



PARSHVANATH CHARITABLE TRUST'S
A.P. Shah Institute of Technology
Thane, 400615

Academic Year: 2022-23
Department of Computer Engineering

CSL605 SKILL BASED LAB COURSE: CLOUD COMPUTING

Mini Project Report

- **Title of Project** : Book-Mart
- **Year and Semester** : TE Sem 6
- **Group Members Name and Roll No.** : Siddhesh Sawant
Siddharth Sharma
PravinKumar Sharma
Harjot Singh Sidhu

Table of Contents

Sr. No.	Topic	Page No.
1.	Abstract	3
2.	Introduction	4
3.	Problem Definition	5
4.	Objective & Scope	6
5.	Description (Include the cloud services used in the project, methodologies used and software requirements)	7
6.	Implementation details with screen-shots (stepwise)	9
7.	Learning Outcome	12

Abstract:

The project is developed using Django, python, HTML and CSS. This book Swapping website on cloud provides a convenient and efficient platform for customers to browse, search, and purchase books online. The website is built on a cloud-based infrastructure, ensuring high scalability and reliability, and allowing for easy management and maintenance. The website offers a wide selection of books from various genres, and provides customers with personalized recommendations based on their browsing and purchase history. The website also features a secure payment system and fast shipping options, ensuring a seamless shopping experience for customers. Overall, this book Swapping website on cloud is a great solution for both book lovers and sellers looking to expand their reach and improve their online presence.

Introduction:

In today's digital age, online trading have become increasingly popular. Book-Mart is a website project designed to provide a user-friendly platform for conducting online trading of books. The project is developed using Django, Python, HTML, and CSS, which allows for a robust and secure platform for both buyers and sellers.

The website provides a simple and efficient way for sellers to list their products and for buyers to browse and bid on items. The project has a comprehensive database that stores information about books, categories and users. The website also has an administrator panel that enables the website owner to manage the website's content, users and generate reports.

With Book-Mart, users can participate in online tradding from the comfort of their own homes, eliminating the need to physically attend Book Store provides a safe and secure platform for conducting online transactions, ensuring that buyers and sellers can confidently participate in online trading of books.

Problem definition:

Traditional trading require buyers and sellers to be physically present at a specific location and time, which can be inconvenient and time-consuming. This limitation has prompted the need for an online book store that allows users to participate in book-mart from anywhere at any time. Additionally, traditional trading of books may also be limited by the number of participants, which can impact the price and demand for products.

Book-Mart aims to solve these problems by providing a user-friendly online book store platform that enables buyers and sellers to participate in auctions from anywhere at any time. The project provides a comprehensive database that stores information about books , categories, and users.

Furthermore, the project provides an administrator panel that allows the website owner to manage the website's content, users, and generate reports. This feature ensures that the website can be maintained and operated effectively.

Objectives:

- Provide a user-friendly platform for online book swapping
- Develop a comprehensive database for secure and accurate exchange.
- Enable user to browse and swap on products.
- Create an administrator panel for website management and report generation.

Scope:

- Develop a user-friendly and secure online book swapping
- Allow users to browse and swap on books listed on website
- Implement a comprehensive database to store Book-related information
- Create an administrator panel for website management and report generation

Description:

Cloud Services used in this project are as follows:

1.AWS Elastic Compute Cloud:

AWS Elastic Compute Cloud (EC2) is a cloud computing service provided by Amazon Web Services (AWS) that allows businesses to run applications and workloads in a virtual machine (VM) environment in the cloud. EC2 provides scalable computing capacity, allowing businesses to quickly and easily provision and deploy VMs to meet their computing needs. EC2 offers a wide range of instance types that are optimized for different workloads, including general-purpose, compute-optimized, memory-optimized, and storage-optimized instances. Users can choose the instance type that best suits their application's requirements and only pay for the computing resources they use. EC2 also provides a range of other features and services, such as load balancing, auto-scaling, and network security, that allow users to easily manage and scale their computing resources. EC2 enables businesses to run a wide range of applications, from simple web servers to complex, multi-tier applications with large databases. It also integrates with other AWS services, such as Amazon S3 for storage, Amazon RDS for database management, and Amazon CloudWatch for monitoring and logging. Overall, EC2 provides a flexible and cost-effective solution for businesses looking to move their applications and workloads to the cloud.

2.AWS Security Groups:

AWS Security Groups are a key component of the Amazon Web Services (AWS) cloud security architecture. They act as virtual firewalls that control inbound and outbound traffic to Amazon Elastic Compute Cloud (EC2) instances, ensuring that only authorized traffic is allowed to and from instances. Each security group is associated with one or more EC2 instances, and administrators can define the inbound and outbound traffic rules for each group. These rules can be based on protocols, ports, and source/destination IP addresses or other security groups. For example, an administrator could create a security group that allows inbound traffic on port 80 for a web server instance, and another security group that allows outbound traffic to an RDS database instance. Security groups are stateful, which means that any traffic allowed in will be automatically allowed out, and vice versa. This simplifies administration and reduces the risk of misconfigurations that could leave a system open to attack. Security groups also provide additional layers of security, such as traffic encryption, access control, and logging, that help to protect the EC2 instances from unauthorised access and attacks. Overall, AWS Security Groups provide a flexible and scalable solution for securing Amazon EC2 instances, allowing administrators to manage traffic access at the instance level in a simple and granular way.

