

Step By Step Implementation Screen Shots

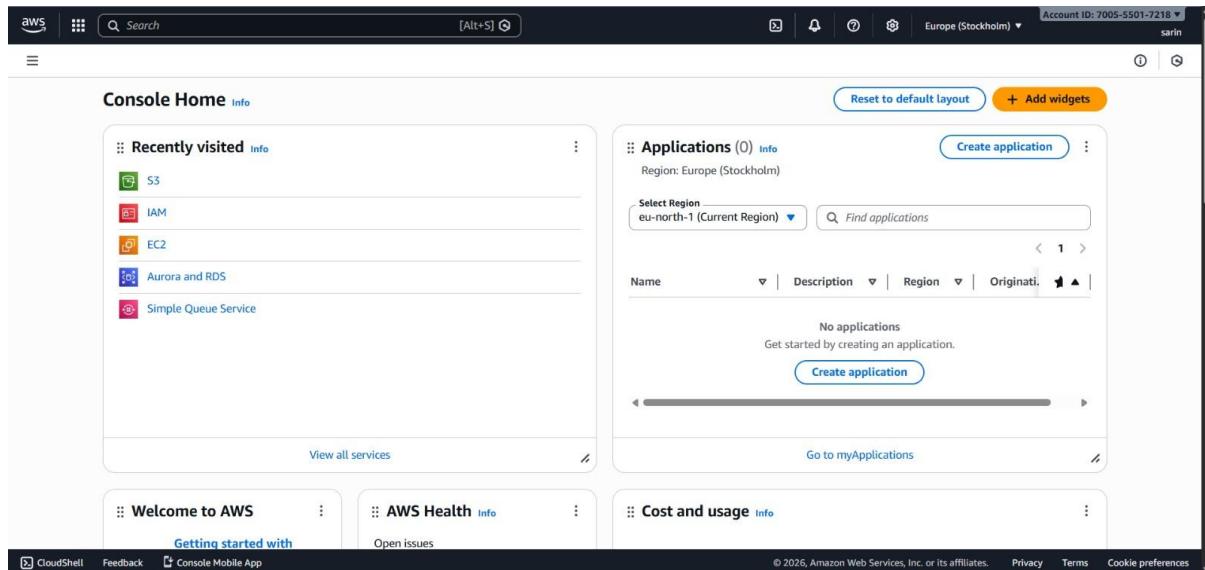


Figure 1: Account Setup

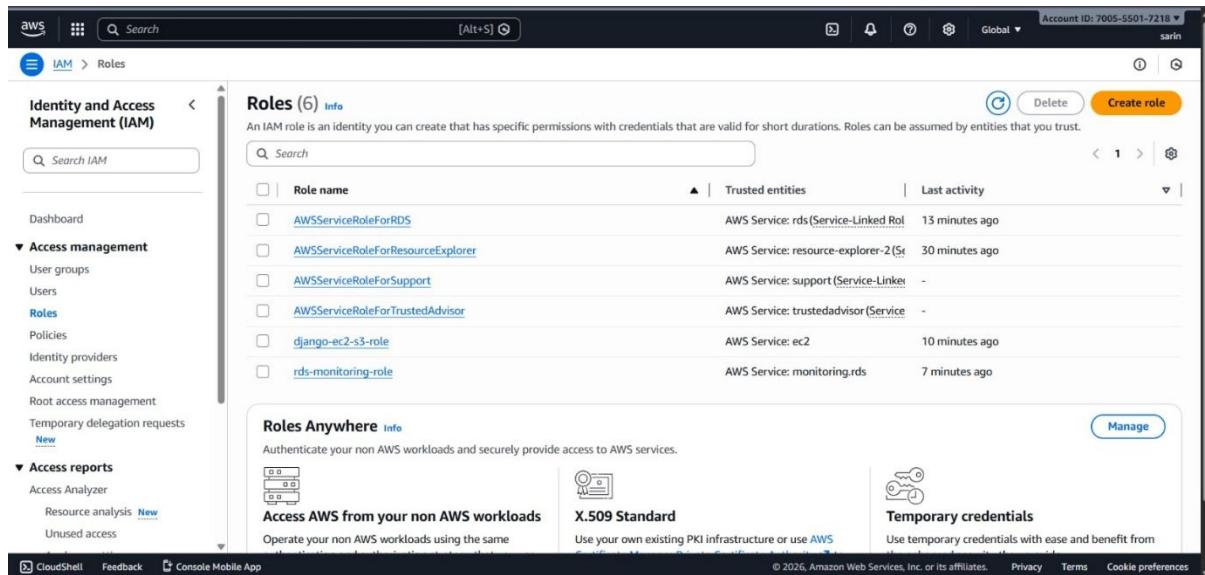


Figure 2: IAM Roles

The screenshot shows the AWS EC2 Security Groups page. The left sidebar includes links for Dashboard, AWS Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Capacity Manager, Images (AMIs, AMI Catalog), and Elastic Block Store (Volumes). The main content area displays a table titled "Security Groups (2) Info" with columns: Name, Security group ID, Security group name, VPC ID, and Description. Two entries are listed: "sg-027765d07bcd9dca2" (Name: launch-wizard-1, VPC ID: vpc-0e7d563152f49d803) and "sg-0b7989d3d922f5f5a" (Name: default, VPC ID: vpc-0e7d563152f49d803). A "Create security group" button is located at the top right. Below the table is a section titled "Select a security group".

Figure 3: Security Groups

The screenshot shows the AWS EC2 Instances page. The left sidebar includes links for Dashboard, AWS Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Capacity Manager, Images (AMIs, AMI Catalog), and Elastic Block Store (Volumes). The main content area displays a table titled "Instances (1) Info" with columns: Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone, Public IPv4 DNS, and Public IP. One entry is listed: "i-073b750b80ad9bddf" (Instance state: Running, Instance type: t3.micro, Status check: 3/3 checks passed, Alarm status: View alarms, Availability Zone: eu-north-1b, Public IPv4 DNS: ec2-13-60-13-96.eu-no..., Public IP: 13.60.1.). A "Launch instances" button is located at the top right. Below the table is a section titled "Select an instance".

Figure 4: EC2 Instances

