Working with AWS

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SOLUTIONS ARCHITECT

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Outline

Creating an AWS free tier account

- What is free tier?

- Walkthrough signup process

- How to stick to 100% free services

Navigating the AWS console

- Service areas & menus

- Services we will be using

Identity & Access Management (IAM)

- The basics of roles and policies

- IAM setup with the policy generator
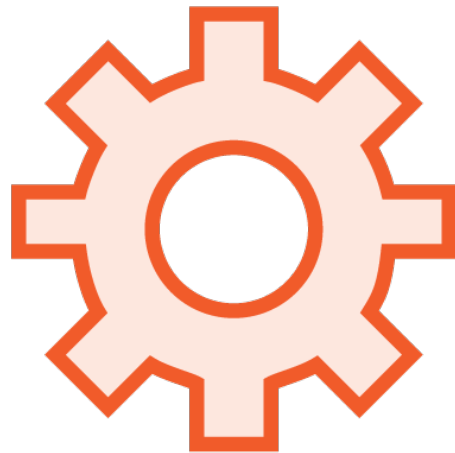
AWS Free Tier - 12 Months of Free

Amazon EC2

Dynamo DB

Simple Email Service

Lambda
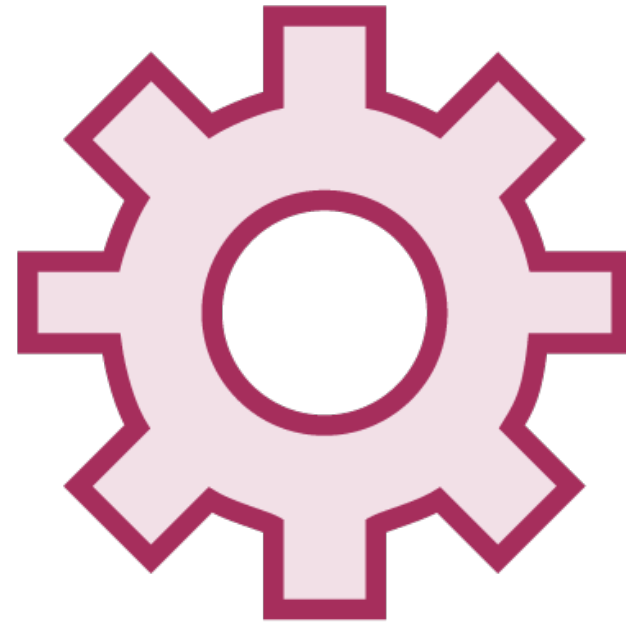
Relational Database Service

Simple Storage Service

Free Tier Examples

EC2 - 750 Hours

Lambda Functions - 1MM

Dynamo - 25GB RDS - 20GB
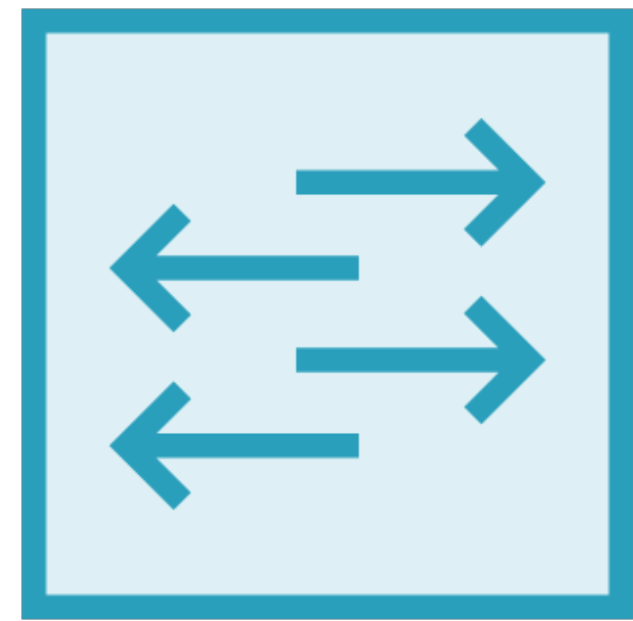
AWS S3 - 5GB

Building with Free Tier

Create static sites on S3

Database powered applications with EC2 and RDS

Scaleable APIs with Lambda and API Gateway

Demo

Free tier signup

- Walkthrough

- Finding service-specific information

- Avoiding unwanted expenses

