Host a Dynamic Ecommerce Website on AWS

I recently finished a DevOps project where I deployed a dynamic ecommerce web app on AWS, utilizing the resources listed below. I have uploaded the reference diagram and scripts I used to deploy the web app on an EC2 instance to a GitHub repository for the project. Please use this information to create a readme file for the project.

1. VPC with public and private subnets in 2 availability zones.
2. An internet Gateway is used to allow communication between instances in VPC and the internet.
3. Used 2 Availability Zones for high availability and fault tolerance.
4. Resources such as Nat Gateway, Bastion Host, and Application Load Balancer use Public Subnets.
5. We will put the web servers and database servers in the Private Subnets to protect them.
6. The Nat Gateway allows instances in the private App subnets and private Data subnets to access the internet.
7. We are using an MYSQL RDS database
8. We are using EC2 Instances to host our website.
9. Application Load Balancer is used to distribute web traffic across an Auto Scaling Group of EC2 instances in multiple AZs.
10. Using Auto Scaling Group to dynamically create our EC2 instances to make our website highly available scalable, fault-tolerant, and elastic.
11. We are using Route 53 to register our Domain name and create a record set.
12. We are using AWS S3 to store our Webfiles
13. We will use IAM Role to give EC2 permission to download webfiles from AWS S3.
14. Once we have installed our website on an EC2 instance, we will use the EC2 instance we installed our website on to create an AMI.

This is the script I used to deploy the web app on an EC2 instance.

```
#!/bin/bash
sudo su
yum update -y
yum install -y httpd
cd /var/www/html
wget https://github.com/azeezsalu/jupiter/archive/refs/heads/main.zip
unzip main.zip
cp -r jupiter-main/* /var/www/html/
rm -rf jupiter-main main.zip
systemctl enable httpd
systemctl start httpd
```