Home Made Pickles and Snacks

Description:

Home Made Pickles & Snacks — Taste the Best is a cloud-based culinary platform revolutionizing access to authentic, handcrafted pickles and snacks. Addressing the growing demand for preservative-free, traditional recipes, this initiative combines artisanal craftsmanship with cutting-edge technology to deliver farm-fresh flavors directly to consumers. Built on Flask for backend efficiency and hosted on AWS EC2 for scalable performance, the platform offers seamless browsing, ordering, and subscription management. DynamoDB ensures real-time inventory tracking and personalized user experiences, while fostering sustainability through partnerships with local farmers and eco-friendly packaging. From tangy regional pickles to wholesome snacks, every product celebrates heritage recipes, nutritional integrity, and convenience—proving that tradition and innovation can coexist deliciously. "Preserving Traditions, One Jar at a Time."

Scenarios:

Scenario 1: Scalable Order Management for High Demand

A cloud-based system ensures seamless order processing during peak user activity. For instance, during a promotional event, hundreds of users simultaneously access the platform to place orders. The backend efficiently processes requests; updates inventory in real-time and manages user sessions. The cloud infrastructure handles traffic spikes without performance degradation, ensuring smooth transactions and minimizing wait times.

Scenario 2: Real-Time Inventory Tracking and Updates

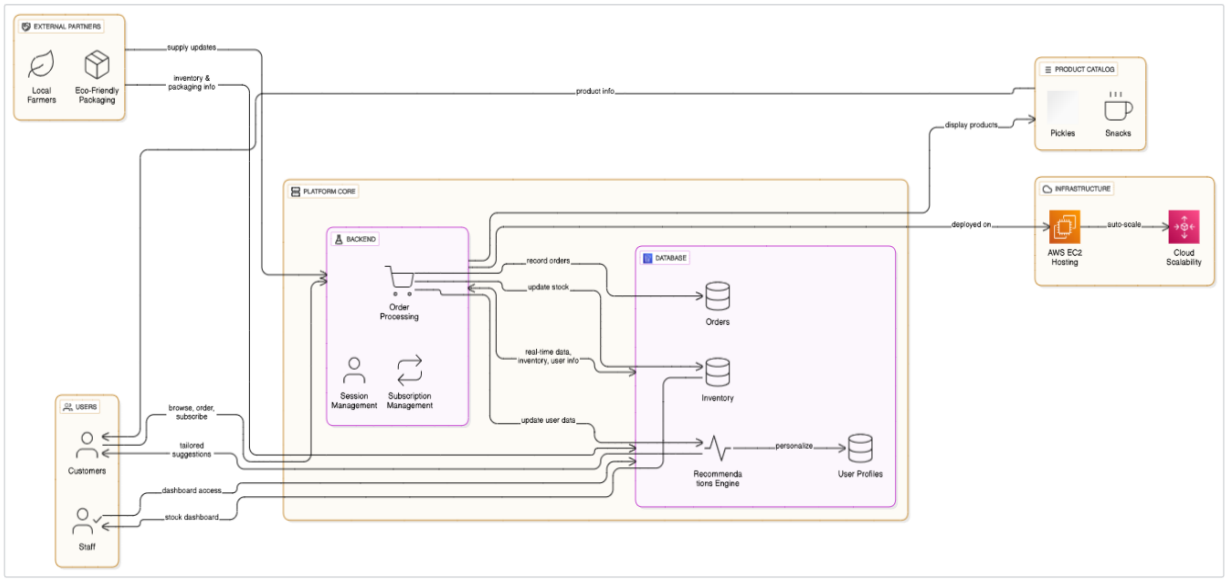
When a customer places an order for a product, the system instantly updates stock levels and records transaction details. For example, a user purchases an item, triggering automatic inventory deduction and order confirmation. Staff members receive updated dashboards to monitor stock availability and fulfillment progress, ensuring timely restocking and minimizing overselling risks.

Scenario 3: Personalized User Experience and Recommendations

The platform leverages user behavior data to enhance engagement. A returning customer, for instance, views tailored recommendations based on past purchases and browsing history. The system dynamically adjusts suggestions in real-time, while maintaining fast response rates even during high traffic, creating a frictionless and intuitive shopping experience.

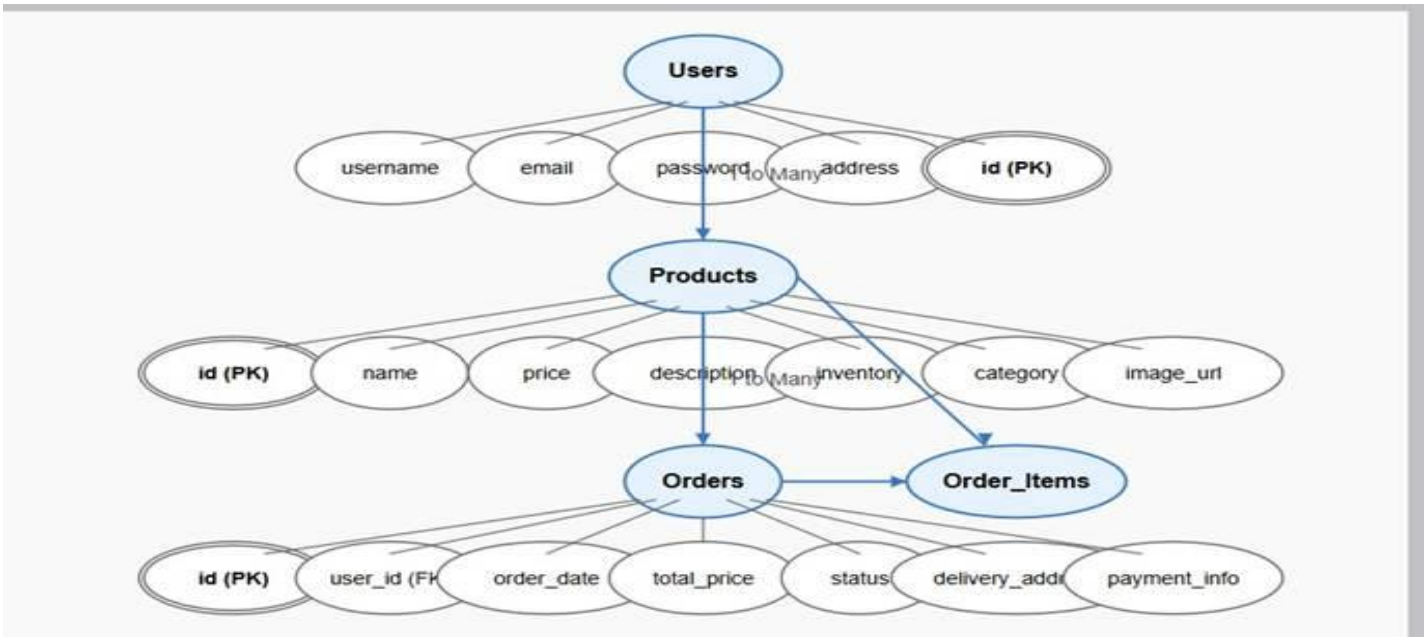
AWS ARCHITECTURE

This AWS-based architecture powers a scalable and secure web application using Amazon EC2 for hosting the backend, with a lightweight framework like Flask handling core logic. Application data is stored in Amazon DynamoDB, ensuring fast, reliable access, while user access is managed through AWS IAM for secure authentication and control. Real-time alerts and system notifications are enabled via Amazon SNS, enhancing communication and user engagement.



Entity Relationship (ER)Diagram:

An ER (Entity-Relationship) diagram visually represents the logical structure of a database by defining entities, their attributes, and the relationships between them. It helps organize data efficiently by illustrating how different components of the system interact and relate. This structured approach supports effective database normalization, data integrity, and simplified query design.



Pre-requisites

- AWS Account Setup: https://docs.aws.amazon.com/accounts/latest/reference/getting-started.html
- AWS IAM (Identity and Access Management): https://docs.aws.amazon.com/IAM/latest/UserGuide/introduction.html
- AWS EC2 (Elastic Compute Cloud): https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/concepts.html
- AWS DynamoDB: https://docs.aws.amazon.com/amazondynamodb/Introduction.html
- Git Documentation: https://git-scm.com/doc
- VS Code Installation: (download the VS Code using the below link or you can get that in Microsoft store) https://code.visualstudio.com/download

Project Workflow

Milestone 1. Backend Development and Application Setup

- Develop the Backend Using Flask.
- Integrate AWS Services Using boto3.

Milestone 2. AWS Account Setup and Login

- Set up an AWS account if it is not done yet.
- Log in to the AWS Management Console

Milestone 3. DynamoDB Database Creation and Setup

- Create a DynamoDB Table.
- Configure Attributes for User Data and Book Requests.

Milestone 4. SNS Notification Setup

- Create SNS topics for book request notifications.
- Subscribe users and library staff to receive SNS email notifications.

Milestone 5. IAM Role Setup

- Create IAM Role
- Attach Policies

Milestone 6. EC2 Instance Setup

- Launch an EC2 instance to host the Flask application.
- Configure security groups for HTTP and SSH access.

Milestone 7. Deployment on EC2

- Upload Flask Files
- Run the Flask App

Milestone 8. Testing and Deployment

- Conduct functional testing to verify user signup, login, buy/sell stocks and notifications.

Milestone 1: Web Application Development and Setup

Backend Development and Application Setup focuses on establishing the core structure of the application. This includes configuring the backend framework, setting up routing, and integrating database connectivity. It lays the groundwork for handling user interactions, data management, and secure access.

Important Instructions:

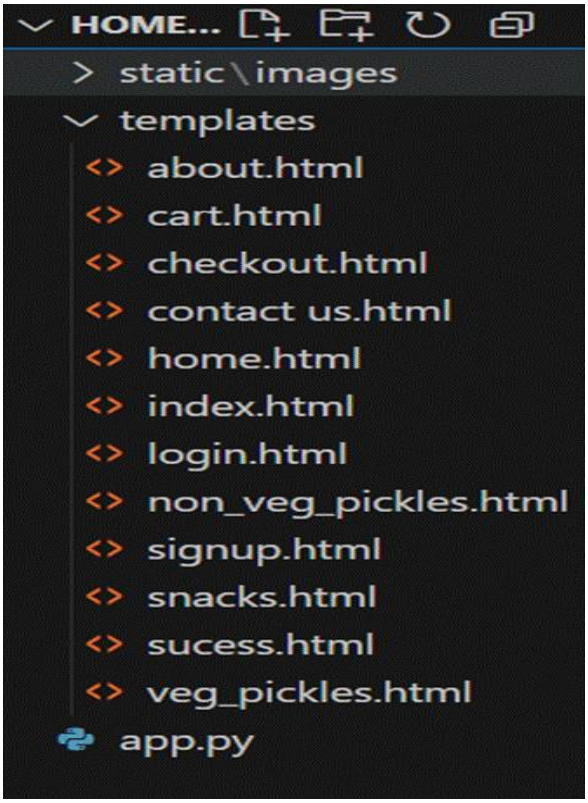
- Start by creating the necessary HTML pages and Flask routes (app.py) to build the core functionality of your application.
- During the initial development phase, store and retrieve data using Python dictionaries or lists locally. This will allow you to design, test, and validate your application logic without external database dependencies
- Ensure your app runs smoothly with local data structures before integrating any cloud services.

Post Troven Access Activation:

- Once Troven Labs access is provided (valid for 3 hours), you must immediately proceed with Milestone 1 of your Guided Project instructions.
- At this point, modify your app.py and replace local dictionary/list operations with AWS services (such as DynamoDB, RDS, or others as per project requirements).
- Using the temporary credentials provided by Troven Labs, securely connect your application to AWS resources.
- Since the AWS configuration is lightweight and already instructed in the milestones, you should be able to complete the cloud integration efficiently within the allotted time.

LOCAL DEPLOYMENT

- File Explorer Structure



Description of the code:

? Flask App Initialization

```
from flask import Flask, render_template, request, redirect, url_for, session
from werkzeug.security import generate_password_hash, check_password_hash
import boto3
from datetime import datetime
import json,uuid
```

```
app = Flask(__name__)
```

- Use boto3 to connect to DynamoDB for handling user registration, Order details database operations and mention region name where DynamoDB tables are created.

```python
dynamodb = boto3.resource('dynamodb', region_name='ap-south-1')  # e.g., 'us-east-1'
users_table = dynamodb.Table('Users')
orders_table = dynamodb.Table('Orders')
```

```python
products = {
    'non_veg_pickles': [
        {'id': 1, 'name': 'Chicken Pickle', 'weights': {'250': 600, '500': 1200, '1000': 1800}},
        {'id': 2, 'name': 'Fish Pickle', 'weights': {'250': 200, '500': 400, '1000': 800}},
        {'id': 3, 'name': 'Gongura Mutton', 'weights': {'250': 400, '500': 800, '1000': 1600}},
        {'id': 4, 'name': 'Mutton Pickle', 'weights': {'250': 400, '500': 800, '1000': 1600}},
        {'id': 5, 'name': 'Gongura Prawns', 'weights': {'250': 600, '500': 1200, '1000': 1800}},
        {'id': 6, 'name': 'Chicken Pickle (Gongura)', 'weights': {'250': 350, '500': 700, '1000': 1050}}
    ],
    'veg_pickles': [
        {'id': 7, 'name': 'Traditional Mango Pickle', 'weights': {'250': 150, '500': 280, '1000': 500}},
        {'id': 8, 'name': 'Zesty Lemon Pickle', 'weights': {'250': 120, '500': 220, '1000': 400}},
        {'id': 9, 'name': 'Tomato Pickle', 'weights': {'250': 130, '500': 240, '1000': 450}},
        {'id': 10, 'name': 'Kakarakaya Pickle', 'weights': {'250': 130, '500': 240, '1000': 450}},
        {'id': 11, 'name': 'Chintakaya Pickle', 'weights': {'250': 130, '500': 240, '1000': 450}},
        {'id': 12, 'name': 'Spicy Pandu Mirchi', 'weights': {'250': 130, '500': 240, '1000': 450}}
    ],  # Add your veg pickle products here
    'snacks': [
        {'id': 7, 'name': 'Banana Chips', 'weights': {'250': 300, '500': 600, '1000': 800}},
        {'id': 8, 'name': 'Crispy Aam-Papad', 'weights': {'250': 150, '500': 300, '1000': 600}},
        {'id': 9, 'name': 'Crispy Chekka Pakodi', 'weights': {'250': 50, '500': 100, '1000': 200}},
        {'id': 10, 'name': 'Boondhi Acchu', 'weights': {'250': 300, '500': 600, '1000': 900}},
        {'id': 11, 'name': 'Chekkalu', 'weights': {'250': 350, '500': 700, '1000': 1000}},
        {'id': 12, 'name': 'Ragi Laddu', 'weights': {'250': 350, '500': 700, '1000': 1000}},
        {'id': 13, 'name': 'Dry Fruit Laddu', 'weights': {'250': 500, '500': 1000, '1000': 1500}},
        {'id': 14, 'name': 'Kara Boondi', 'weights': {'250': 250, '500': 500, '1000': 750}},
        {'id': 15, 'name': 'Gavvalu', 'weights': {'250': 250, '500': 500, '1000': 750}},
        {'id': 16, 'name': 'Kaju Chikki', 'weights': {'250': 250, '500': 500, '1000': 750}},
```

- Routes for Web Pages
- Login Route (GET/POST): Verifies user credentials, increments login count, and redirects to the dashboard on success.

```python
@app.route('/')
def index():
    return render_template('index.html')

@app.route('/login', methods=['GET', 'POST'])
def login():
    if request.method == 'POST':
        username = request.form['username']
        password = request.form['password']

        try:
            # Fetch user from DynamoDB
            response = users_table.get_item(Key={'username': username})

            if 'Item' not in response:
                return render_template('login.html', error='User not found')

            user = response['Item']

            # Ensure password field exists in the DB
            if 'password' not in user:
                return render_template('login.html', error='Password not found in database')

            # Verify password
            if check_password_hash(user['password'], password):
                session['logged_in'] = True
                session['username'] = username
                session.setdefault('cart', [])  # Initialize cart if not set
```

