AWS documentation: https://docs.aws.amazon.com/

Cloud Service Providers: Amazon Web Services (AWS)

Sign up for an AWS account, and access the AWS Management Console.

Services offered by AWS: EC2, S3, RDS, Lambda, etc.

EC2: Create and run virtual servers in the cloud

Lambda: Run code without thinking about servers

App Containerization: Docker

Install Docker, set up the development environment, and define the necessary dependencies, configurations, and environment variables in a Docker file. Build a Docker image that encapsulates the app and its dependencies.

Cloud Database Selection: Cloud Database (AWS RDS) or NoSQL Databases (AWS DynamoDB)

Relational Database: AWS RDS (Relational Database Service) for options like MySQL, PostgreSQL, or others.

NoSQL database: AWS DynamoDB, a fully-managed NoSQL database service provided by AWS.

Cloud Networking: Networking considerations, virtual private cloud (VPC) setup, network security groups, and subnets.

(Optional Research) Virtual Private Cloud (VPC) to isolate the app and database resources. Define subnets within the VPC to segment your resources. Configure security groups to control inbound and outbound network traffic.

Deployment Automation: Use infrastructure-as-code (IaC) tools like AWS CloudFormation.

AWS CloudFormation templates written in YAML or JSON. Get the resources required and database deployment, including EC2 instances, RDS instances, security groups, etc.

Use CloudFormation to update deployments.

High Availability: AWS Auto Scaling.

Data Backup and Recovery: AWS Backup. Implement regular backups and snapshots

Monitoring and Logging: AWS CloudWatch