The screenshot shows the AWS S3 console interface. On the left, there's a navigation sidebar with sections like 'Buckets', 'Access management and security', 'Storage management and insights', and 'Account and organization settings'. The main area is titled 'General purpose buckets' and shows one bucket named 'cafe-sarin-bucket'. This bucket is located in 'Europe (Stockholm) eu-north-1'. A 'Create bucket' button is visible at the top right of this section. To the right of the bucket list, there are two callout boxes: 'Account snapshot' (updated daily) which links to a 'View dashboard' and describes 'Storage Lens provides visibility into storage usage and activity trends'; and 'External access summary - new' (updated daily) which links to an 'Info' section describing 'External access findings help you identify bucket permissions that allow public access or access from other AWS accounts'.

Figure 5: S3 Buckets

The screenshot shows the AWS RDS console interface. On the left, there's a navigation sidebar with sections like 'Dashboard', 'Databases', 'Performance insights', 'Snapshots', 'Exports in Amazon S3', 'Automated backups', 'Reserved instances', 'Proxies', 'Subnet groups', 'Parameter groups', 'Option groups', 'Custom engine versions', 'Zero-ETL Integrations', 'Events', and 'Event subscriptions'. The main area is titled 'Databases (1)' and shows one database named 'cafe-users-db'. This database is in 'Available' status, is an 'Instance', uses 'PostgreSQL' as the engine, and is in 'SECOND' upgrade rollout order. It is located in 'eu-north-1c' and has a 'db.t4g.micro' instance type. A 'Create database' button is visible at the top right of this section. The bottom of the screen includes standard AWS navigation links like CloudShell, Feedback, and Console Mobile App.

