## Short Description about our project

Techplement -week2 Project

Team: Cloud03

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Project Details: Deploying Web Application on EC2.

Description: Deploy a web application on an Amazon EC2 instance using an appropriate programming language and web framework. Implementation: Set up an EC2 instance, install necessary software, configure security groups, and deploy the web application code. Use Elastic IP for a static IP address and Elastic Load Balancer for load balancing if required.

Primary Goal: Based on the Project Description we have decided to maintain the architecture as highly available.

We have decided to Deploy a Shopping application

Services Used:

## Virtual Private Cloud:

The VPC places a role to maintain the services which are associated to that vpc should be highly secure within the region.

The Netmask of the vpc is 10.0.0.0/25

Two Availability zones and two subnets, each Az's have one subnet

The subnet mask are 10.0.0.0/26, 10.0.0.64/26

We have configured the Internet gateway to main route table to publicly accessible.

## **EC2 Compute:**

Here we are using compute power service as elastic cloud compute and it can be associated with Auto scaling groups and load balancers.

**Auto Scaling Group** is service which can automatically scale up and down the number instances by configuring the launch template.

**Load balancers** are attach to the target groups where we can balance the among the instances traffic without overwhelmed a single instance.