

AWS Project

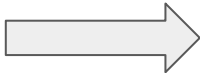
Interim Review

Deploying a Website(end to end)

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CSE-IoT (T2 Section)

Services Used



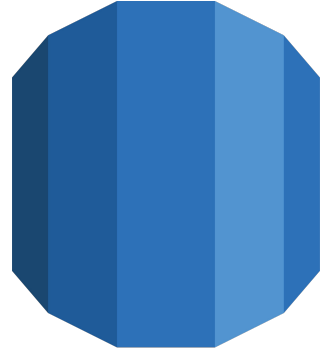
Deployed using



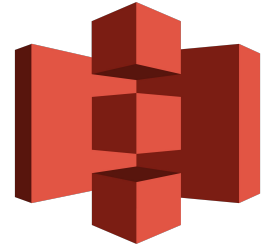
Route 53



Amazon EC2



Amazon RDS



Amazon s3

Layout

First, a domain is configured utilizing Amazon RDS through the Route 53 service. All crucial data is loaded into the storage service, S3. Objects are loaded into the database using a service named S3. Subsequently, utilizing a MySQL client, all significant data is exported to the server hosted on Amazon RDS.

RDS Console

Firefox Web Browser Oct 1 22:19

Databases | RDS | ap-south-1 Google Meet

https://ap-south-1.console.aws.amazon.com/rds/home?region=ap-south-1#databases: 120%

aws Services Search [Alt+S] Mumbai Shounak Chandra

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
- Events
- Event subscriptions
- Recommendations 3
- Certificate update 1

Introducing Aurora I/O-Optimized
Aurora's I/O-Optimized is a new cluster storage configuration that offers predictable pricing for all applications and improved price-performance, with up to 40% costs savings for I/O-intensive applications.

Consider creating a Blue/Green Deployment to minimize downtime during upgrades
You may want to consider using Amazon RDS Blue/Green Deployments and minimize your downtime during upgrades. A Blue/Green Deployment provides a staging environment for changes to production databases. [RDS User Guide](#) [Aurora User Guide](#)

Databases (1)

☒ Group resources Refresh Modify Actions Restore from S3 Create database

	DB identifier ▲	Status ▼	Role ▼	Engine ▼	Region & AZ ▼	Size ▼	Actions ▼	CPU ▼	Current activity ▼
	employee	Available	Instance	MySQL Community	ap-south-1b	db.t2.micro		4.48%	0 Connections

EC2 Instance

The screenshot displays the AWS Management Console interface for an EC2 instance. The browser window shows the URL `https://ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#instances:instanceState=running`. A green notification bar at the top states "Successfully force stopped i-053ccba61db7ce6f2, i-043f12fbfb834960e".

Instances (1/5) Info

Find instance by attribute or tag (case-sensitive)

Instance state: **running** Clear filters

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
-	i-053ccba61db7ce6f2	Stopped	t2.micro	2/2 checks passed	No alarms	ap-south-1b	-

Instance: i-077173dd5de00ce0c (AWS Project)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

Instance summary Info

Instance ID i-077173dd5de00ce0c (AWS Project)	Public IPv4 address 13.233.55.44 open address	Private IPv4 addresses 172.31.47.167
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-13-233-55-44.ap-south-1.compute.amazonaws.com open address
Hostname type IP name: ip-172-31-47-167.ap-south-1.compute.internal	Private IP DNS name (IPv4 only) ip-172-31-47-167.ap-south-1.compute.internal	Elastic IP addresses -
Answer private resource DNS name IPv4 (A)	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address 13.233.55.44 [Public IP]	VPC ID vpc-0fa688dae2291e00c open	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-015db1856d696a7f open	
IMDSv2		

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S3 bucket instance

The screenshot shows the AWS Management Console interface in a Firefox browser. The page displays the properties of an S3 bucket named 'awsaddemployee' in the 'ap-south-1' region. The left sidebar contains navigation options for Amazon S3, including Buckets, Access Points, and Storage Lens. The main content area shows the 'Properties' tab for the bucket, which includes details like the AWS Region (Asia Pacific (Mumbai) ap-south-1), Amazon Resource Name (ARN), and Creation date (September 30, 2023, 21:38:15 UTC+05:30). It also shows the Bucket Versioning status as 'Disabled' and the Default encryption status as 'Server-side encryption is automatically applied to new objects stored in this bucket.' The 'Tags' section indicates that there are no tags associated with this resource.