Figure 6: RDS Database (Postgresql)

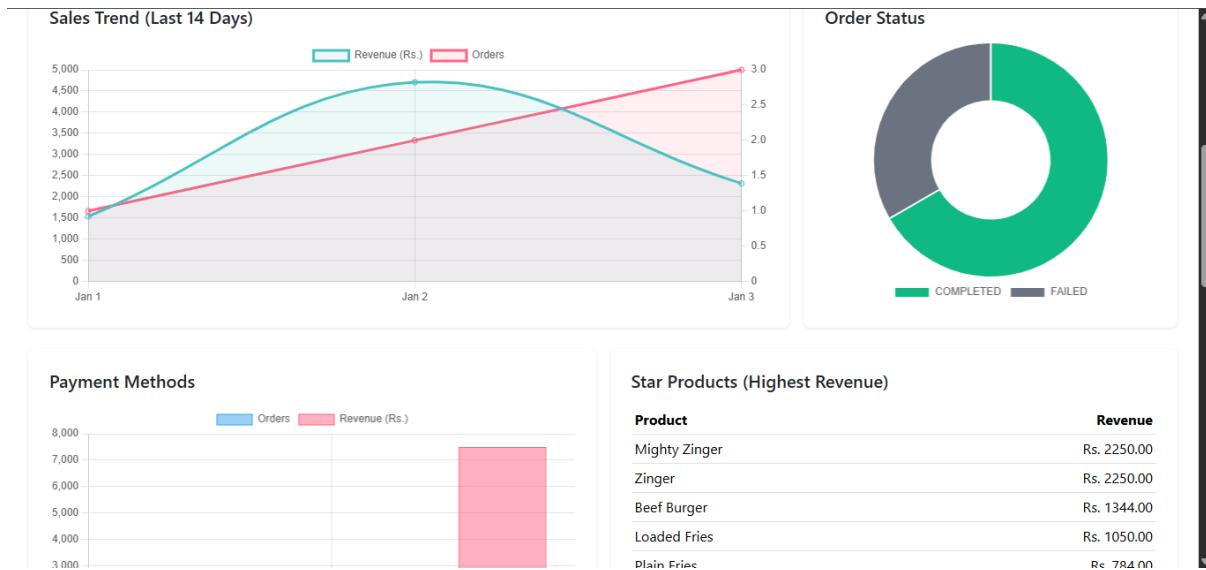


Figure 7: Monitoring and Analysis (AWS Glue)

