

AWS Cloud Computing - A to Z Beginner Guide

1. Introduction to Cloud Computing

- Cloud computing delivers computing services over the internet.
- Types of Cloud: Public, Private, Hybrid
- Models: IaaS (e.g. EC2), PaaS (e.g. Elastic Beanstalk), SaaS (e.g. Gmail)
- Benefits: Cost-effective, Scalable, Reliable, Global Reach

2. Setting Up Your AWS Free Tier Account

1. Go to <https://aws.amazon.com/free> and create an account.
2. Enter billing info and set up budget alerts to avoid charges.
3. Access the AWS Console at <https://console.aws.amazon.com>

3. Week 1 Study Plan

Monday: Learn Cloud Basics: IaaS, PaaS, SaaS, Public/Private Cloud

Tuesday: AWS Overview: Regions, Availability Zones, Global Infrastructure

Wednesday: Create AWS Free Tier Account + Explore Console UI

Thursday: Learn EC2: Launch a free-tier Linux virtual machine

Friday: Learn S3: Upload and retrieve files

Saturday: Hands-on Mini Project: Host a static website on EC2 + Backup with S3

Sunday: Review notes + Prepare resume content under 'Cloud Projects'

4. Mini Project: Host a Static Website with EC2 + S3

1. Launch an EC2 instance (Amazon Linux) from AWS Console.
2. Connect using SSH: `ssh -i <keypair.pem> ec2-user@<public-ip>`
3. Install Apache: `sudo yum install httpd -y`
4. Start Apache: `sudo systemctl start httpd`
5. Add your HTML page: `echo '<h1>Hello from EC2</h1>' > /var/www/html/index.html`

6. Open EC2 Security Group and allow HTTP (port 80) access.
7. Visit EC2 public IP in browser to view your site.
8. Create an S3 bucket and upload the HTML file as a backup.
9. (Optional) Enable static website hosting on S3 and set permissions.

5. Tools to Learn Along the Way

- AWS Console (GUI for services)
- AWS CLI (Command line interface for AWS services)
- Linux Commands (for managing EC2 instances)
- Git & GitHub (Version Control)
- Visual Studio Code (Text editor)

6. Recommended Free Resources

- FreeCodeCamp AWS Course (YouTube)
- AWS Skill Builder (official training) - <https://skillbuilder.aws>
- Qwiklabs (guided hands-on labs) - <https://www.qwiklabs.com/>
- Linux Journey (Linux basics) - <https://linuxjourney.com/>

7. Resume Project Example

- Hosted a static website using Amazon EC2 and backed up content to Amazon S3. Configured IAM, VPC settings, and managed Apache Web Server on Linux.