- Signup route: Collecting registration data, hashes the password, and stores user details in the database.

```python
@app.route('/signup', methods=['GET', 'POST'])
def signup():
    if request.method == 'POST':
        username = request.form['username'].strip()
        email = request.form['email'].strip()
        password = request.form['password']

        try:
            # Check if username exists
            response = users_table.get_item(Key={'username': username})
            if 'Item' in response:
                return render_template('signup.html', error='Username already exists')

            # Hash password before storing
            hashed_password = generate_password_hash(password)

            # Store new user in DynamoDB
            users_table.put_item(
                Item={
                    'username': username,
                    'email': email,
                    'password': hashed_password  # Store hashed password
                }
            )

            return redirect(url_for('login'))

        except Exception as e:
            app.logger.error(f"Signup error: {str(e)}")
```

```
        except Exception as e:
            app.logger.error(f"Signup error: {str(e)}")
            return render_template('signup.html', error='Registration failed. Please try again.')

    return render_template('signup.html')

@app.route('/logout')
def logout():
    session.clear()
    return redirect(url_for('login'))
```

- Logout route: The user can Logout so that the user can get back to the Login Page

```
@app.route('/logout')
def logout():
    session.clear()
    return redirect(url_for('login'))
```

- Home Route: Home page contains the routing for different categories which are Veg_pickles, Non_Veg_pickles,Snacks.

```
@app.route('/home')
def home():
    if not session.get('logged_in'):
        return redirect(url_for('login'))
    return render_template('home.html')

@app.route('/non_veg_pickles')
def non_veg_pickles():
    if not session.get('logged_in'):
        return redirect(url_for('login'))

    return render_template('non_veg_pickles.html', products=products['non_veg_pickles'])

@app.route('/veg_pickles')
def veg_pickles():
    if not session.get('logged_in'):
        return redirect(url_for('login'))

    # Simply pass all products without filtering
    return render_template('veg_pickles.html', products=products['veg_pickles'])

@app.route('/snacks')
def snacks():
    if not session.get('logged_in'):
        return redirect(url_for('login'))

    return render_template('snacks.html', products=products['snacks']
```

Restart Visual Studio

- Check out Route:

```python
@app.route('/checkout', methods=['GET', 'POST'])
def checkout():
    if not session.get('logged_in'):
        return redirect(url_for('login'))

    error_message = None  # Variable to hold error messages

    if request.method == 'POST':
        try:
            # Extract form data safely
            name = request.form.get('name', '').strip()
            address = request.form.get('address', '').strip()
            phone = request.form.get('phone', '').strip()
            payment_method = request.form.get('payment', '').strip()

            # Validate inputs
            if not all([name, address, phone, payment_method]):
                return render_template('checkout.html', error="All fields are required.")

            if not phone.isdigit() or len(phone) != 10:
                return render_template('checkout.html', error="Phone number must be exactly 10 digits.")

            # Get cart data from hidden inputs
            cart_data = request.form.get('cart_data', '[]')
            total_amount = request.form.get('total_amount', '0')
```

Restart Visual Studio Code to apply the late

```python
            try:
                cart_items = json.loads(cart_data)
                total_amount = float(total_amount)
            except (json.JSONDecodeError, ValueError):
                return render_template('checkout.html', error="Invalid cart data format.")

            # Ensure cart is not empty
            if not cart_items:
                return render_template('checkout.html', error="Your cart is empty.")

            # Store order in DynamoDB
            try:
                orders_table.put_item(
                    Item={
                        'order_id': str(uuid.uuid4()),
                        'username': session.get('username', 'Guest'),
                        'name': name,
                        'address': address,
                        'phone': phone,
                        'items': cart_items,
                        'total_amount': total_amount,
                        'payment_method': payment_method,
                        'timestamp': datetime.now().isoformat()
                    }
                )
            except Exception as db_error:
                print(f"DynamoDB Error: {db_error}")
                return render_template('checkout.html', error="Failed to save order. Please try again later.")
```

```python
            # Redirect to success page with success message
            return redirect(url_for('sucess', message="Your order has been placed successfully!"))

        except Exception as e:
            print(f"Checkout error: {str(e)}")
            return render_template('checkout.html', error="An unexpected error occurred. Please try again.")

    return render_template('checkout.html')  # Render checkout page for GET request


@app.route('/sucess')
def success():
    return render_template('sucess.html')

if __name__ == '__main__':
    app.run(host='0.0.0.0', port=5000, debug=True)  # Add debug=True temporarily
```

Milestone 2: AWS Account Setup

Important Notice: Use Troven Labs for AWS Access

Students are strictly advised not to create their own AWS accounts, as doing so may incur charges. Instead, we have set up a dedicated section called “Labs” on the Troven platform, which provides temporary and cost-free access to AWS services.

Once your website is locally deployed and fully functional, you must proceed with integrating AWS services only through the Troven Labs environment. This ensures secure, controlled access to AWS resources without any risk of personal billing.

All steps involving AWS (such as deploying to EC2, connecting to DynamoDB, or using SNS) must be carried out within the Troven Labs platform, as we've configured temporary credentials for each student.

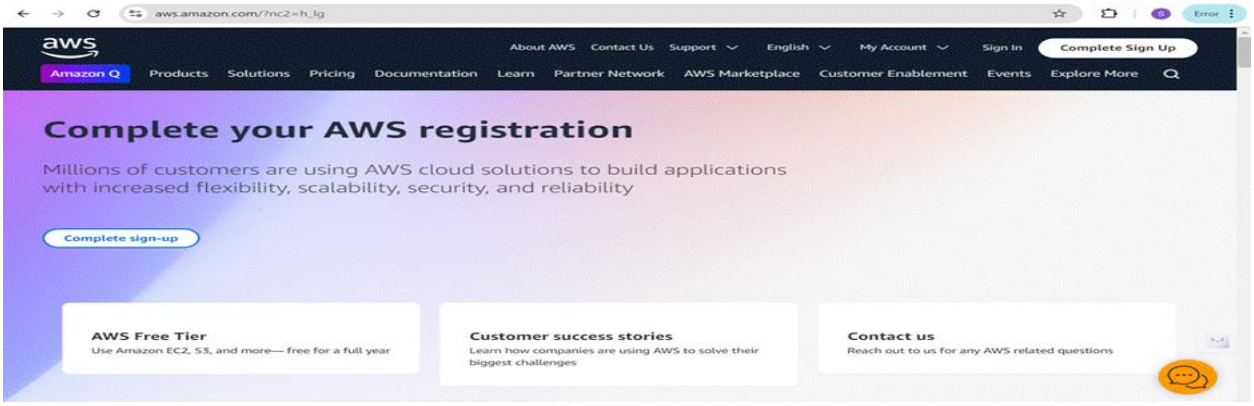
Reminder: You must complete the Web Development task before gaining access to Troven. Once accessed, the AWS Console via Troven is available for only 3 hours—please plan your work accordingly.

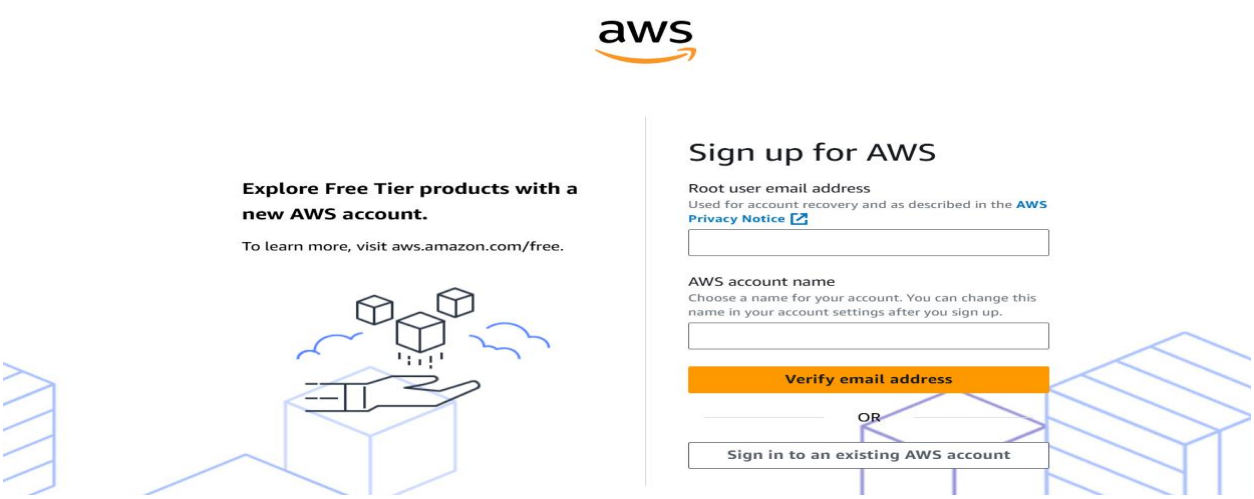
Please follow the provided guidelines and access AWS exclusively through Troven to avoid unnecessary issues.

AWS Account Setup and Login

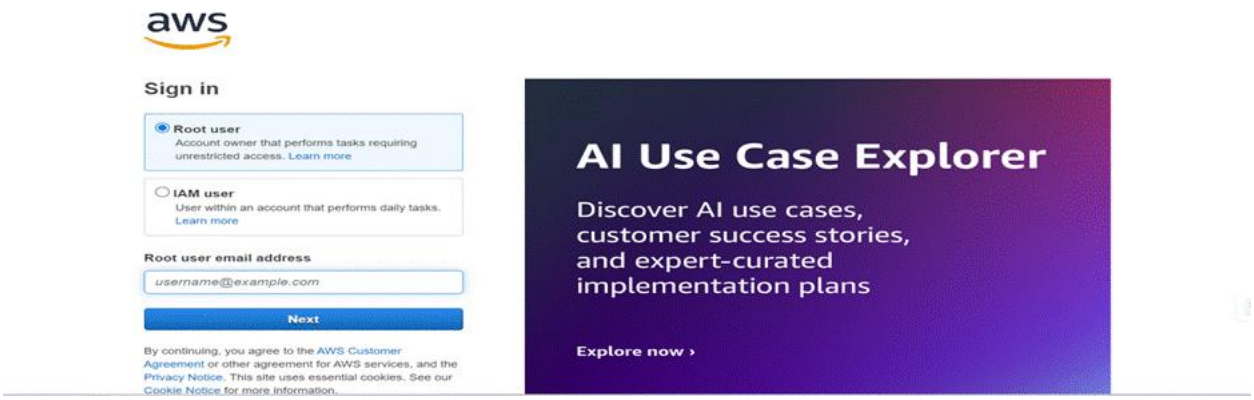
This is for your understanding only. Please refrain from creating an AWS account. A temporary account will be provided via Troven.

- Go to the AWS website (https://aws.amazon.com/).
- Click on the "Create an AWS Account" button.
- Follow the prompts to enter your email address and choose a password.
- Provide the required account information, including your name, address, and phone number.
- Enter your payment information. (Note: While AWS offers a free tier, a credit card or debit card is required for verification.
- Complete the identity verification process.
- Choose a support plan (the basic plan is free and sufficient for starting).
- Once verified, you can sign in to your new AWS account.





- Log in to the AWS Management Console
- After setting up your account, log in to the AWS Management Console.

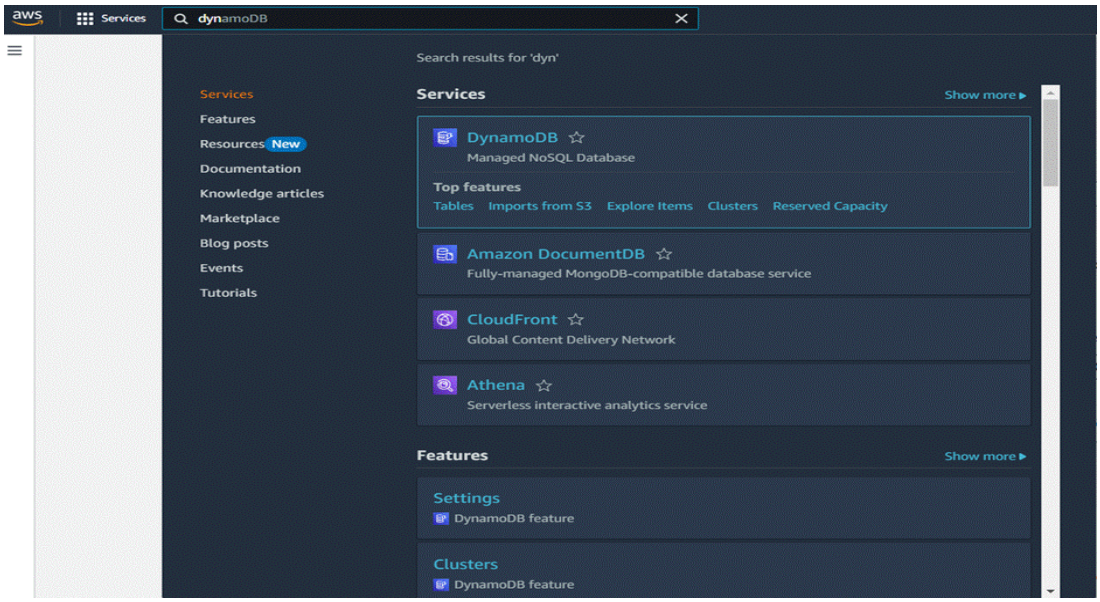


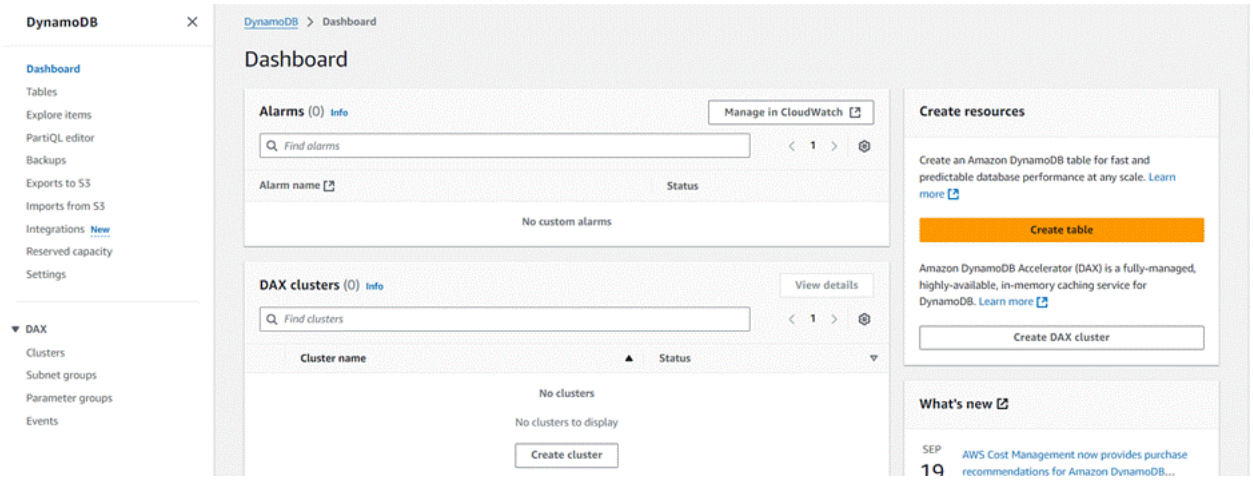
Milestone 3: DynamoDB Database Creation and Setup

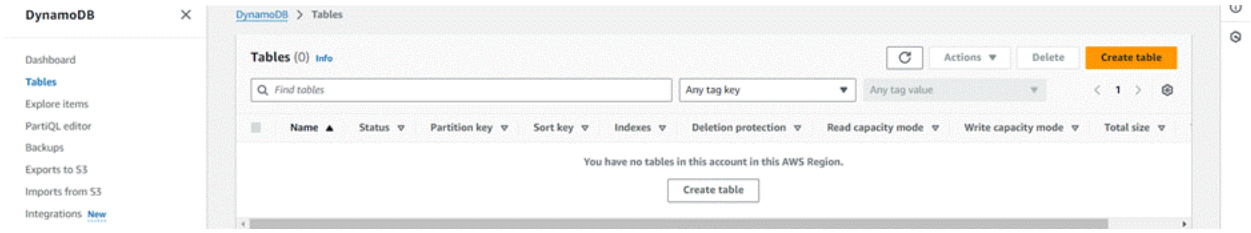
Database Creation and Setup involves initializing a cloud-based NoSQL database to store and manage application data efficiently. This step includes defining tables, setting primary keys, and configuring read/write capacities. It ensures scalable, high-performance data storage for seamless backend operations.