Amazon S3

Buckets

Access Points

Object Lambda Access Points

Multi-Region Access Points

Batch Operations

IAM Access Analyzer for S3

Block Public Access settings for this account

Storage Lens

Dashboards

AWS Organizations settings

Feature spotlight 7

AWS Marketplace for S3

awsaddemployee

Properties

Bucket overview

AWS Region	Amazon Resource Name (ARN)	Creation date
Asia Pacific (Mumbai) ap-south-1	arn:aws:s3::awsaddemployee	September 30, 2023, 21:38:15 (UTC+05:30)

Bucket Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#)

Edit

Bucket Versioning

Disabled

Multi-factor authentication (MFA) delete

An additional layer of security that requires multi-factor authentication for changing Bucket Versioning settings and permanently deleting object versions. To modify MFA delete settings, use the AWS CLI, AWS SDK, or the Amazon S3 REST API. [Learn more](#)

Disabled

Tags (0)

You can use bucket tags to track storage costs and organize buckets. [Learn more](#)

Edit

Key	Value
No tags associated with this resource.	

Default encryption

Server-side encryption is automatically applied to new objects stored in this bucket.

Edit

Establishing the connection with terminal

```
ubuntu@ip-172-31-31-89:~$ mysql -h employee.coghw13fheqo.us-east-2.rds.amazonaws.com -u
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 12
Server version: 8.0.17 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>
```

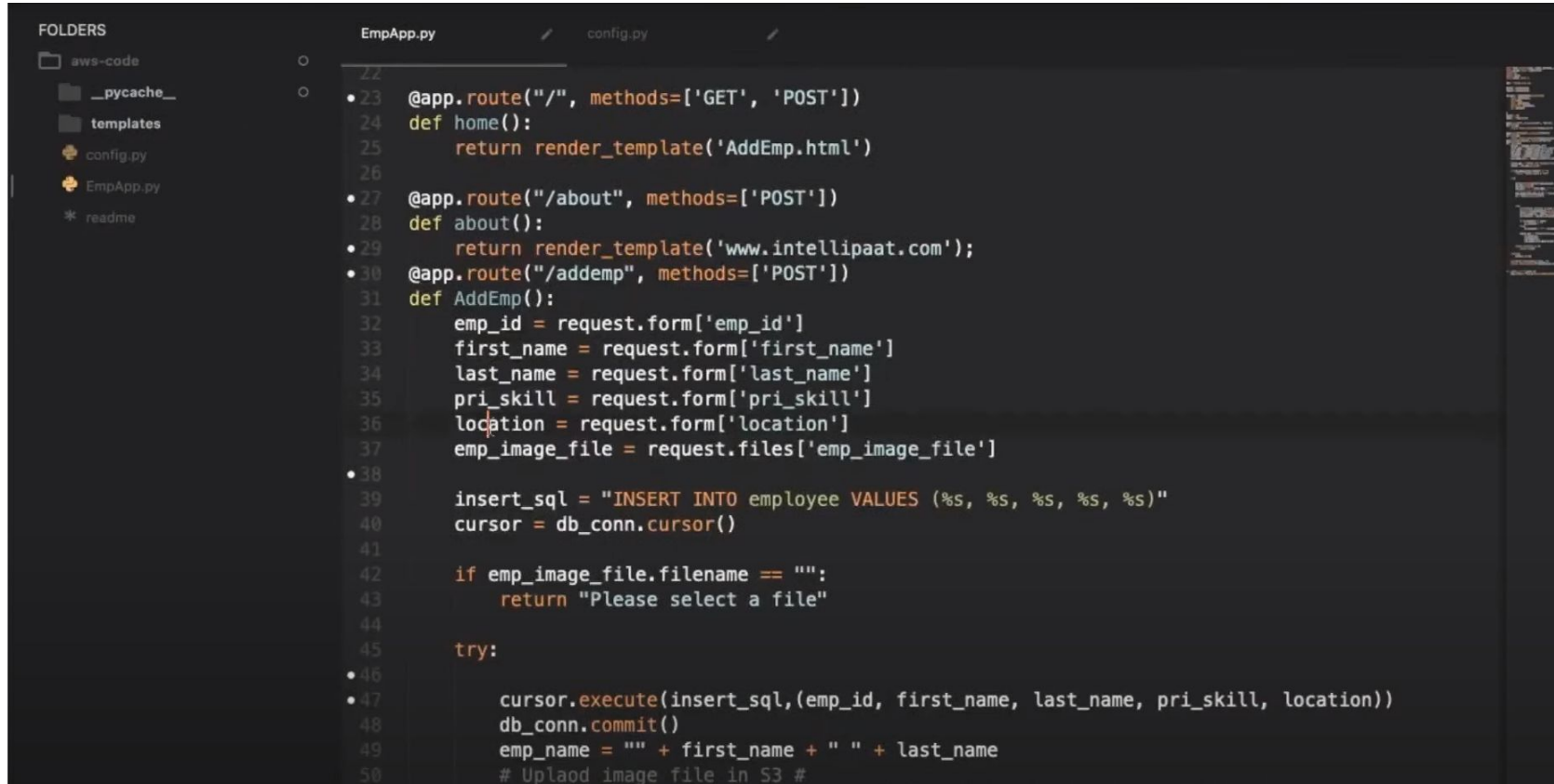
Creating the database

```
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
+-----+
3 rows in set (0.00 sec)

mysql> create database employee;
Query OK, 1 row affected (0.01 sec)

mysql> 
```