AWS console

- Service areas

- Configuring our workspace

- Finding services we'll use

Identity and Access Management - Overview
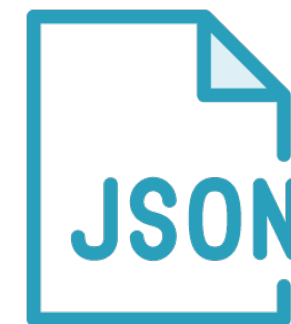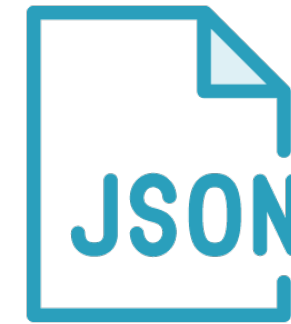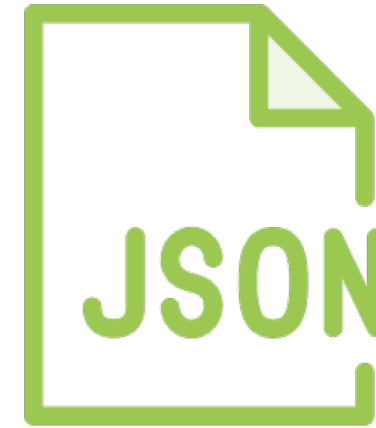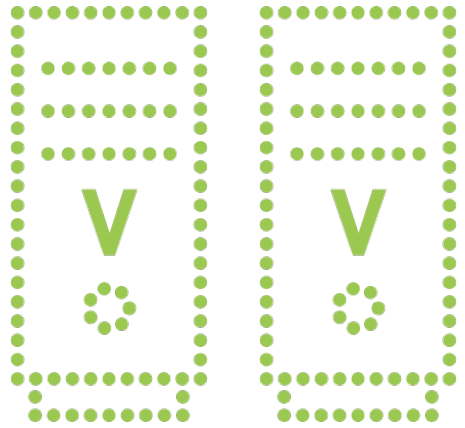
A Few Key Concepts

Users   **Groups**   **Roles**

Users, Groups, Roles, and Policies

Users, Groups, Roles, and Policies

```json
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": "*",
      "Resource": "*"
    }
  ]
}
```

Sample IAM Policy

◄ JSON

◄ Tracks policy versions

◄ Allow or deny access
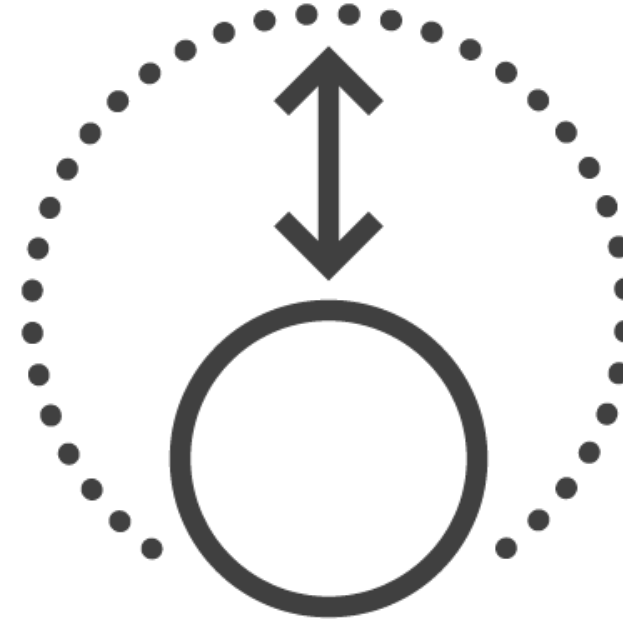◄ What actions can be taken?
◄ On what AWS resources
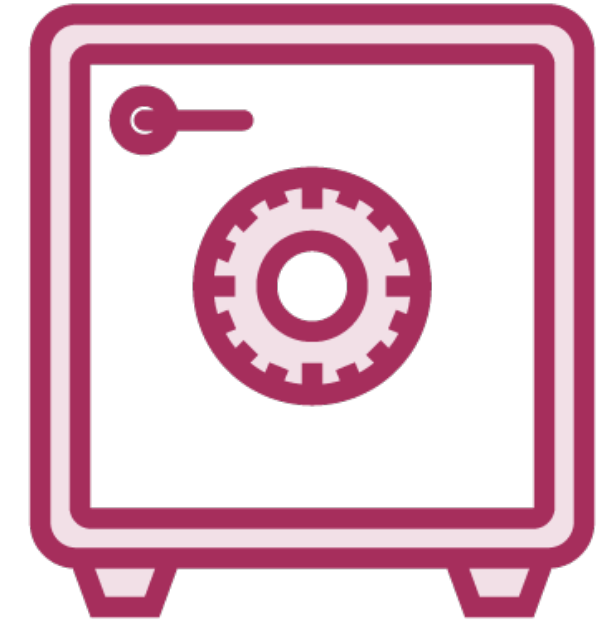
IAM Best Practices

Strong password

Two factor authentication

Principle of Least Privilege

Root account caution!

Demo

AWS IAM Demo

- AWS Managed Policies

- AWS Policy Generator

- AWS IAM roles

Summary

What we've done

- Building with Free Tier

- Understand AWS services

- Created IAM policies

What's next?

- Our first Lambda project