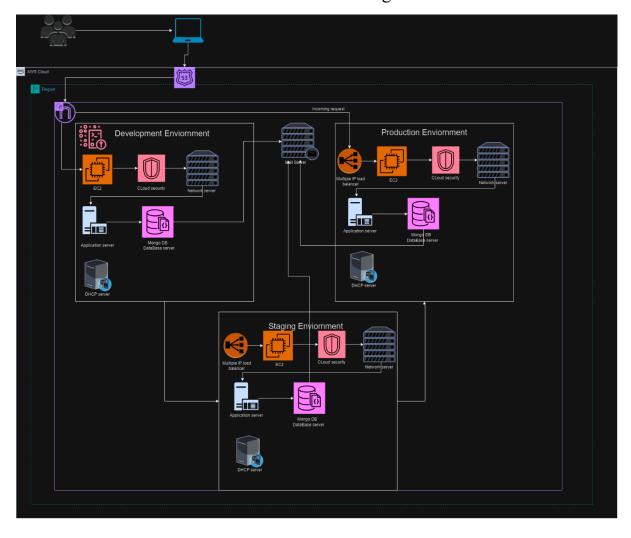
AWS Architecture Diagram



Development Environment:

- 1. User sends a request to access the application.
 - Users initiate requests to access the application hosted on AWS infrastructure.
- 2. The request will be received by an EC2 instance, which is the web service for the application.
 - The request is routed to an EC2 instance, acting as the web server, within the selected availability zone.
- 3. Then the request goes through Cloud Security services such as AWS WAF or AWS Shield for security.
 - Cloud Security services like AWS WAF or AWS Shield inspect incoming requests for security threats and provide protection against common web exploits.
- 4. Then the request is forwarded to the Network Server, which manages networking configurations using services like Amazon VPC.
 - The Network Server, configured within the selected Amazon VPC, handles networking configurations and routing of incoming requests within the region.
- 5. Network Server forwards the request to the Application Server (Application logic).
 - The Network Server routes the request to the Application Server, where the application logic resides, within the same availability zone.
- 6. Application Server will fetch data from the Database Server to store or retrieve data, utilizing services like Amazon RDS for relational databases (MongoDB).
 - The Application Server interacts with the Database Server, hosted in the same availability zone or another availability zone within the same region, to store or retrieve data from Amazon RDS, ensuring data integrity and availability.

Production / Staging Environment:

- 1. User sends a request to access the application.
 - Users initiate requests to access the application hosted on AWS infrastructure.

2. Load Balancer receives the request and distributes it among available EC2 instances.

- The request is first directed to the Load Balancer, which evenly distributes traffic across multiple EC2 instances located in different availability zones within the selected region, ensuring high availability and fault tolerance.
- 3. The request passes through Cloud Security services such as AWS WAF or AWS Shield for security checks.
 - Cloud Security services like AWS WAF or AWS Shield inspect incoming requests for security threats and provide protection against common web exploits.
- 4. Load Balancer forwards the request to the Network Server, which manages networking configurations using services like Amazon VPC.
 - The Load Balancer routes the request to the Network Server, configured within the selected Amazon VPC, to handle networking configurations and routing of incoming requests within the region.
- 5. Network Server forwards the request to the Application Server.
 - The Network Server routes the request to the Application Server, where the application logic resides, within the same availability zone or another availability zone within the same region, ensuring load distribution and fault tolerance.
- 6. Application Server fetches data from the Database Server to store or retrieve data, utilizing services like Amazon RDS for relational databases (MongoDB).
 - The Application Server interacts with the Database Server, hosted in the same availability zone or another availability zone within the same region, to store or retrieve data from Amazon RDS, ensuring high availability and durability of the data.