Navigate to the DynamoDB

- In the AWS Console, navigate to DynamoDB and click Create Tables.

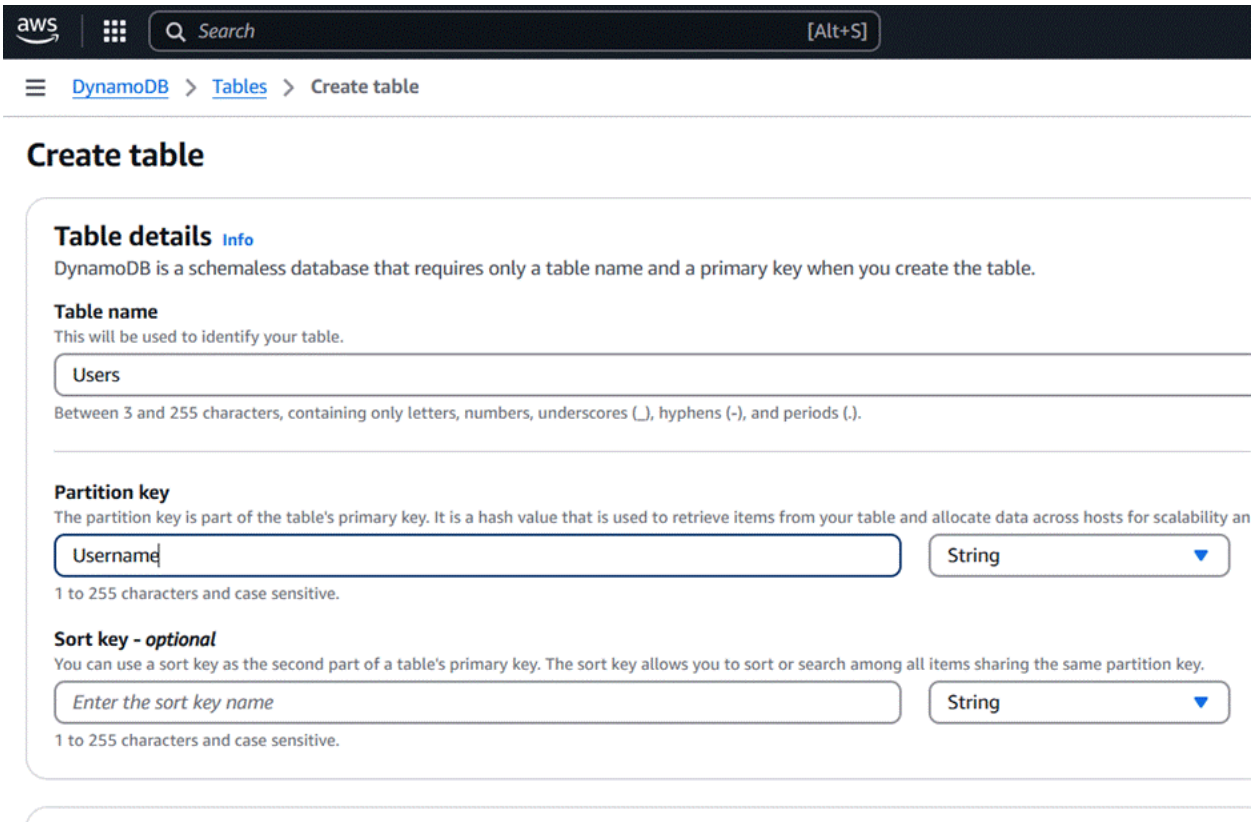


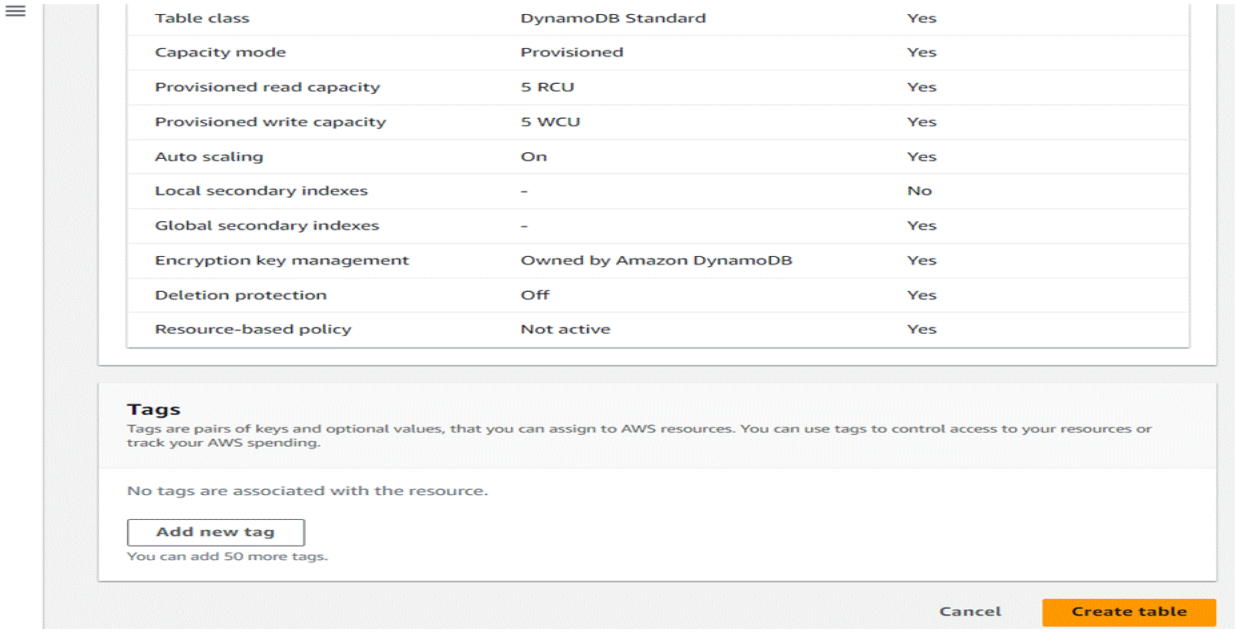


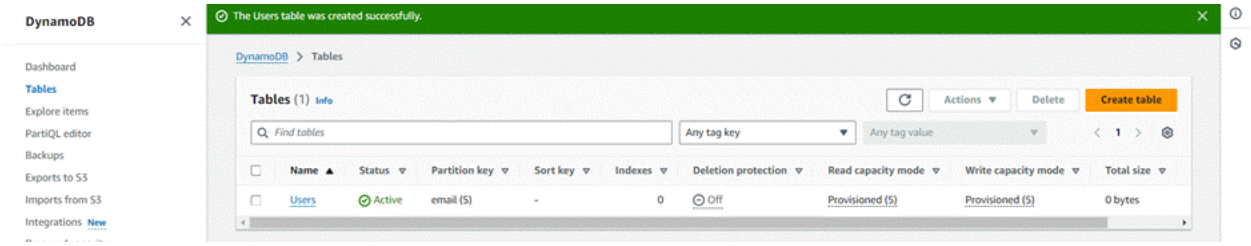


Create a DynamoDB table for storing data

- Create Users table with partition key “Username” with type String and click on create tables.







- Follow the same steps to create an Orders table with Order_id as the primary key to store Order details.

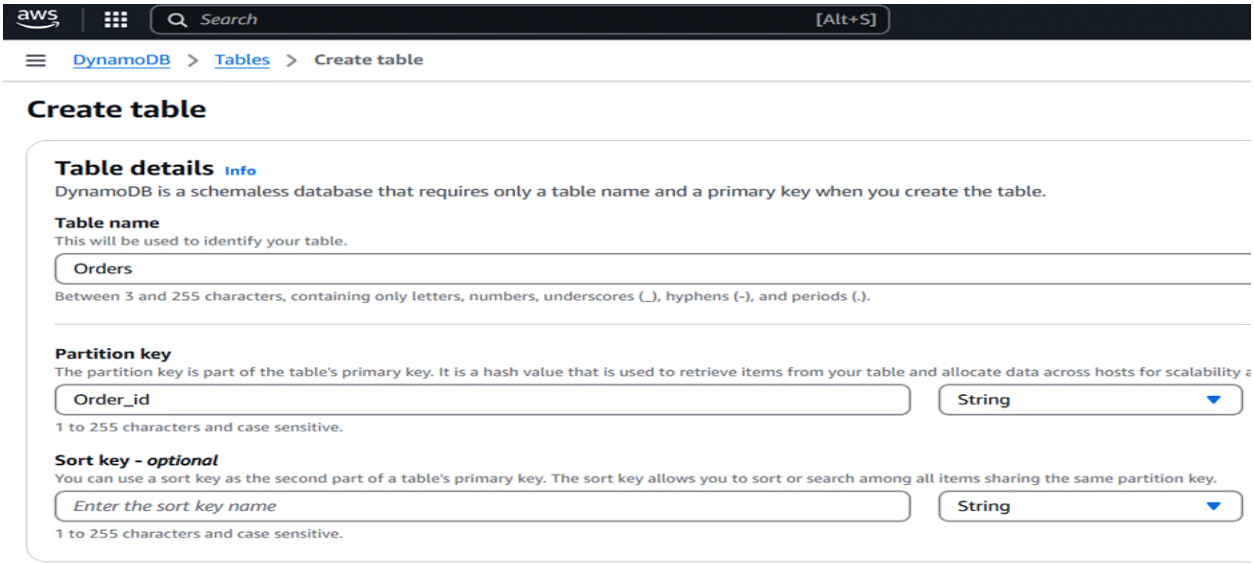


Table class	DynamoDB Standard	Yes
Capacity mode	Provisioned	Yes
Provisioned read capacity	5 RCU	Yes
Provisioned write capacity	5 WCU	Yes
Auto scaling	On	Yes
Local secondary indexes	-	No
Global secondary indexes	-	Yes
Encryption key management	Owned by Amazon DynamoDB	Yes
Deletion protection	Off	Yes
Resource-based policy	Not active	Yes

Tags

Tags are pairs of keys and optional values, that you can assign to AWS resources. You can use tags to control access to your resources or track your AWS spending.

No tags are associated with the resource.

Add new tag

You can add 50 more tags.

Cancel Create table

Tables (2) Info

Actio

Find tables | Any tag key | Any tag value

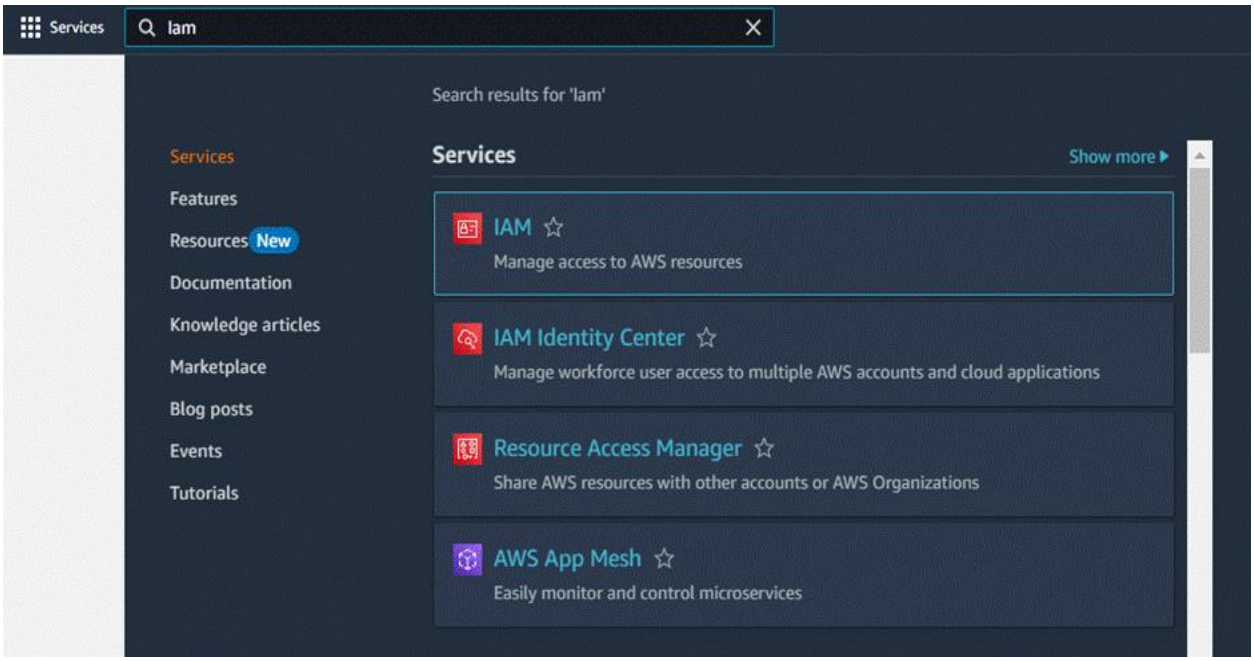
Name	Status	Partition key	Sort key	Indexes	Replication Regions	Deletion protecti
Orders	Active	order_id (S)	-	0	0	Off
Users	Active	username (S)	-	0	0	Off

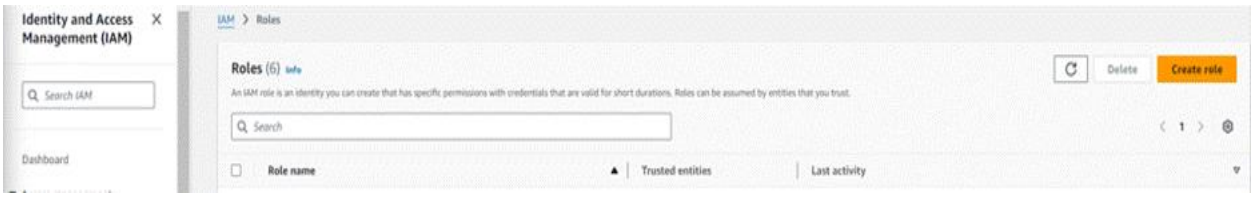
Milestone 4: IAM Role Setup

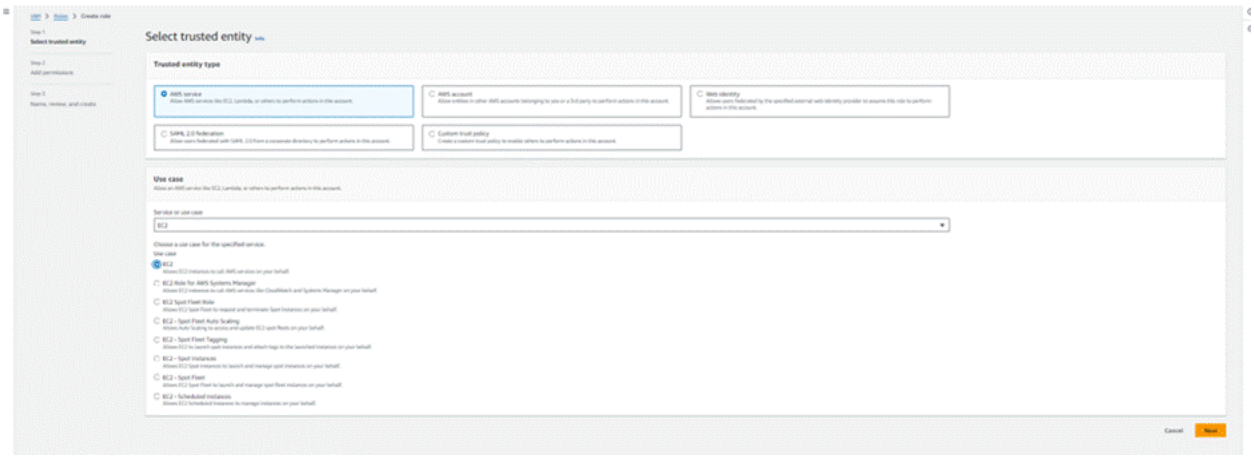
The IAM (Identity and Access Management) role setup involves creating roles that define specific permissions for AWS services. To set it up, you create a role with the required policies, assign it to users or services, and ensure the role has appropriate access to resources like EC2, S3, or RDS. This allows controlled access and ensures security best practices in managing AWS resources.

