Lifecycle hooks (0) Info

🔍 Filter lifecycle hooks

C | Actions ▼ | Create lifecycle hook

< 1 > ⚙

	Name ▲	Lifecycle tran... ▽	Default result ▽	Heartbeat ti... ▽	Notification t... ▽	Role ARN ▽

9.WEBSITE with LB:
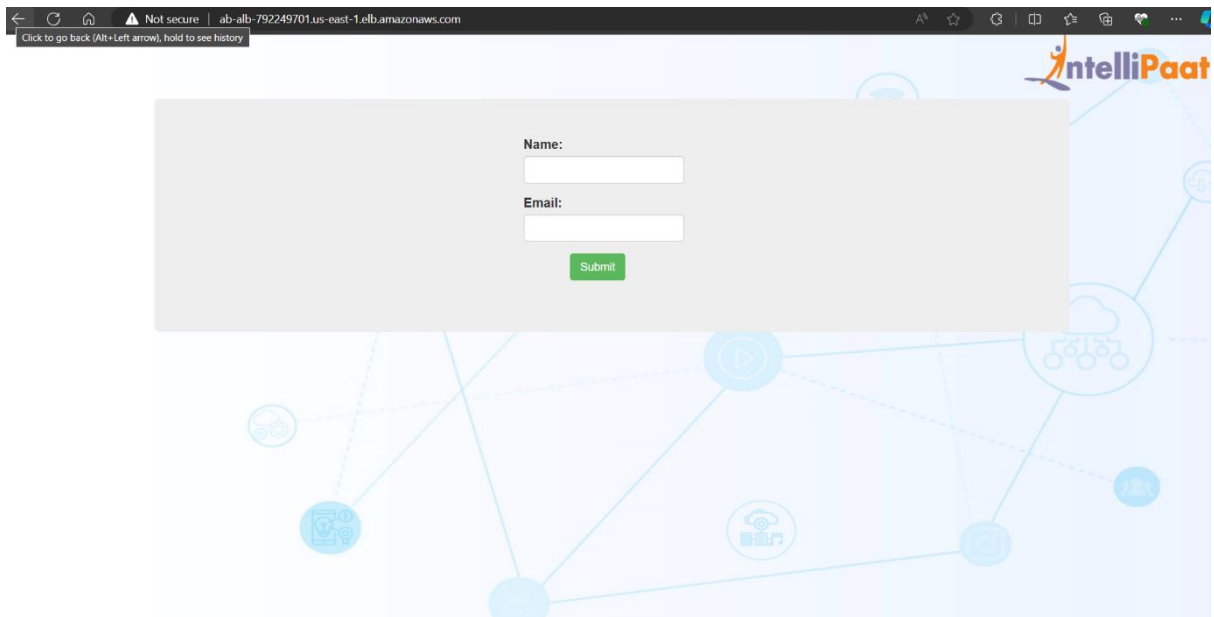
10.WORKING WEBSITE :
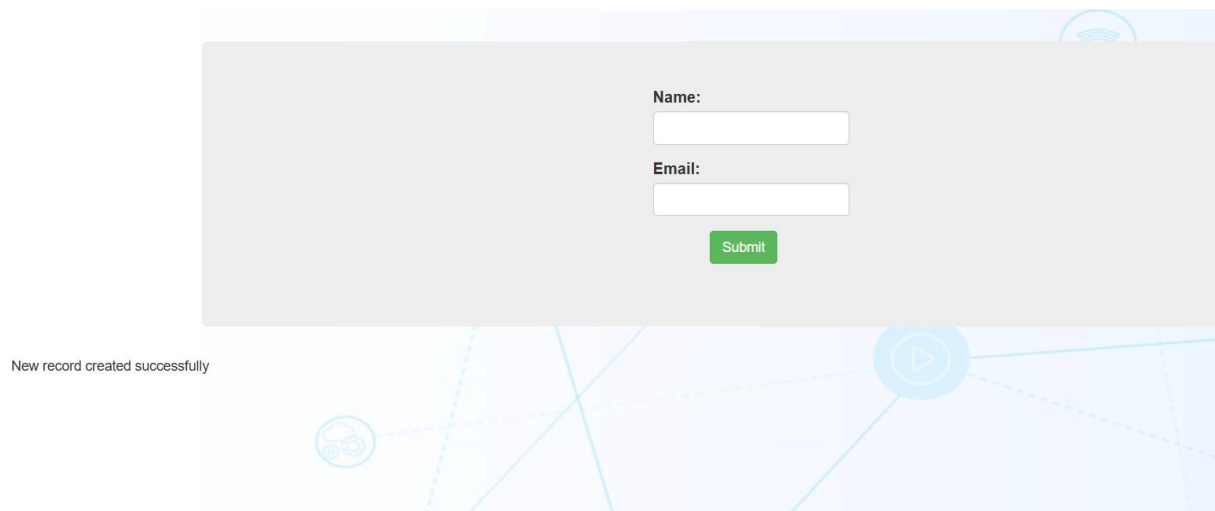
11.VERIFICATION IN PUBLIC INSTANCE

```
mysql> use intel
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select * from table
    -> ;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual
mysql> select * from data
    -> ;
+-----------------+----------------------+
| firstname       | email                |
+-----------------+----------------------+
| Abhishek Khosla | abhishekkhosla208@gm |
| radhiki         | radhika57@gmail.com  |
| Abhishek Khosla | abhishekkhosla57@gma |
| owen            | koli@.com            |
| intel           | intel@12345          |
+-----------------+----------------------+
5 rows in set (0.01 sec)

mysql>
```

i-0a02c09b25094e297 (ab-webserver)

PublicIPs: 3.215.176.176   PrivateIPs: 10.0.29.13