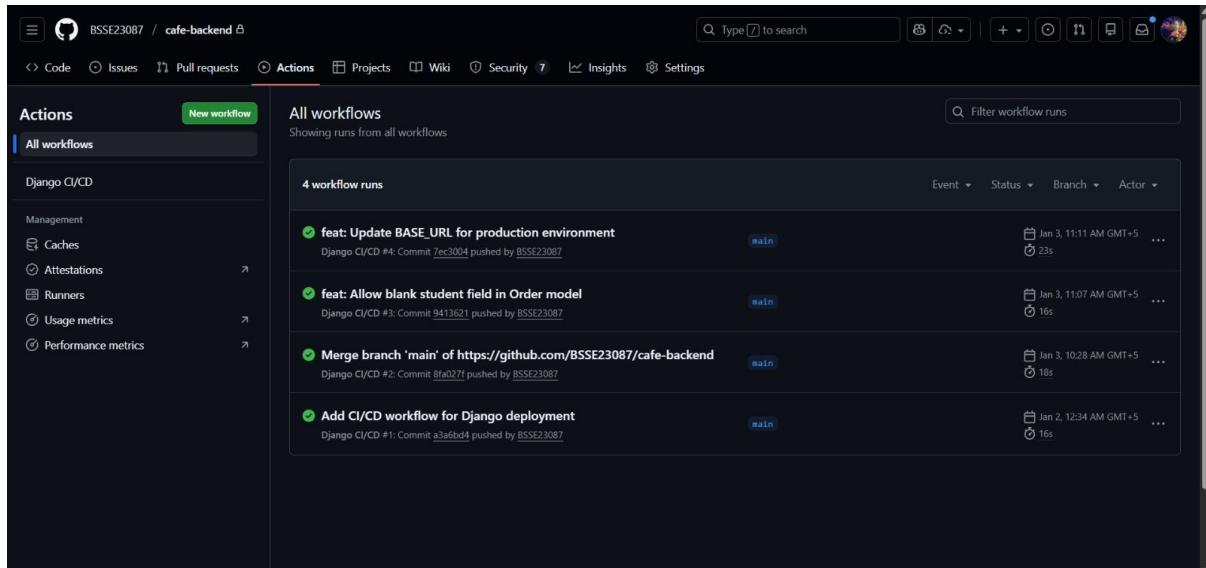


Figure 8: Workflow (CI/CD)