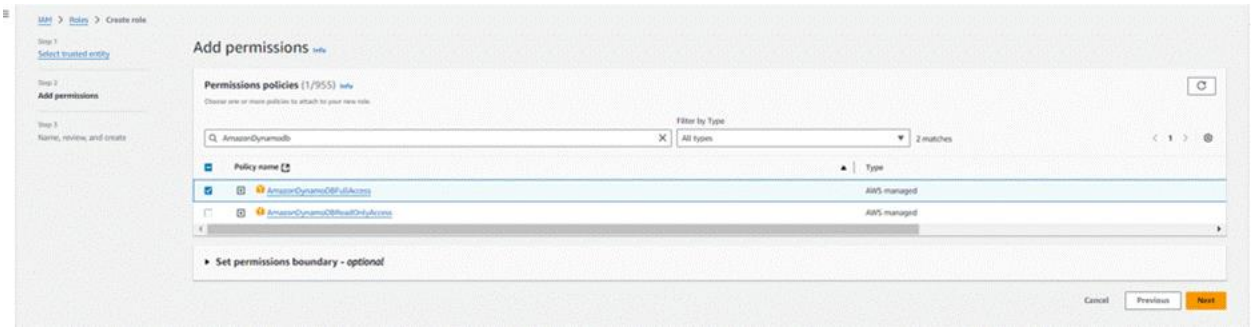
Create an IAM Role.

- In the AWS Console, go to IAM and create a new IAM Role for EC2 to interact with DynamoDB.





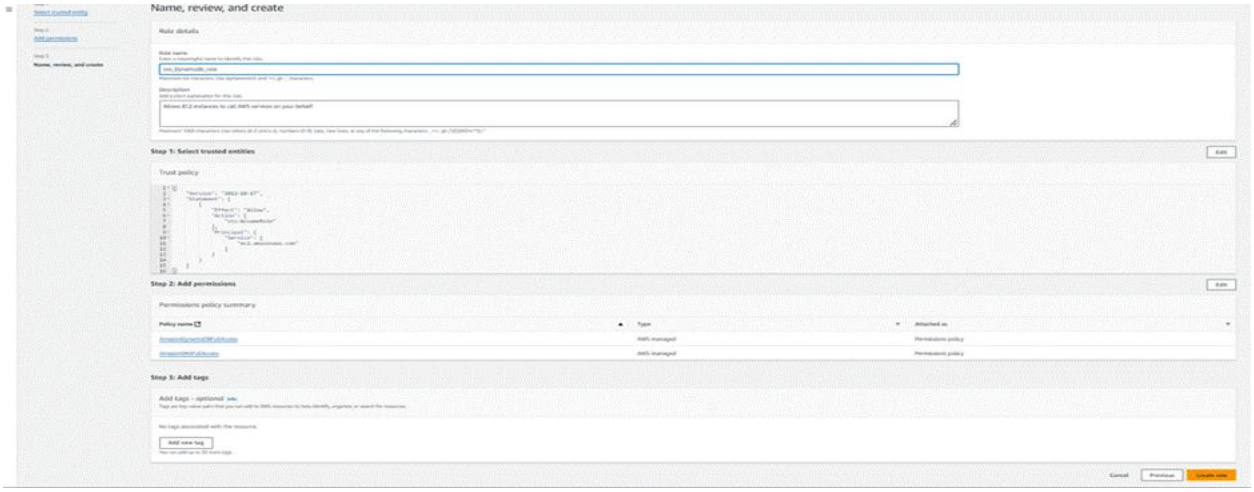


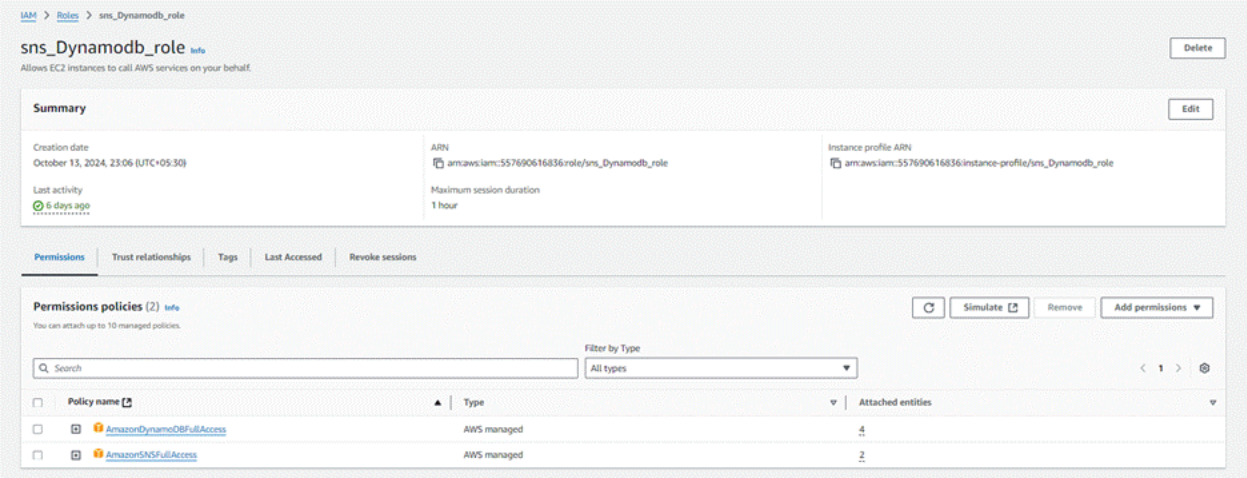


Attach Policies

Attach the following policies to the role:

- AmazonDynamoDBFullAccess: Allows EC2 to perform read/write operations on DynamoDB.

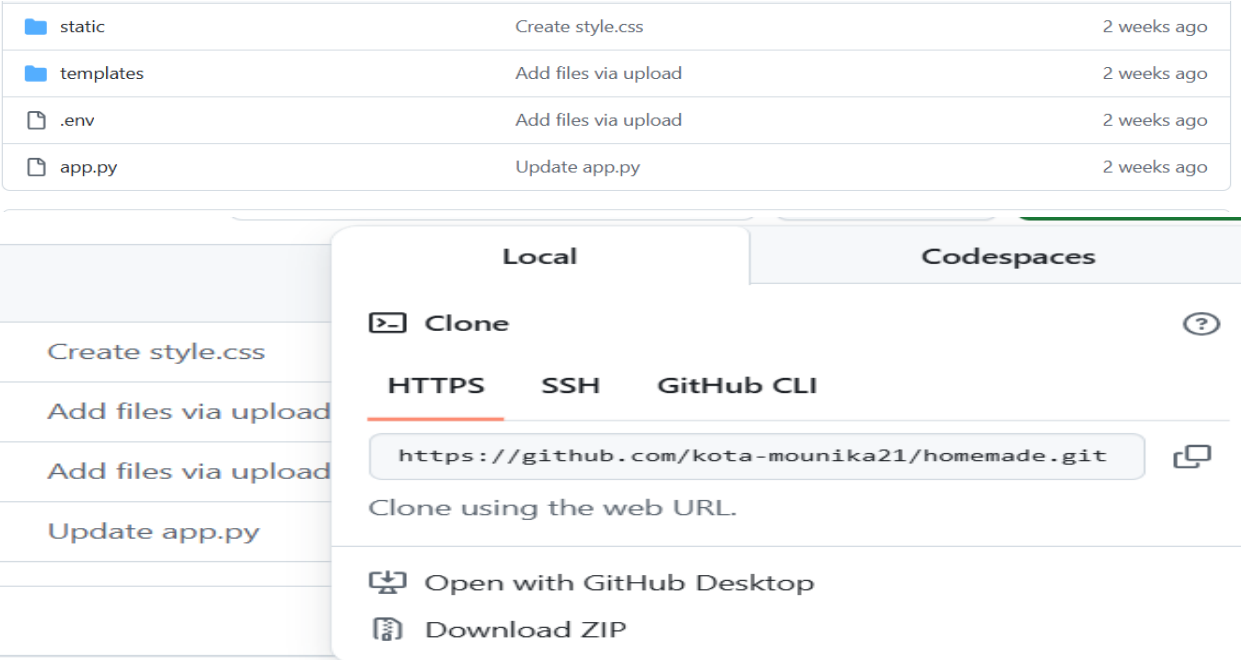




Milestone 5: EC2 Instance Setup

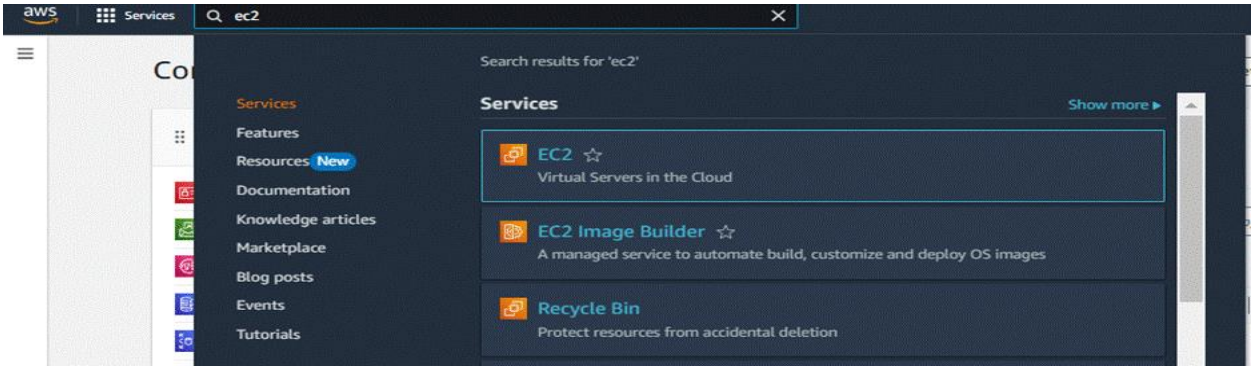
To set up a public EC2 instance, choose an appropriate Amazon Machine Image (AMI) and instance type. Ensure the security group allows inbound traffic on necessary ports (e.g., HTTP/HTTPS for web applications). After launching the instance, associate it with an Elastic IP for consistent public access, and configure your application or services to be publicly accessible.

- Note: Load your Flask app and Html files into GitHub repository.

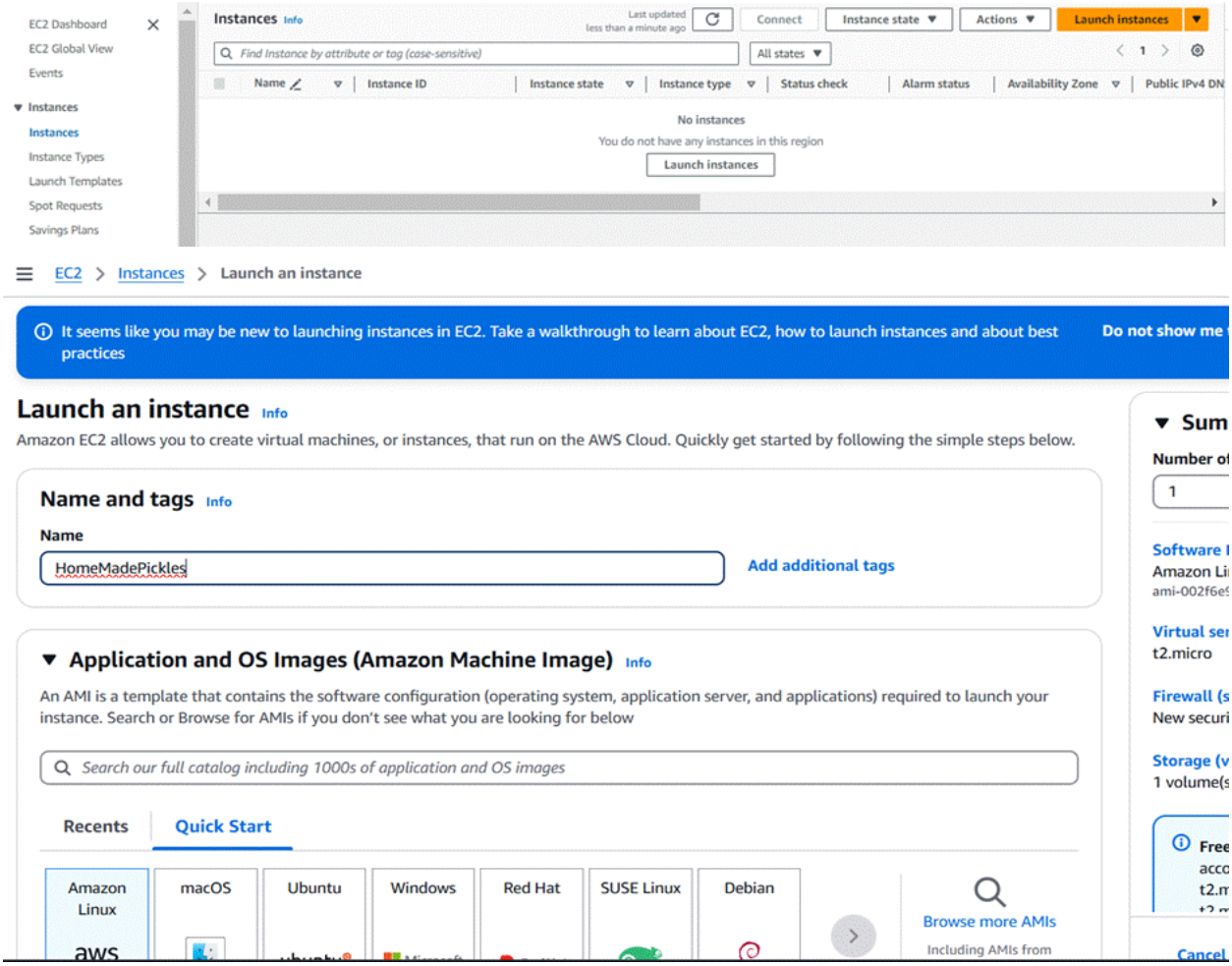


Launch an EC2 instance to host the Flask

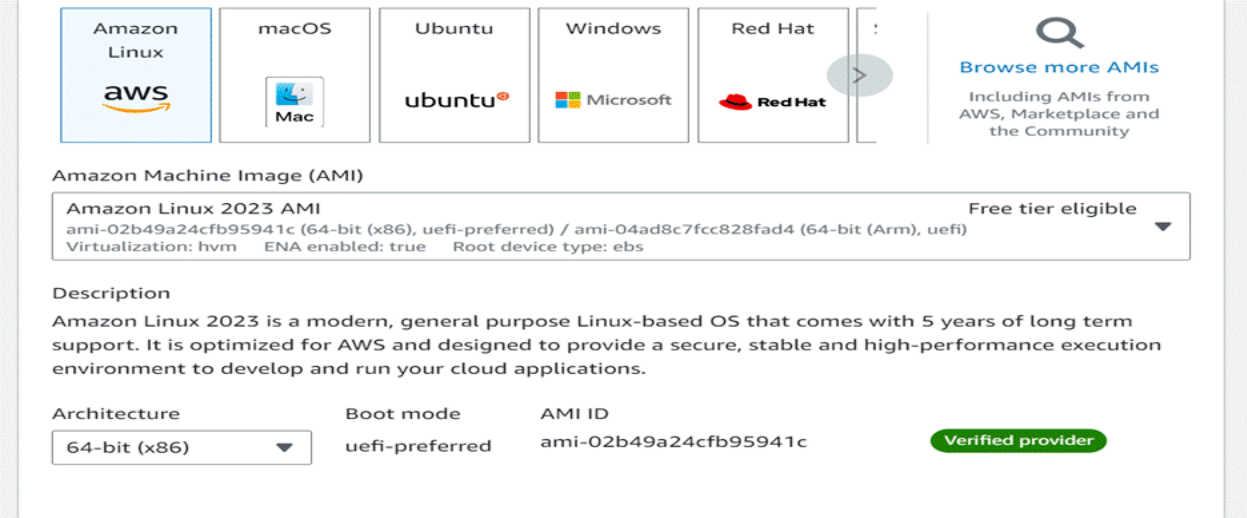
- Launch EC2 Instance
- In the AWS Console, navigate to EC2 and launch a new instance.