EmpApp.py script



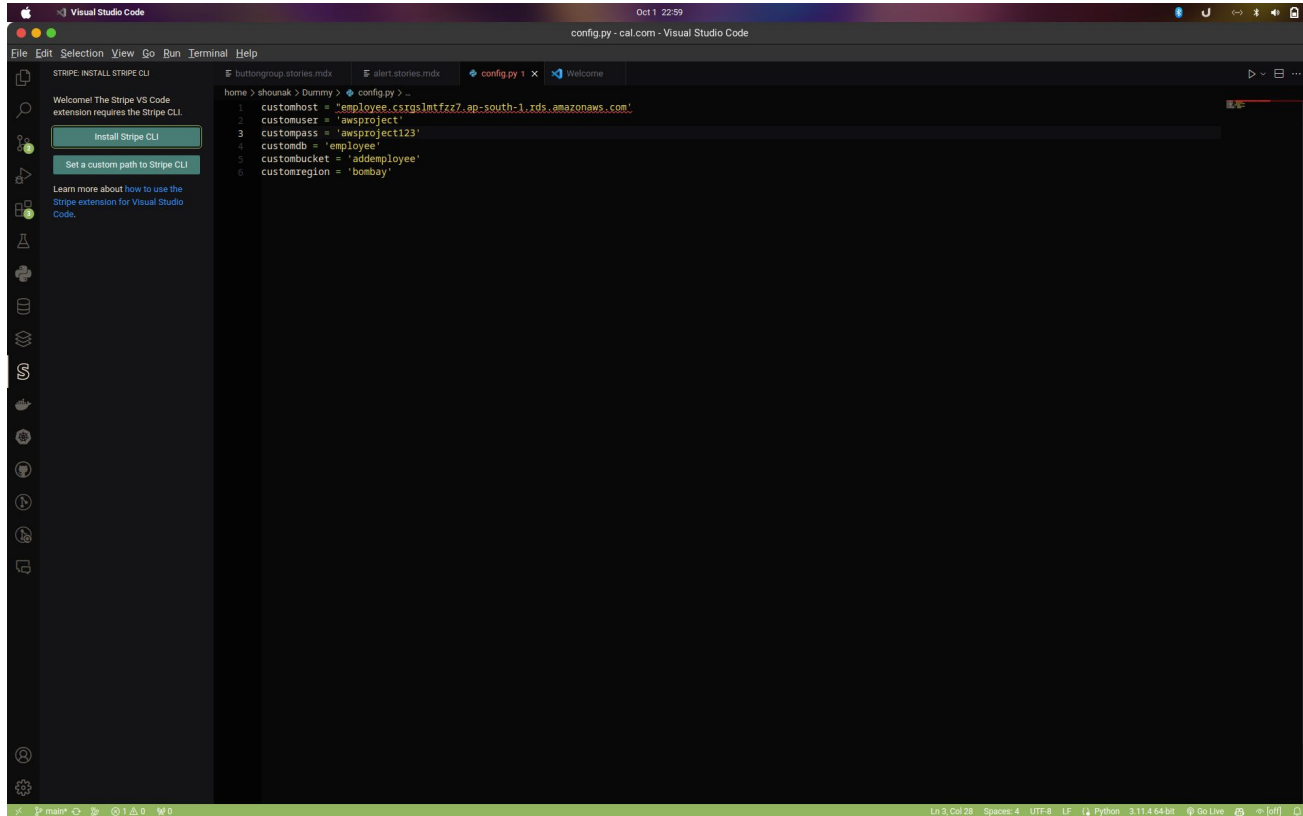
```
FOLDERS
aws-code
  __pycache__
  templates
  config.py
  EmpApp.py
  * readme

EmpApp.py
22
23 @app.route("/", methods=['GET', 'POST'])
24 def home():
25     return render_template('AddEmp.html')
26
27 @app.route("/about", methods=['POST'])
28 def about():
29     return render_template('www.intellipaat.com');
30 @app.route("/addemp", methods=['POST'])
31 def AddEmp():
32     emp_id = request.form['emp_id']
33     first_name = request.form['first_name']
34     last_name = request.form['last_name']
35     pri_skill = request.form['pri_skill']
36     location = request.form['location']
37     emp_image_file = request.files['emp_image_file']
38
39     insert_sql = "INSERT INTO employee VALUES (%s, %s, %s, %s, %s)"
40     cursor = db_conn.cursor()
41
42     if emp_image_file.filename == "":
43         return "Please select a file"
44
45     try:
46
47         cursor.execute(insert_sql,(emp_id, first_name, last_name, pri_skill, location))
48         db_conn.commit()
49         emp_name = "" + first_name + " " + last_name
50         # Upload image file in S3 #
```