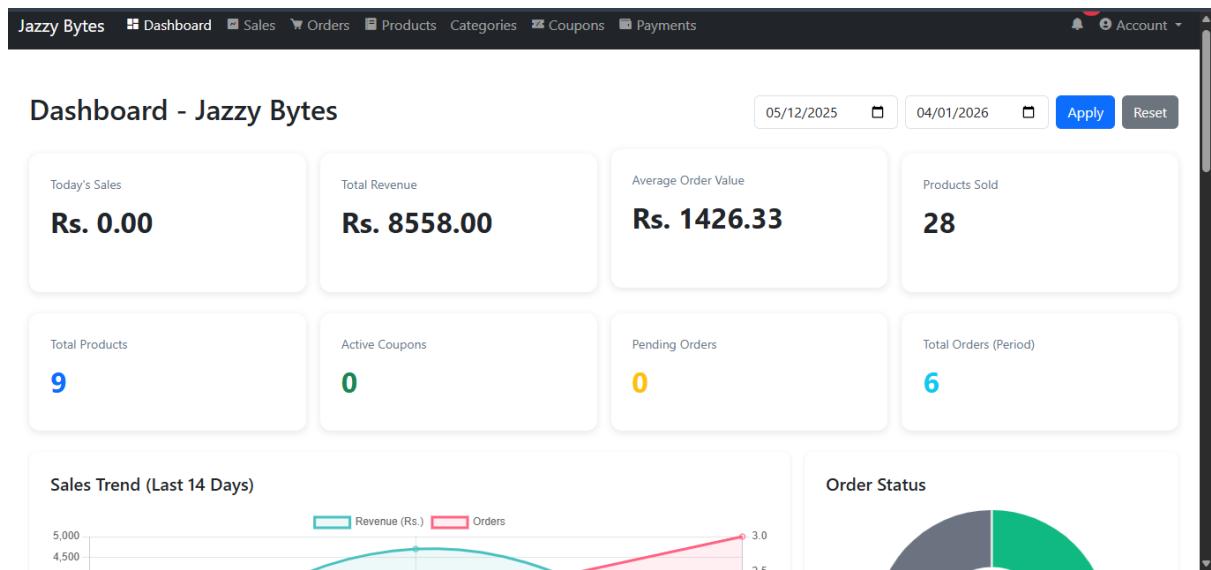


Figure 9: Final Output Website Dashboard

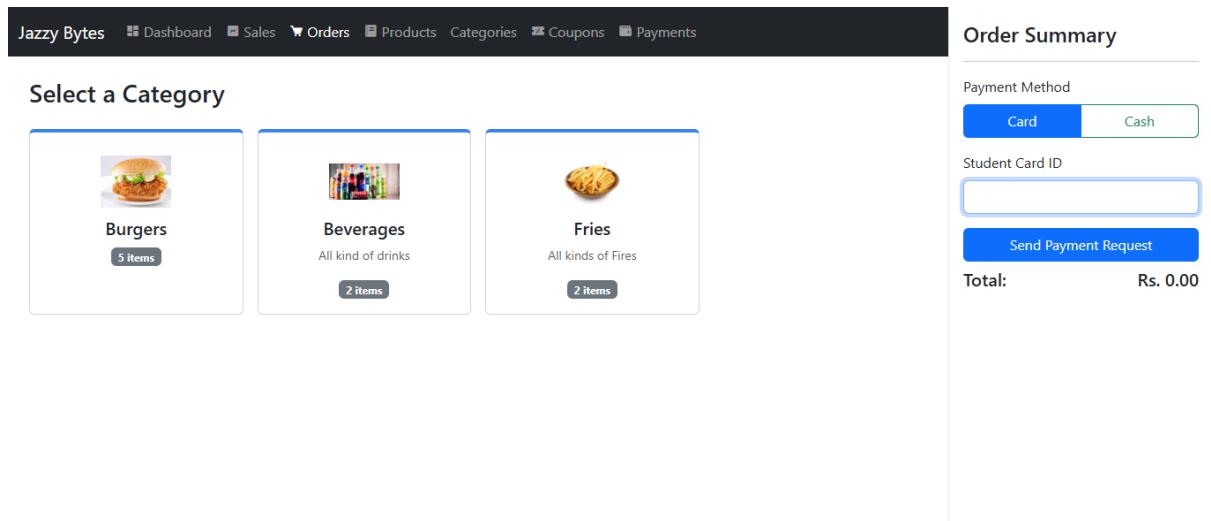


Figure 10: Website payment page

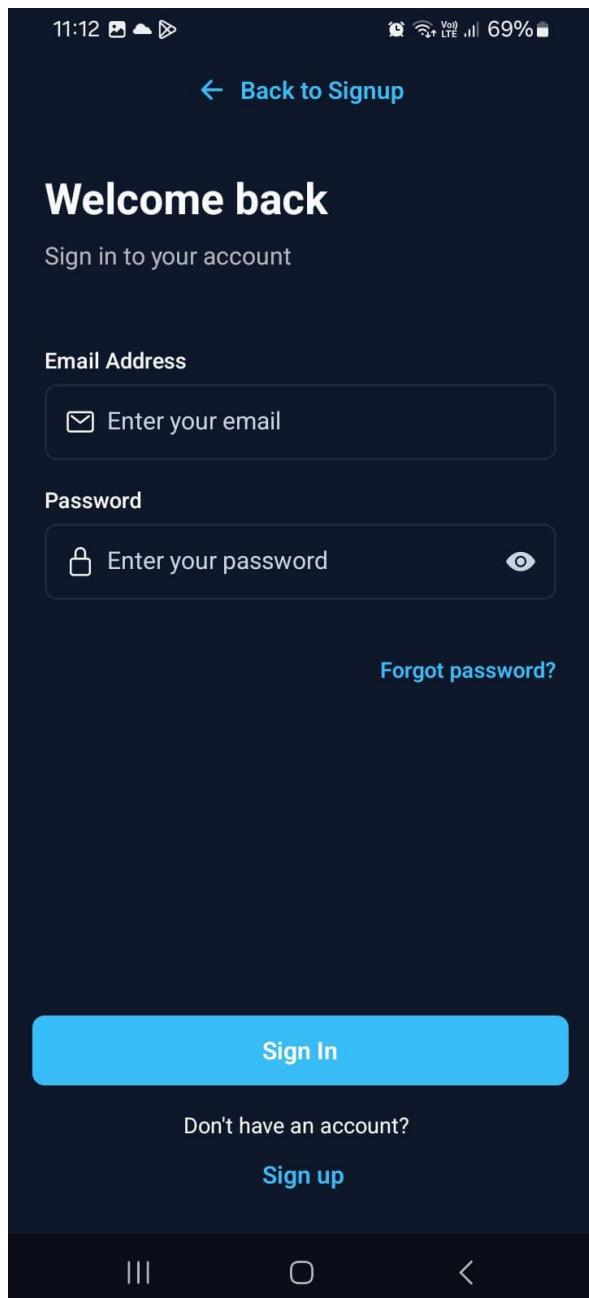


Figure 11: Final Output Student App