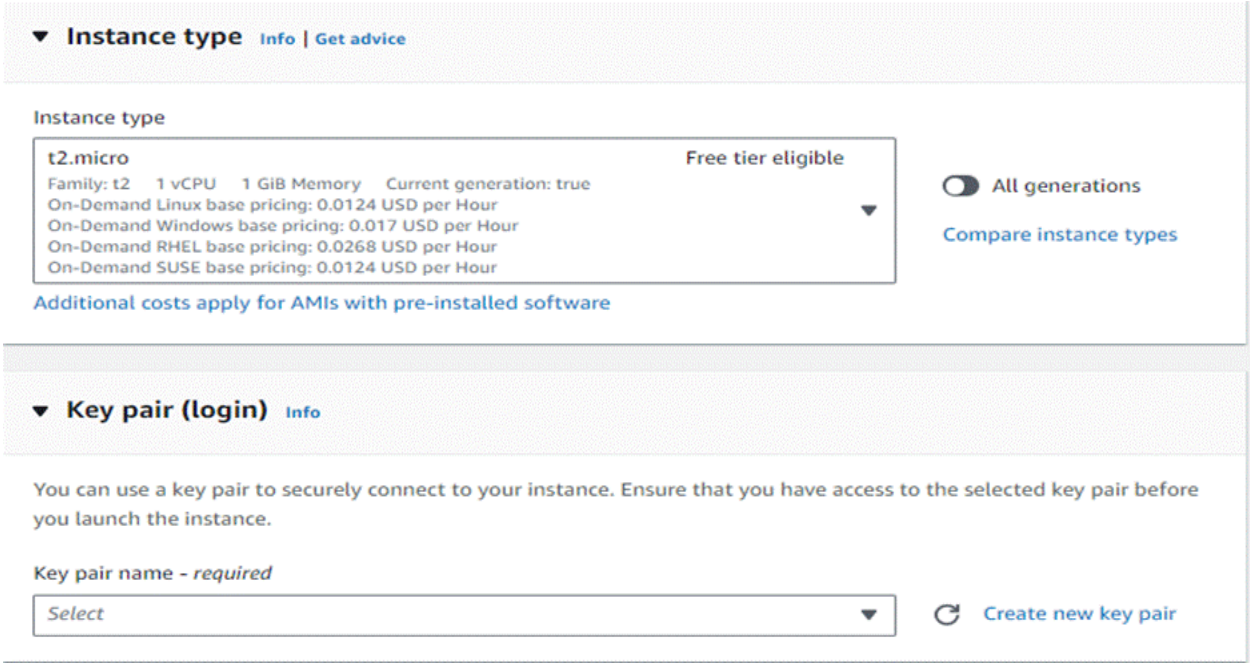
- Click on Launch instance to launch EC2 instance

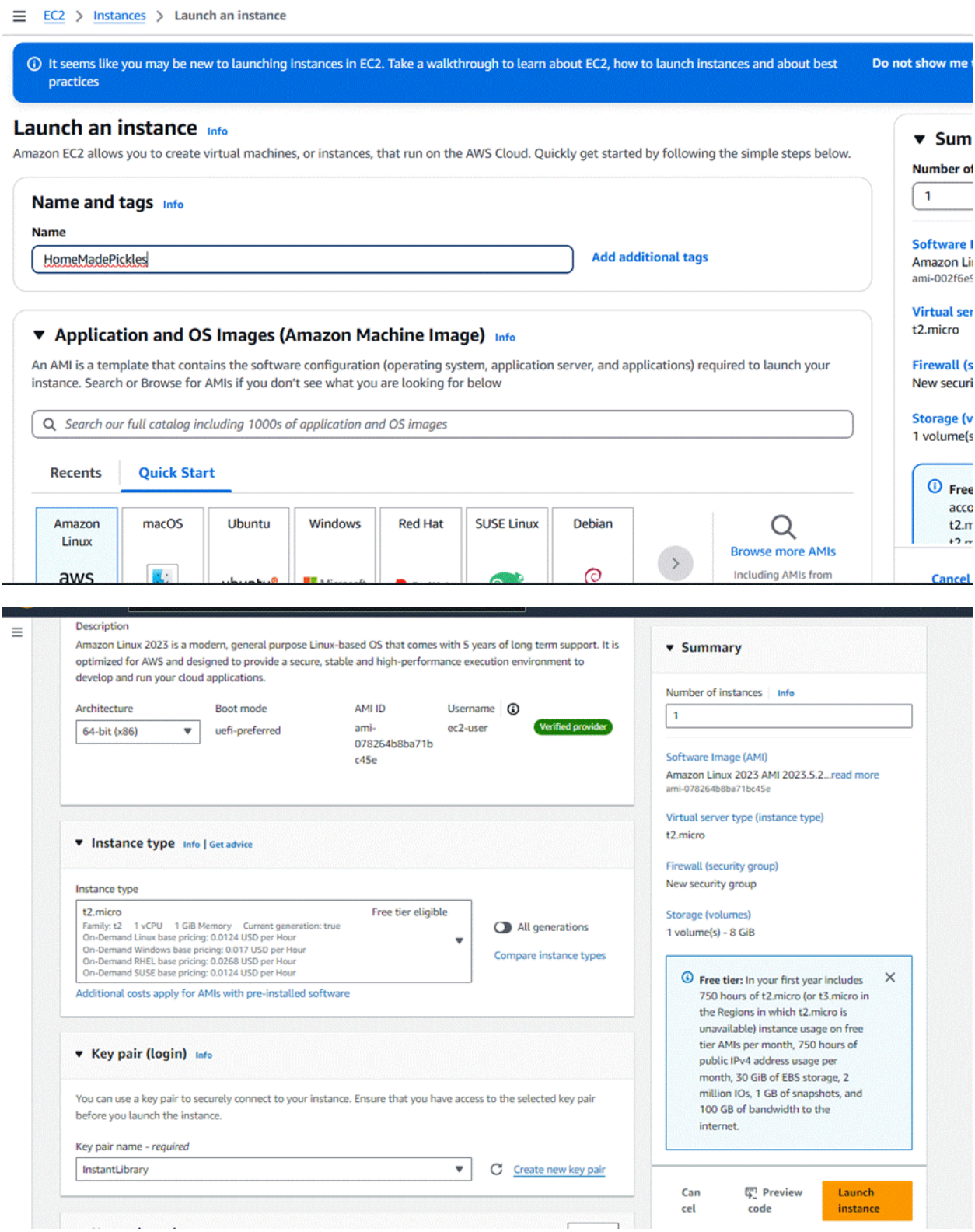


? Choose Amazon Linux 2 or Ubuntu as the AMI and t2. micro as the instance type (free-tier eligible).

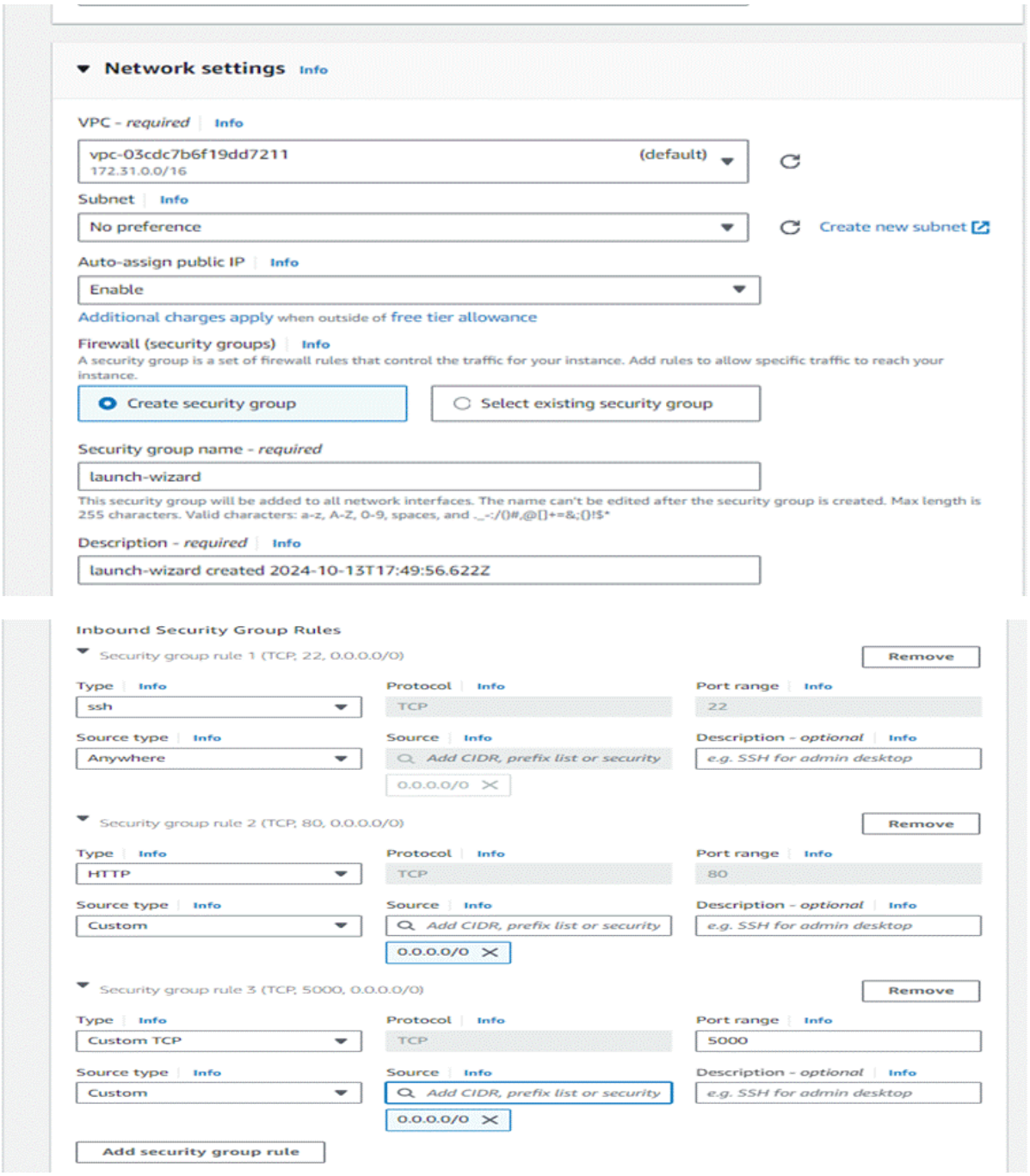


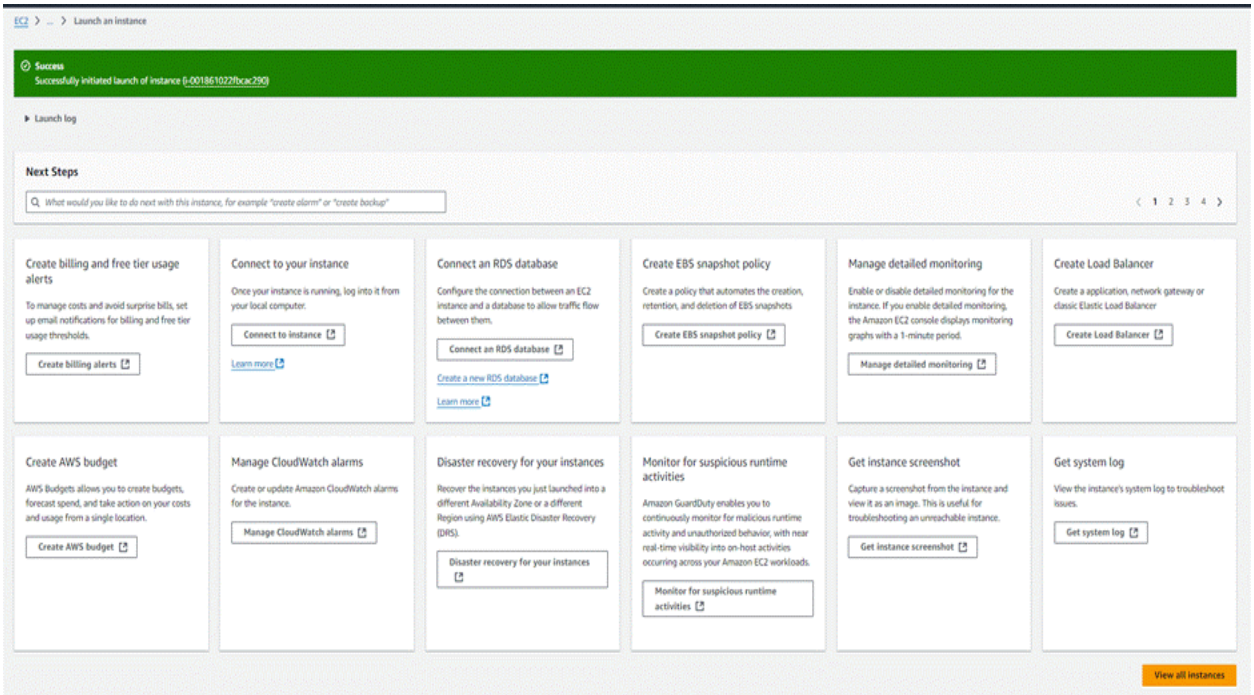
- Create and download the key pair for Server access.



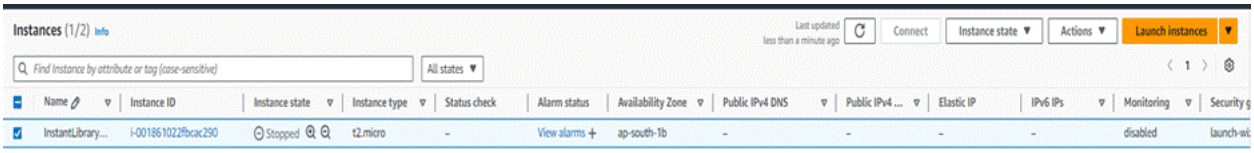

EC2 > Instances > Launch an instance
It seems like you may be new to launching instances in EC2. Take a walkthrough to learn about EC2, how to launch instances and about best practices
Do not show me
Launch an instance Info
Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.
Name and tags Info
Name
HomeMadePickles
Add additional tags
Application and OS Images (Amazon Machine Image) Info
An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below
Search our full catalog including 1000s of application and OS images
Recents
Quick Start
Amazon Linux
macOS
Ubuntu
Windows
Red Hat
SUSE Linux
Debian
Browse more AMIs
Including AMIs from
Sum
Number of
1
Software I
Amazon Li
ami-002f6e
Virtual ser
t2.micro
Firewall (s
New securi
Storage (v
1 volume(s
Free
acco
t2.m
Cancel
Description
Amazon Linux 2023 is a modern, general purpose Linux-based OS that comes with 5 years of long term support. It is optimized for AWS and designed to provide a secure, stable and high-performance execution environment to develop and run your cloud applications.
Architecture
64-bit (x86)
Boot mode
uefi-preferred
AMI ID
ami-078264b8ba71bc45e
Username
ec2-user
Verified provider
Instance type Info | Get advice
Instance type
t2.micro
Free tier eligible
Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Linux base pricing: 0.0124 USD per Hour
On-Demand Windows base pricing: 0.017 USD per Hour
On-Demand RHEL base pricing: 0.0268 USD per Hour
On-Demand SUSE base pricing: 0.0124 USD per Hour
All generations
Compare instance types
Additional costs apply for AMIs with pre-installed software
Key pair (login) Info
You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.
Key pair name - required
InstantLibrary
Create new key pair
Summary
Number of instances Info
1
Software Image (AMI)
Amazon Linux 2023 AMI 2023.5.2...read more
ami-078264b8ba71bc45e
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.
Can cel
Preview code
Launch instance

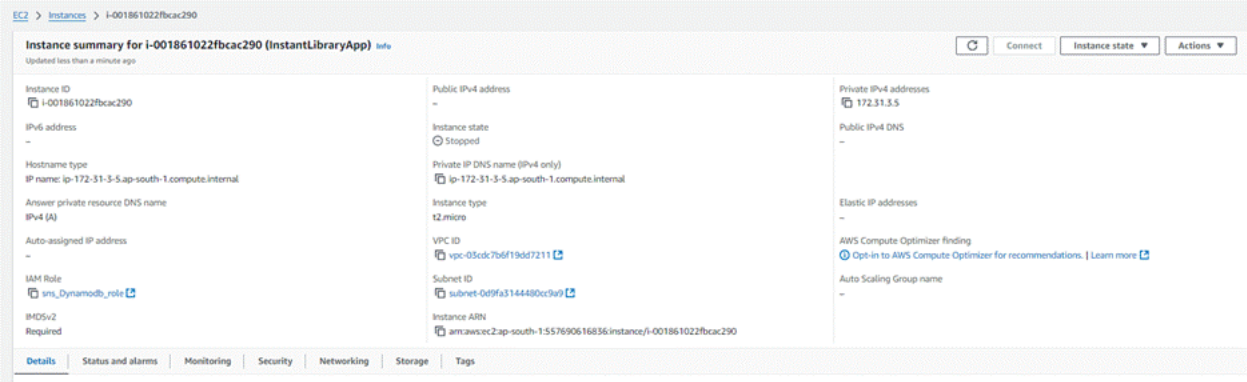
Configure security groups for HTTP and SSH access.