Screen Shots

AWS Elastic Cloud Compute

The screenshot shows the AWS Management Console interface for an EC2 instance. The left sidebar contains navigation links for EC2 Dashboard, EC2 Global View, Events, Tags, Limits, Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations, and Images. The main content area displays the 'Instance summary for i-087a8d474bcf0e5bb'. The instance is in a 'Running' state. Key details include: Instance ID: i-087a8d474bcf0e5bb, Public IPv4 address: 52.207.219.218, Private IPv4 addresses: 172.31.86.246, Instance state: Running, Hostname type: IP name: ip-172-31-86-246.ec2.internal, Answer private resource DNS name: IPv4 (A), Auto-assigned IP address: 52.207.219.218 [Public IP], Private IP DNS name (IPv4 only): ip-172-31-86-246.ec2.internal, Instance type: t2.micro, VPC ID: vpc-0a219b34884d124ac. A warning message is displayed: 'AWS Compute Optimizer finding' with a red circle icon. The message text is: 'User: arn:aws:sts::501551529874:assumed-role/voc-labs/user2379301=21202001@apsit.edu.in is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: * because no identity-based policy allows the compute-optimizer:GetEnrollmentStatus action'. A 'Retry' link is provided at the bottom of the message.

Instance ID	Public IPv4 address	Private IPv4 addresses
i-087a8d474bcf0e5bb	52.207.219.218 open address	172.31.86.246

Instance state	Public IPv4 DNS
Running	ec2-52-207-219-218.compute-1.amazonaws.com open address

Hostname type	Private IP DNS name (IPv4 only)
IP name: ip-172-31-86-246.ec2.internal	ip-172-31-86-246.ec2.internal

Answer private resource DNS name	Instance type
IPv4 (A)	t2.micro

Auto-assigned IP address	VPC ID
52.207.219.218 [Public IP]	vpc-0a219b34884d124ac

AWS Compute Optimizer finding

User: arn:aws:sts::501551529874:assumed-role/voc-labs/user2379301=21202001@apsit.edu.in is not authorized to perform: compute-optimizer:GetEnrollmentStatus on resource: * because no identity-based policy allows the compute-optimizer:GetEnrollmentStatus action

[Retry](#)

AWS Security Group

The screenshot shows the AWS Management Console interface for a list of EC2 instances. The left sidebar contains navigation links for EC2 Dashboard, EC2 Global View, Events, Tags, Limits, Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations, and Images. The main content area displays a table of instances. The table has columns: Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone, Public IPv4 DNS, and Public IPv4 address. The instances listed are 'BookStore' and 'MyWebApp'. The 'MyWebApp' instance is selected, and its details are shown in the 'Instance summary' section. The instance is in a 'Running' state. Key details include: Instance ID: i-0f4d04584c056adb3, Public IPv4 address: 3.86.138.136, Private IPv4 addresses: 172.31.86.63, Instance state: Running, Hostname type: IP name: ip-172-31-86-63.ec2.internal, Answer private resource DNS name: IPv4 (A), Auto-assigned IP address: 3.86.138.136 [Public IP], Private IP DNS name (IPv4 only): ip-172-31-86-63.ec2.internal, Instance type: t2.small, VPC ID: vpc-05b5baef4201f09, Subnet ID: subnet-0e56988fc592975a7. A warning message is displayed: 'AWS Compute Optimizer finding' with a blue circle icon. The message text is: 'Opt-in to AWS Compute Optimizer for recommendations. | [Learn more](#)'. An 'Auto Scaling Group name' is also listed as '-'. The 'Instance details' section shows the Platform as 'Linux' and the Monitoring status as 'Monitoring'.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 address
BookStore	i-0e1909fe18238f52b	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	ec2-54-146-239-83.co...	54.146.239.8
MyWebApp	i-0f4d04584c056adb3	Running	t2.small	2/2 checks passed	No alarms	us-east-1c	ec2-3-86-138-136.com...	3.86.138.136

Instance: i-0f4d04584c056adb3 (MyWebApp)

Instance summary

Instance ID: i-0f4d04584c056adb3 (MyWebApp)

Public IPv4 address copied

Public IPv4 address: 3.86.138.136 | [open address](#)

Private IPv4 addresses: 172.31.86.63

Public IPv4 DNS: ec2-3-86-138-136.compute-1.amazonaws.com | [open address](#)