Employeeadd from terminal

```
| information_schema |  
| mysql              |  
| performance_schema |  
+-----+  
3 rows in set (0.00 sec)  
  
mysql> create database employee;  
Query OK, 1 row affected (0.01 sec)  
  
mysql> create table employee(  
    -> empid varchar(20),  
    -> fname varchar(20),  
    -> lname varchar(20),  
    -> pri_skill varchar(20),  
    -> location varchar(20));  
ERROR 1046 (3D000): No database selected  
mysql> use employee;  
Database changed  
mysql> create table employee(  
    ->     -> empid varchar(20),  
    ->     -> fname varchar(20),  
    ->     -> lname varchar(20),  
    ->     -> pri_skill varchar(20),  
    ->     -> location varchar(20));  
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL  
rsion for the right syntax to use near '-> empid varchar(20),  
    -> fname varchar(20),  
    -> lname varchar(20),
```

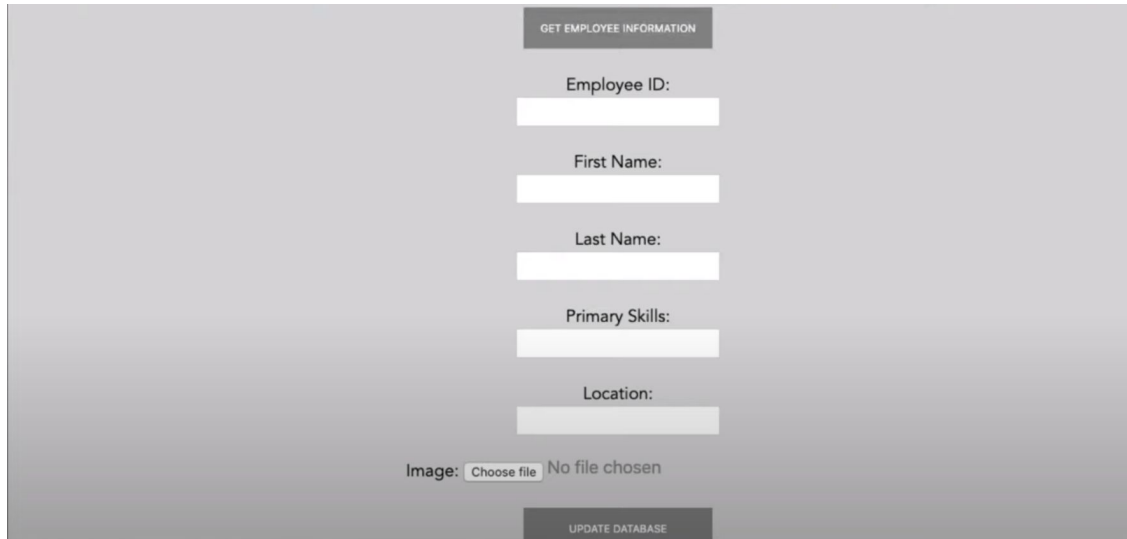
Config.py file from the terminal



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the contents of a file named `config.py`. The file contains configuration variables for a Stripe extension, including custom host, user, password, database, bucket, and region. The interface also shows the Stripe extension sidebar on the left and the file explorer at the top.

```
home > shounak > Dummy > config.py > ..  
1 customhost = "employee_csrgslmtfz27.ap-south-1.rds.amazonaws.com"  
2 customuser = 'awsproject'  
3 custompass = 'awsproject123'  
4 customdb = 'employee'  
5 custombucket = 'addemployee'  
6 customregion = 'bombay'
```

Final product should be



GET EMPLOYEE INFORMATION

Employee ID:

First Name:

Last Name:

Primary Skills:

Location:

Image: No file chosen

UPDATE DATABASE

Thank you