**📍 Cloud & DevOps Roadmap**

### ✅ **1️⃣ RDS & DynamoDB**

Goal: Learn about relational (RDS) and NoSQL (DynamoDB) managed databases.

* Amazon RDS:
  + [What is Amazon RDS?](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Welcome.html)
  + [Creating a DB instance](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_CreateDBInstance.html)
* Amazon DynamoDB:
  + [What is DynamoDB?](https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Introduction.html)
  + [Getting started with DynamoDB](https://docs.aws.amazon.com/amazondynamodb/latest/developerguide/GettingStarted.html)

### ✅ **2️⃣ NGINX, API Gateway & SES**

Goal: Understand web serving, reverse proxy, API management, and sending emails.

* NGINX:
  + Official NGINX Docs
  + Beginner’s Guide
* Amazon API Gateway:
  + [What is API Gateway?](https://docs.aws.amazon.com/apigateway/latest/developerguide/welcome.html)
  + [Getting started with API Gateway](https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-getting-started-with-rest-apis.html)
* Amazon SES (Simple Email Service):
  + [What is Amazon SES?](https://docs.aws.amazon.com/ses/latest/dg/Welcome.html)
  + [Getting started with Amazon SES](https://docs.aws.amazon.com/ses/latest/dg/getting-started.html)

### ✅ **3️⃣ Docker**

Goal: Learn how to containerize applications for consistent deployment.

* Docker:
  + Get Started with Docker
  + Docker Docs

### ✅ **4️⃣ CloudWatch & CloudFront**

Goal: Monitor and log AWS resources and deliver content securely worldwide.

* Amazon CloudWatch:
  + [What is Amazon CloudWatch?](https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/WhatIsCloudWatch.html)
  + [Getting started with CloudWatch](https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/GettingStarted.html)
* Amazon CloudFront:
  + [What is Amazon CloudFront?](https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/Introduction.html)
  + [Getting started with CloudFront](https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/GettingStarted.html)

### ✅ **5️⃣ Cognito & IAM**

Goal: Secure your application with authentication and fine-grained access control.

* Amazon Cognito:
  + [What is Amazon Cognito?](https://docs.aws.amazon.com/cognito/latest/developerguide/what-is-amazon-cognito.html)
  + [Getting started with Cognito](https://docs.aws.amazon.com/cognito/latest/developerguide/tutorials.html)
* AWS IAM:
  + [What is IAM?](https://docs.aws.amazon.com/IAM/latest/UserGuide/introduction.html)
  + [Getting started with IAM](https://docs.aws.amazon.com/IAM/latest/UserGuide/getting-started.html)

### ✅ **6️⃣ S3 & EC2**

Goal: Master AWS core services for storage and computing.

* Amazon S3:
  + [What is Amazon S3?](https://docs.aws.amazon.com/AmazonS3/latest/userguide/Welcome.html)
  + [Getting started with S3](https://docs.aws.amazon.com/AmazonS3/latest/userguide/GetStartedWithS3.html)
* Amazon EC2:
  + [What is Amazon EC2?](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/concepts.html)
  + [Getting started with EC2](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EC2_GetStarted.html)

### ✅ **7️⃣ Lambda**

Goal: Dive into serverless computing for event-driven applications.

* AWS Lambda:
  + [What is AWS Lambda?](https://docs.aws.amazon.com/lambda/latest/dg/welcome.html)
  + [Getting started with Lambda](https://docs.aws.amazon.com/lambda/latest/dg/getting-started.html)

### ✅ **8️⃣ Final Project & Assessment**

Goal: Apply all the learned services in a small real-world project and test your skills.

* ✅ Project idea:
  + Build a simple serverless REST API (API Gateway + Lambda) that stores data in DynamoDB or RDS.
  + Secure it with Cognito.
  + Serve a static website from S3 + CloudFront.
  + Monitor with CloudWatch.
  + Send emails using SES.
  + Deploy with Docker on EC2.
  + Use IAM to manage permissions.
* 📌 Review & test:
  + Try creating IAM policies.
  + Check logs in CloudWatch.
  + Test API endpoints.
  + Simulate sending emails with SES.

## 📌 **Tips**

* Use AWS Free Tier for practice.
* Keep official docs bookmarked — they’re always the best source.
* Document what you build step by step.
* Join the [AWS Documentation Learning Paths](https://aws.amazon.com/getting-started/learning-paths/) for extra guidance.