Instance state: Running

Private IP DNS name (IPv4 only): ip-172-31-86-63.ec2.internal

Instance type: t2.small

VPC ID: vpc-05b5baef4201f09

Subnet ID: subnet-0e56988fc592975a7

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. | [Learn more](#)

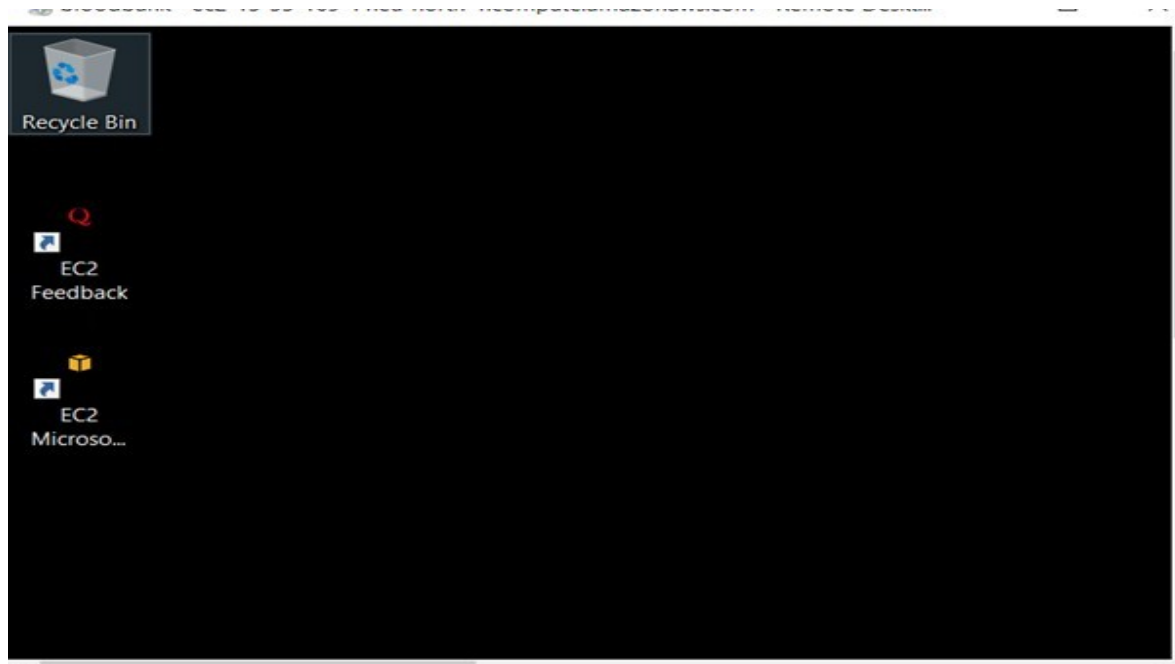
Auto Scaling Group name: -

Instance details


Platform: Linux


Monitoring: Monitoring

Aws Remote Desktop



Frontend

 Swap-Mart

 Login

REGISTER

Find your swap partner

Name

Username


Email


Password

Password confirmation

Register

Already signed up yet?
[Login](#)

 Swap-Mart

 Login

BROWSE GENRES

All

Technology


Fiction

More ▾

EXCHANGE ROOMS

7 Rooms available

+ Create Offers


 @sidd99

11 hours, 6 minutes ago

Bloodhub

0 Joined

Horror


 @adarsh

2 days ago

aladin

0 Joined

Fiction

 @sidd99


1 week, 1 day ago

manus

1 Joined

Technology


RECENT ACTIVITIES

 @20102169.adarsh.sharma@gmail

2 days

replied to post "manus"


pls contact on
20102169.adarsh.sharma@gmail.com

 @20102169.adarsh.sharma@gmail

2 days

replied to post "manus"


contact on 8421505681

 @20102169.adarsh.sharma@gmail

2 days

replied to post "manus"

hi bro I am intersted in this book

 @sid@gmail.com

1 week, 3 days

replied to post "

50 Reel Ghost Stories:

Learning Outcomes

A Book Swapping website deployed on the cloud using EC2 can offer several learning outcomes, including:

Cloud Computing: By deploying the system on the cloud using EC2, you can learn about cloud computing and the benefits it offers, such as scalability, flexibility, and cost-effectiveness.

System Administration: By deploying the book swapping Website on the cloud, you can learn about system administration tasks such as server provisioning, configuration, and maintenance. You can also learn how to manage user accounts, permissions, and access to the system.

Database Management: Book-Mart website requires a database to store information about users, Books, categories, and other related information. By deploying the system on the cloud, you can learn about database management tasks such as creating, configuring, and managing databases.

Security: Deploying the system on the cloud requires you to ensure the security of the system, including securing access to the system and data, securing the server and database, and implementing security measures to protect against cyber threats.

Overall, deploying a Book-Martwebsite on the cloud using EC2 can provide a valuable learning experience in several areas of IT, including cloud computing, system administration, database management, and security.