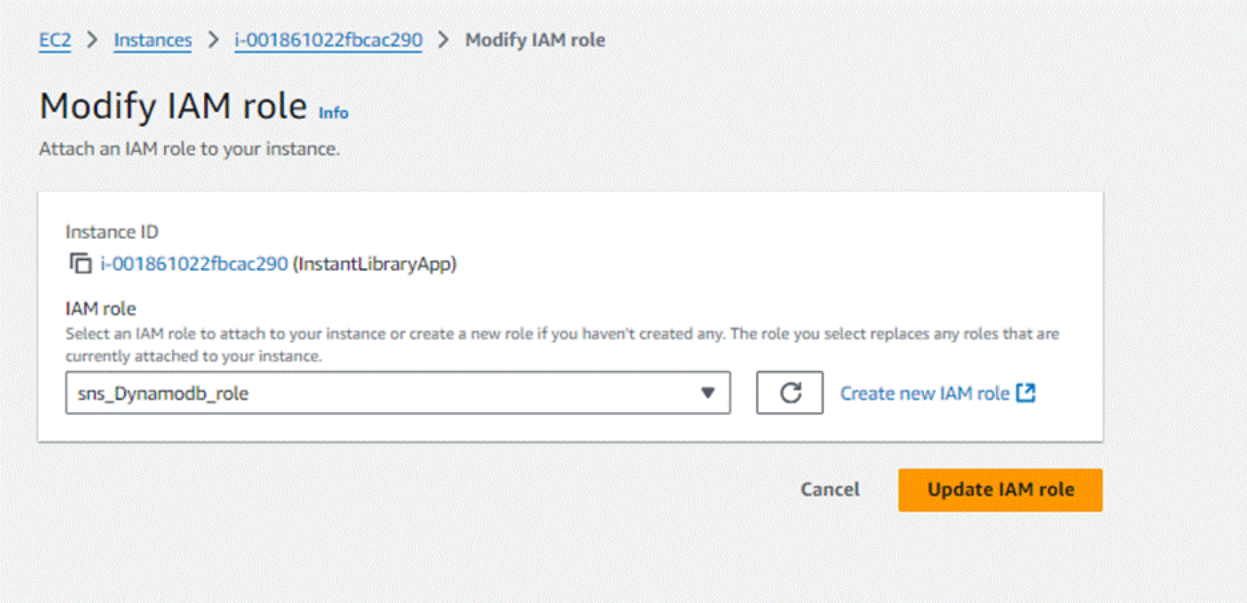




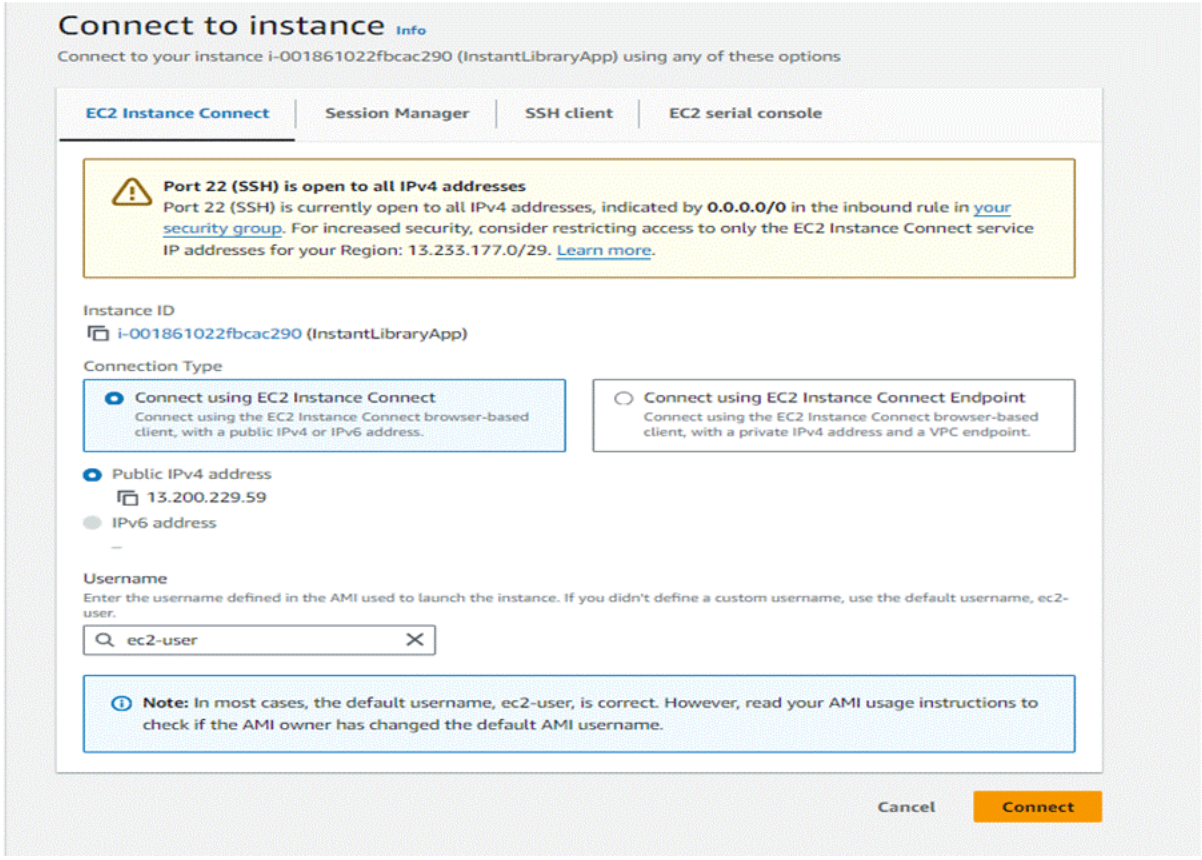
- To connect to EC2 using EC2 Instance Connect, start by ensuring that an IAM role is attached to your EC2 instance. You can do this by selecting your instance, clicking on Actions, then navigating to Security and selecting Modify IAM Role to attach the appropriate role. After the IAM role is connected, navigate to the EC2 section in the AWS Management Console. Select the EC2 instance you wish to connect to. At the top of the EC2 Dashboard, click the Connect button. From the connection methods presented, choose EC2 Instance Connect. Finally, click Connect again, and a new browser-based terminal will open, allowing you to access your EC2 instance directly from your browser.

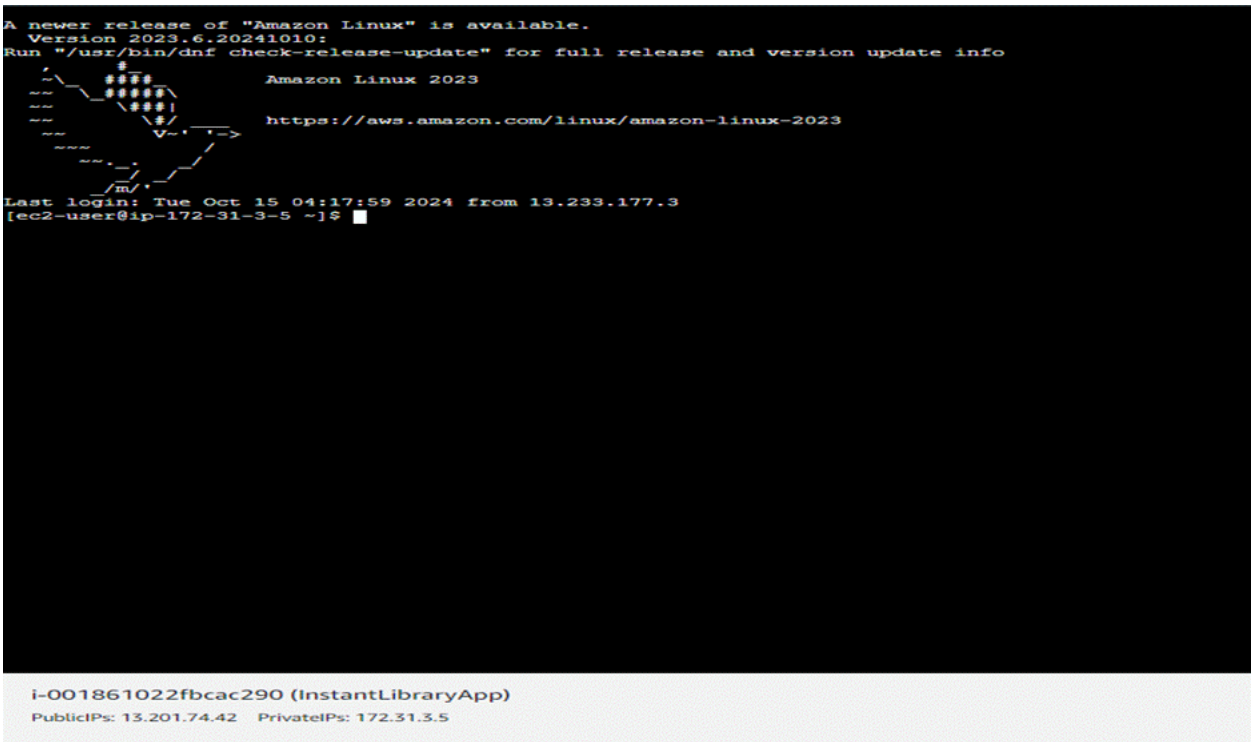






- Now connect the EC2 with the files


Connect to instance Info
Connect to your instance i-001861022fbcac290 (InstantLibraryApp) using any of these options
EC2 Instance Connect
Session Manager
SSH client
EC2 serial console
Port 22 (SSH) is open to all IPv4 addresses
Port 22 (SSH) is currently open to all IPv4 addresses, indicated by 0.0.0.0/0 in the inbound rule in your security group. For increased security, consider restricting access to only the EC2 Instance Connect service IP addresses for your Region: 13.233.177.0/29. Learn more.
Instance ID
i-001861022fbcac290 (InstantLibraryApp)
Connection Type
Connect using EC2 Instance Connect
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 or IPv6 address.
Connect using EC2 Instance Connect Endpoint
Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.
Public IPv4 address
13.200.229.59
IPv6 address
Username
Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ec2-user.
ec2-user
Note: In most cases, the default username, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.
Cancel
Connect


A newer release of "Amazon Linux" is available.
Version 2023.6.20241010:
Run "/usr/bin/dnf check-release-update" for full release and version update info
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
Last login: Tue Oct 15 04:17:59 2024 from 13.233.177.3
[ec2-user@ip-172-31-3-5 ~]$
i-001861022fbcac290 (InstantLibraryApp)
PublicIPs: 13.201.74.42 PrivateIPs: 172.31.3.5

Milestone 6: Deployment on EC2

Deployment on an EC2 instance involves launching a server, configuring security groups for public access, and uploading your application files. After setting up necessary dependencies and environment variables, start your application and ensure it's running on the correct port. Finally, bind your domain or use the public IP to make the application accessible online.

Install Software on the EC2 Instance

Install Python3, Flask, and Git:

On Amazon Linux 2:

- sudo yum update -y
- sudo yum install python3 git
- sudo pip3 install flask boto3

Verify Installations:

- flask --version
- git –version

Clone Your Flask Project from GitHub

Clones your project repository from GitHub into the EC2 instance using Git.

- Run: 'git clone:https://github.com/kilarukusuma-12/Homemadepicklesandsnacks.git'
- Note: change your-github-username and your-repository-name with your credentials

  here:'https://github.com/kilarukusuma-12/Homemadepicklesandsnacks.git'

- This will download your project to the EC2 instance.

To navigate to the project directory, run the following command:

- cd Homemadepicklesandsnacks
- cd "Home Made Pickles1"

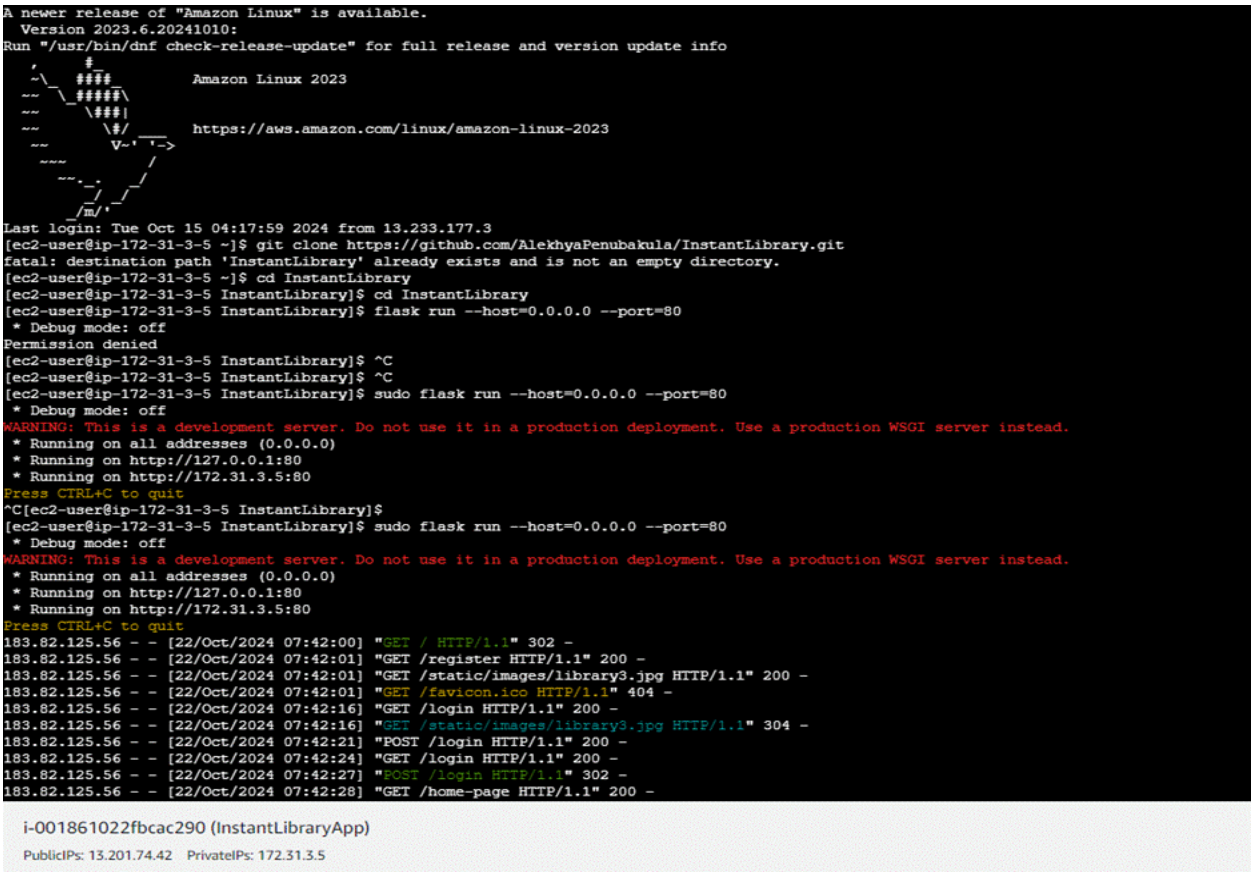
Create a Virtual Environment:

- python3 -m venv venv
- source venv/bin/activate

- sudo yum install python3 git
- sudo pip3 install flask boto3

Once inside the project directory, configure and run the Flask application by executing the following command with elevated privileges:

- Run the Flask Application
- sudo flask run --host=0.0.0.0 --port=5000



Verify the Flask app is running:

http://your-ec2-public-ip

- Run the Flask app on the EC2 instance

```
C:\Users\kmoun\OneDrive\Desktop\Home made pickles and snacks>python  app.py
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5000
 * Running on http://192.168.29.132:5000
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 895-566-049
127.0.0.1 - - [15/Jul/2025 21:39:41] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [15/Jul/2025 21:39:42] "GET /static/css/style.css HTTP/1.1" 200 -
127.0.0.1 - - [15/Jul/2025 21:39:42] "GET /static/images/chiken.png HTTP/1.1" 304 -
127.0.0.1 - - [15/Jul/2025 21:39:42] "GET /static/images/bg.png HTTP/1.1" 304 -
127.0.0.1 - - [15/Jul/2025 21:39:42] "GET /static/images/mango.jpg HTTP/1.1" 304 -
127.0.0.1 - - [15/Jul/2025 21:39:42] "GET /static/images/snackes.jpg HTTP/1.1" 304 -
127.0.0.1 - - [15/Jul/2025 21:39:42] "GET /favicon.ico HTTP/1.1" 404 -
127.0.0.1 - - [15/Jul/2025 21:39:43] "GET /non_veg_pickles HTTP/1.1" 200 -
127.0.0.1 - - [15/Jul/2025 21:39:43] "GET /static/css/style.css HTTP/1.1" 304 -
127.0.0.1 - - [15/Jul/2025 21:39:43] "GET /static/images/chiken.png HTTP/1.1" 304 -
127.0.0.1 - - [15/Jul/2025 21:39:43] "GET /static/images/fish.png HTTP/1.1" 304 -
127.0.0.1 - - [15/Jul/2025 21:39:44] "GET /static/images/prawns.jpg HTTP/1.1" 304 -
127.0.0.1 - - [15/Jul/2025 21:39:44] "GET /static/images/crab.jpg HTTP/1.1" 304 -
127.0.0.1 - - [15/Jul/2025 21:39:44] "GET /static/images/mutton.jpg HTTP/1.1" 304 -
```

Access the website through:

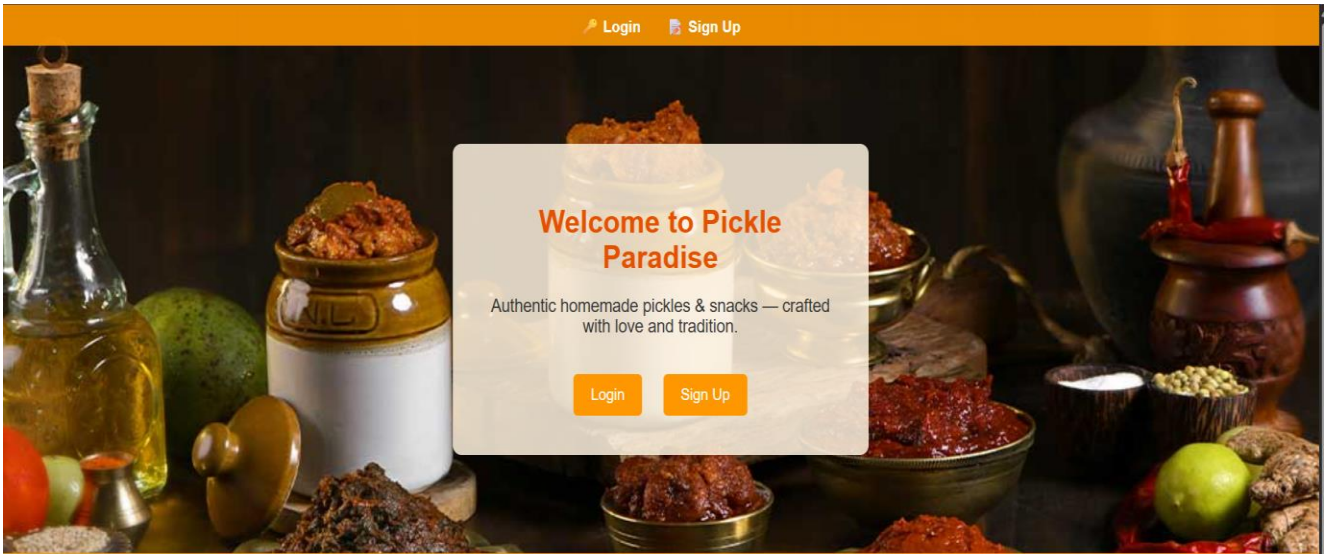
PublicIPs: http://3.95.250.6:5000

Milestone 7: Testing and Deployment

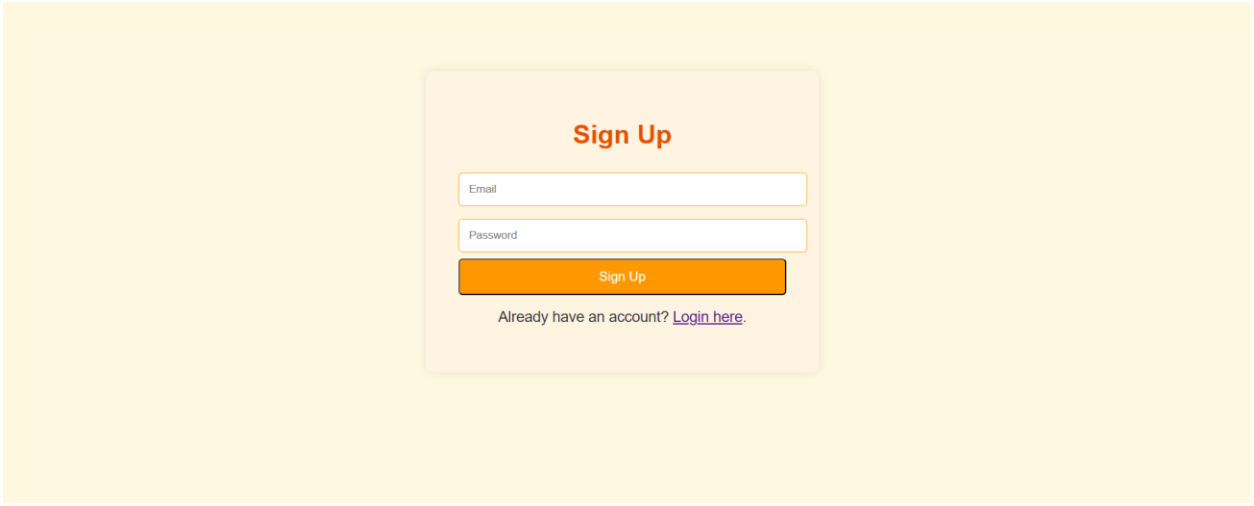
Testing and deployment involve verifying that your application works as expected before making it publicly accessible. Start by testing locally or in a staging environment to catch bugs and ensure functionality. Once tested, deploy the application to an EC2 instance, configure necessary services, and perform a final round of live testing to confirm everything runs smoothly in the production environment.

Functional testing to verify the Project

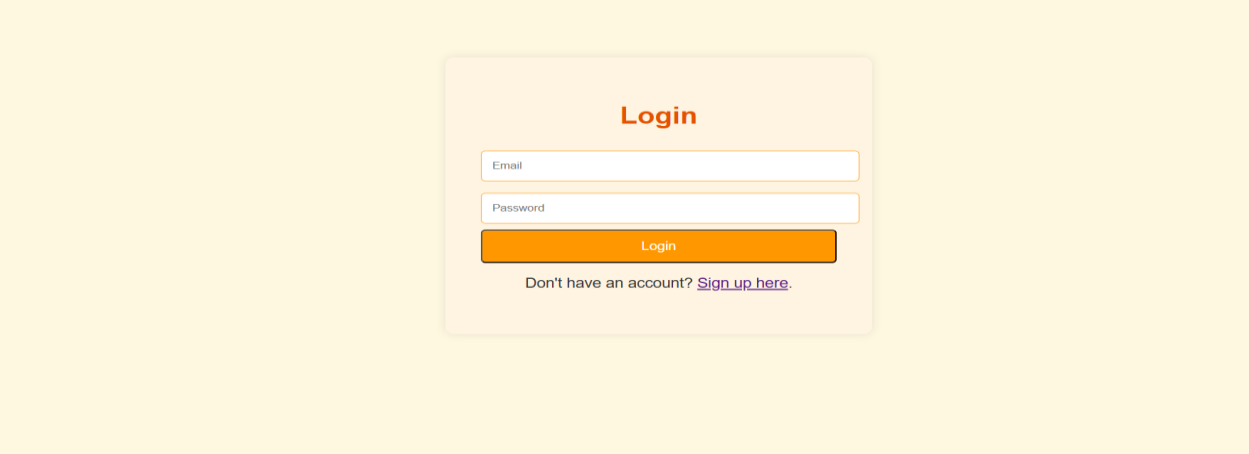
Welcome page:


Login
Sign Up
Welcome to Pickle Paradise
Authentic homemade pickles & snacks — crafted with love and tradition.
Login
Sign Up

Signup page

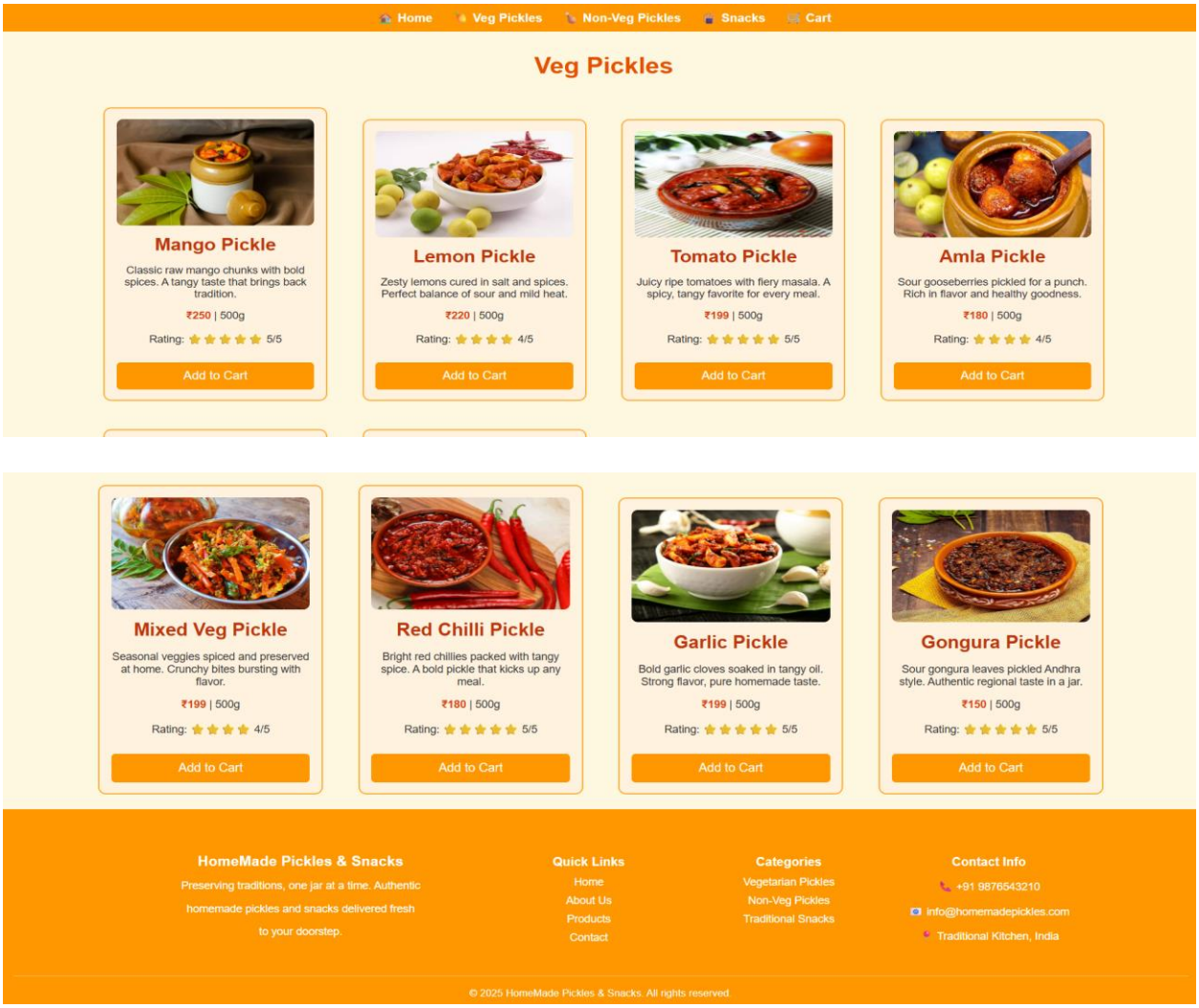

Sign Up
Email
Password
Sign Up
Already have an account? Login here.

Login Page:

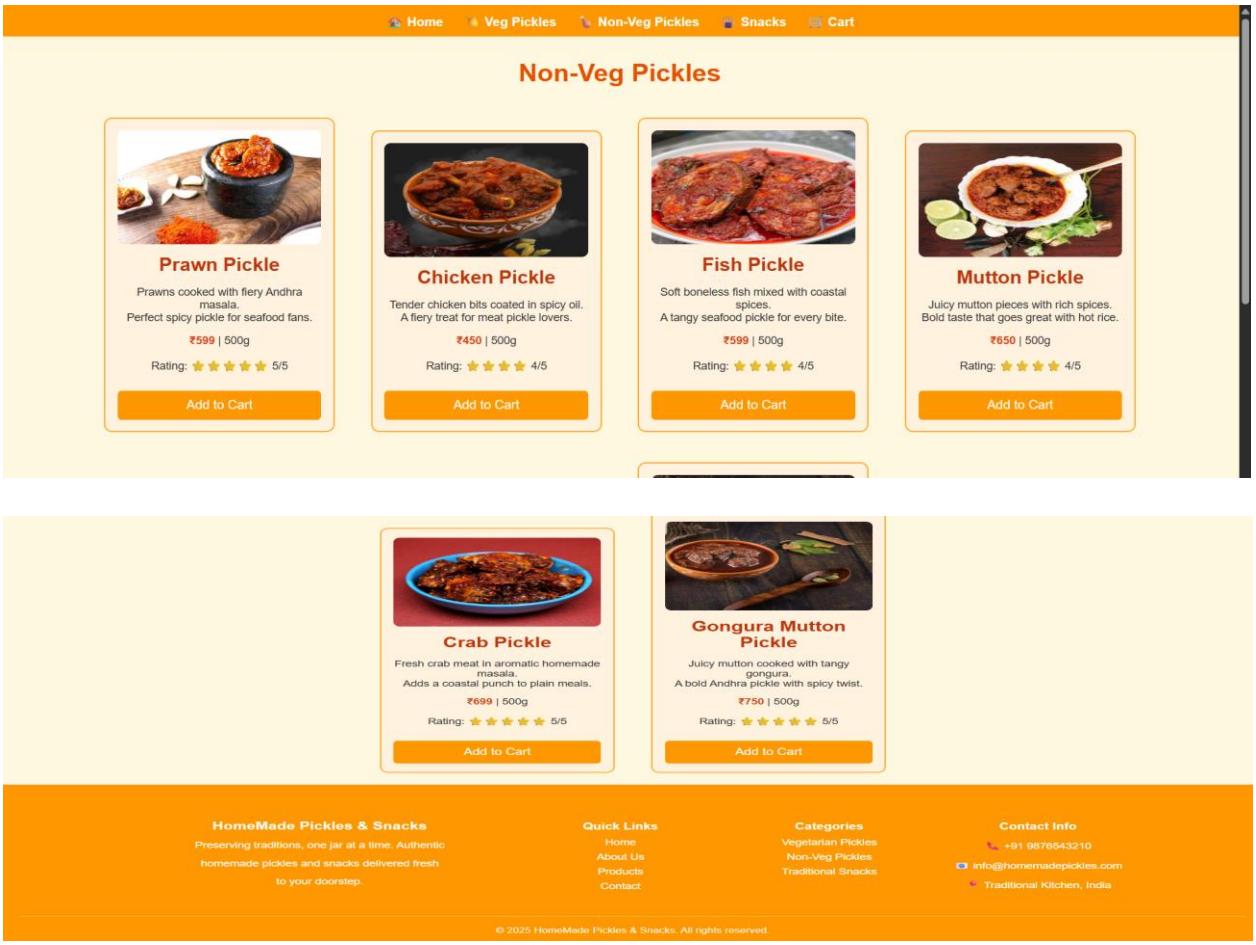


Home Page:

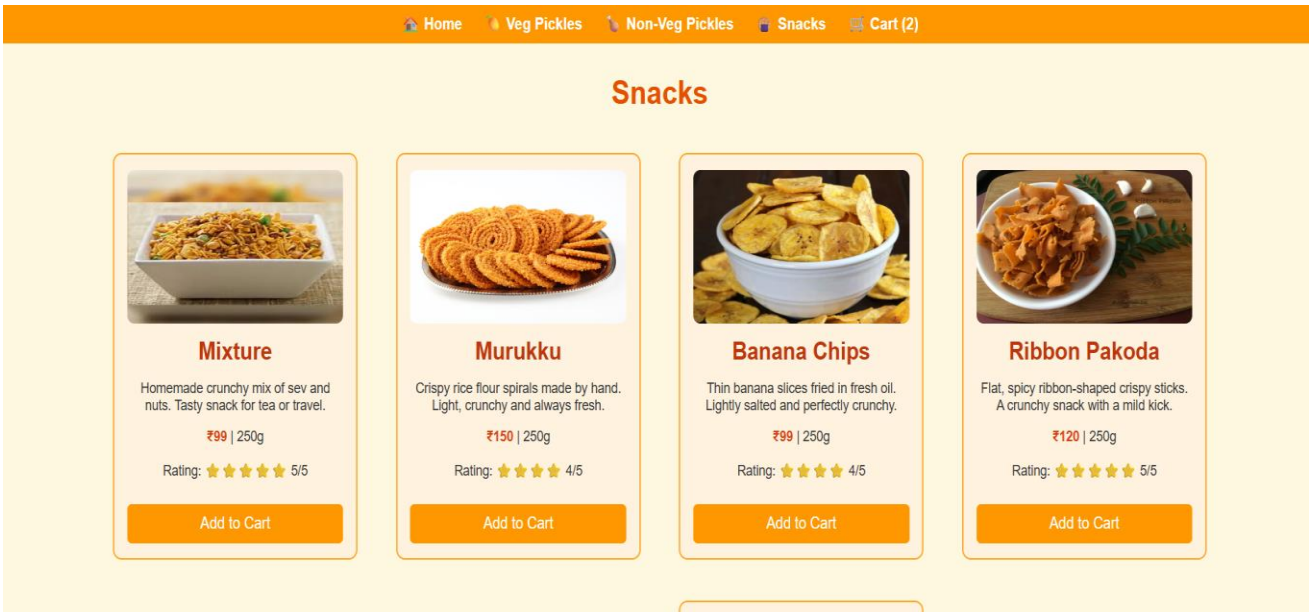
Veg_Pickles Page:

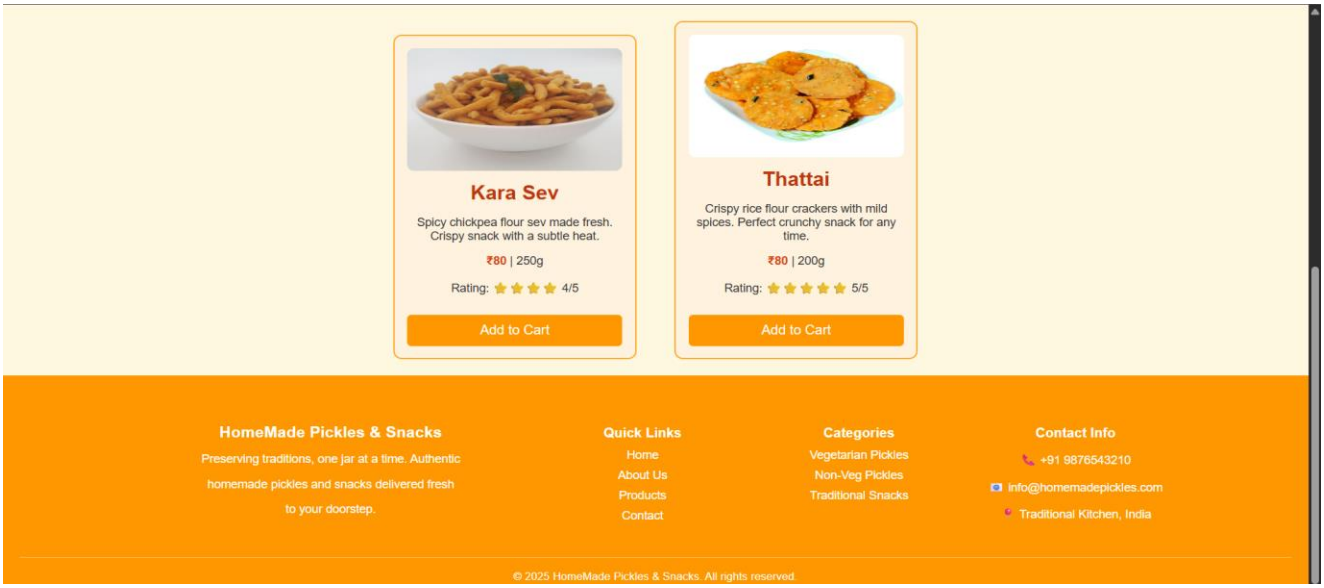


Non_veg Pickles Page:

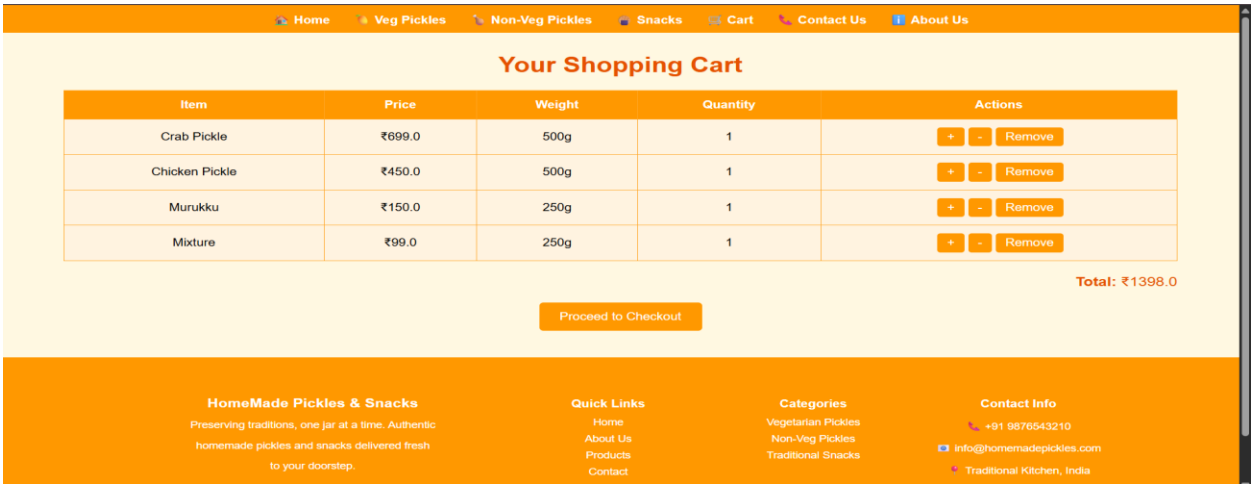


Snacks Page:

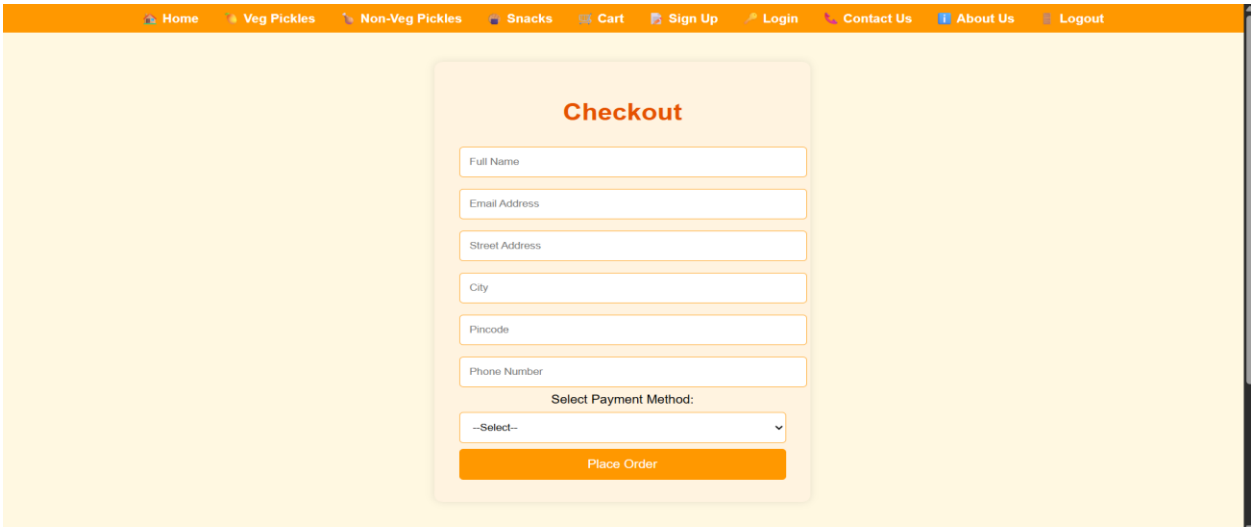

Home
Veg Pickles
Non-Veg Pickles
Snacks
Cart (2)
Snacks
Mixture
Homemade crunchy mix of sev and nuts. Tasty snack for tea or travel.
₹99 | 250g
Rating: 5/5
Add to Cart
Murukku
Crispy rice flour spirals made by hand. Light, crunchy and always fresh.
₹150 | 250g
Rating: 4/5
Add to Cart
Banana Chips
Thin banana slices fried in fresh oil. Lightly salted and perfectly crunchy.
₹99 | 250g
Rating: 4/5
Add to Cart
Ribbon Pakoda
Flat, spicy ribbon-shaped crispy sticks. A crunchy snack with a mild kick.
₹120 | 250g
Rating: 5/5
Add to Cart


Kara Sev
Spicy chickpea flour sev made fresh. Crispy snack with a subtle heat.
₹80 | 250g
Rating: 4/5
Add to Cart
Thattai
Crispy rice flour crackers with mild spices. Perfect crunchy snack for any time.
₹80 | 200g
Rating: 5/5
Add to Cart
HomeMade Pickles & Snacks
Preserving traditions, one jar at a time. Authentic homemade pickles and snacks delivered fresh to your doorstep.
Quick Links
Home
About Us
Products
Contact
Categories
Vegetarian Pickles
Non-Veg Pickles
Traditional Snacks
Contact Info
+91 9876543210
info@homemadepickles.com
Traditional Kitchen, India
© 2025 HomeMade Pickles & Snacks. All rights reserved.

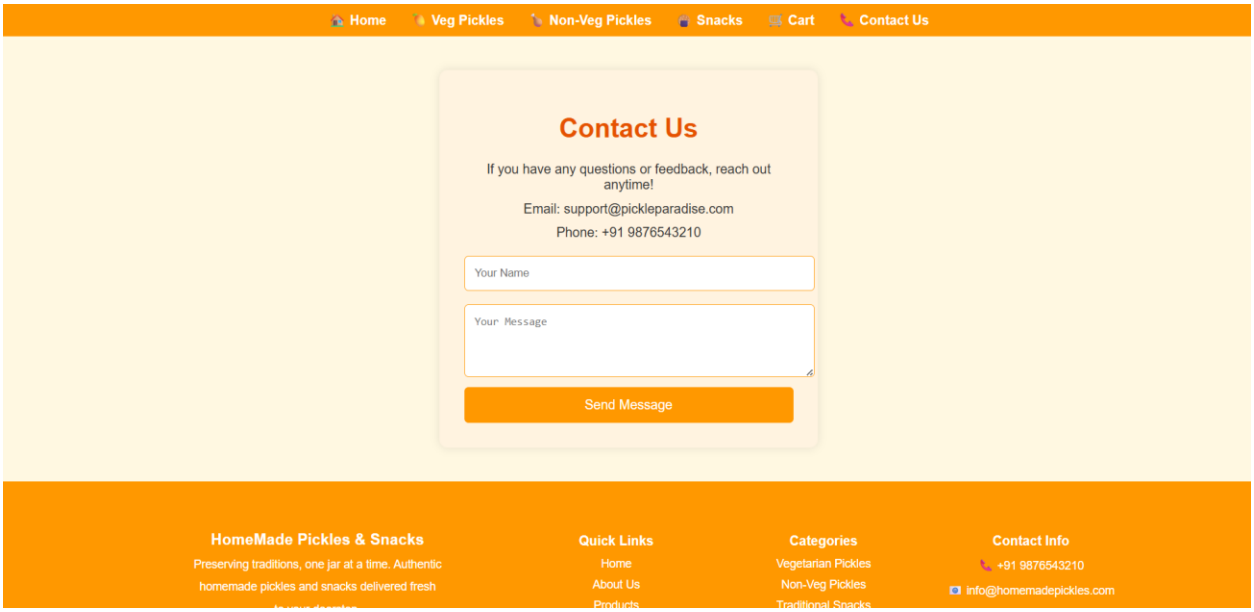
Cart Page:



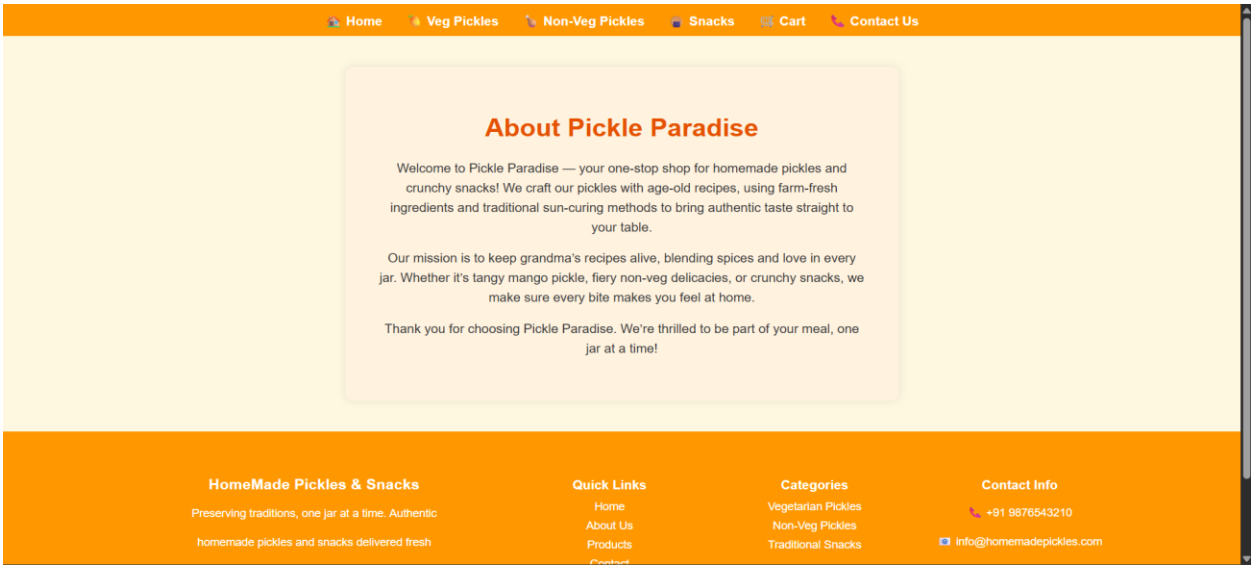
Checkout Page:



Contact Us Page:



About Us Page:



After Logout