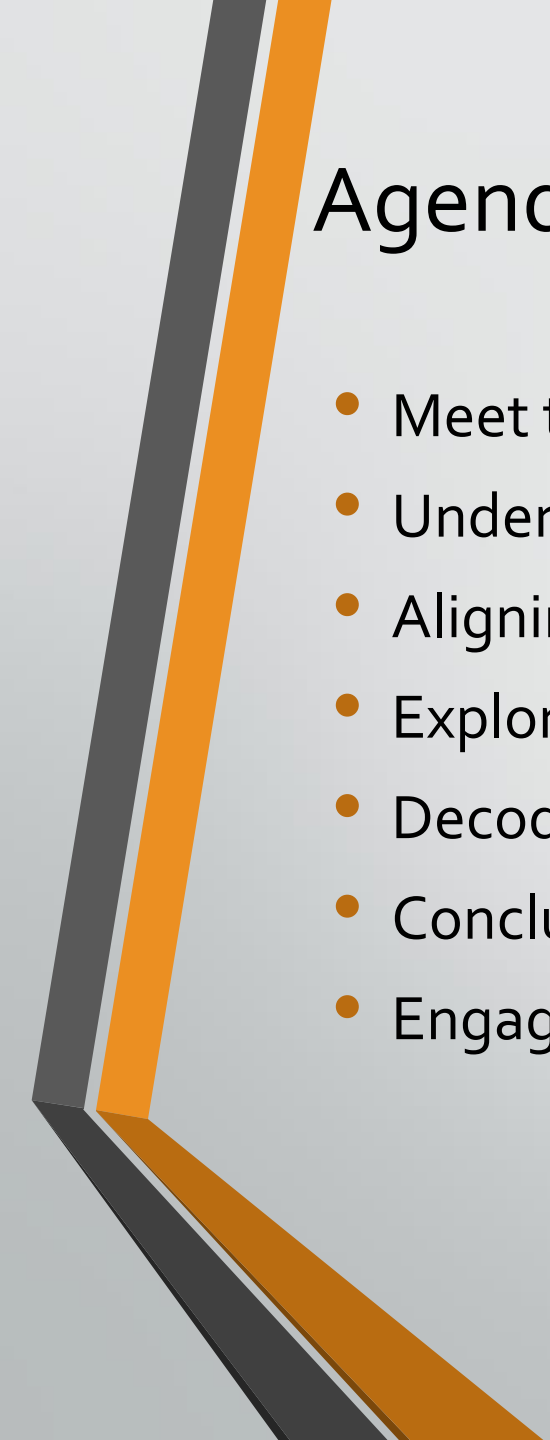


Deployment and Management of WordPress in AWS

Empowering WordPress with AWS using Terraform



Elevate your Zen with Yoga, soaring effortlessly on cloud wings.



Agenda

- Meet the AWS Dream Team
- Understanding the Problem Statement
- Aligning Requirements with Vision
- Exploring AWS Architecture
- Decoding Terraform: Infrastructure as Code
- Conclusion: Charting Our Path Forward
- Engage & Explore: Q&A Session

Meet the AWS Dream Team

Revathi Hariharasubramanian

Coding enthusiast, programming isn't just a skill—it's a way of life



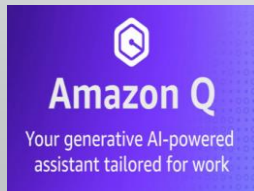
Vijaya Athavale

Testing the Cloud Waters :Entering the world of AWS to shape the future in cloud

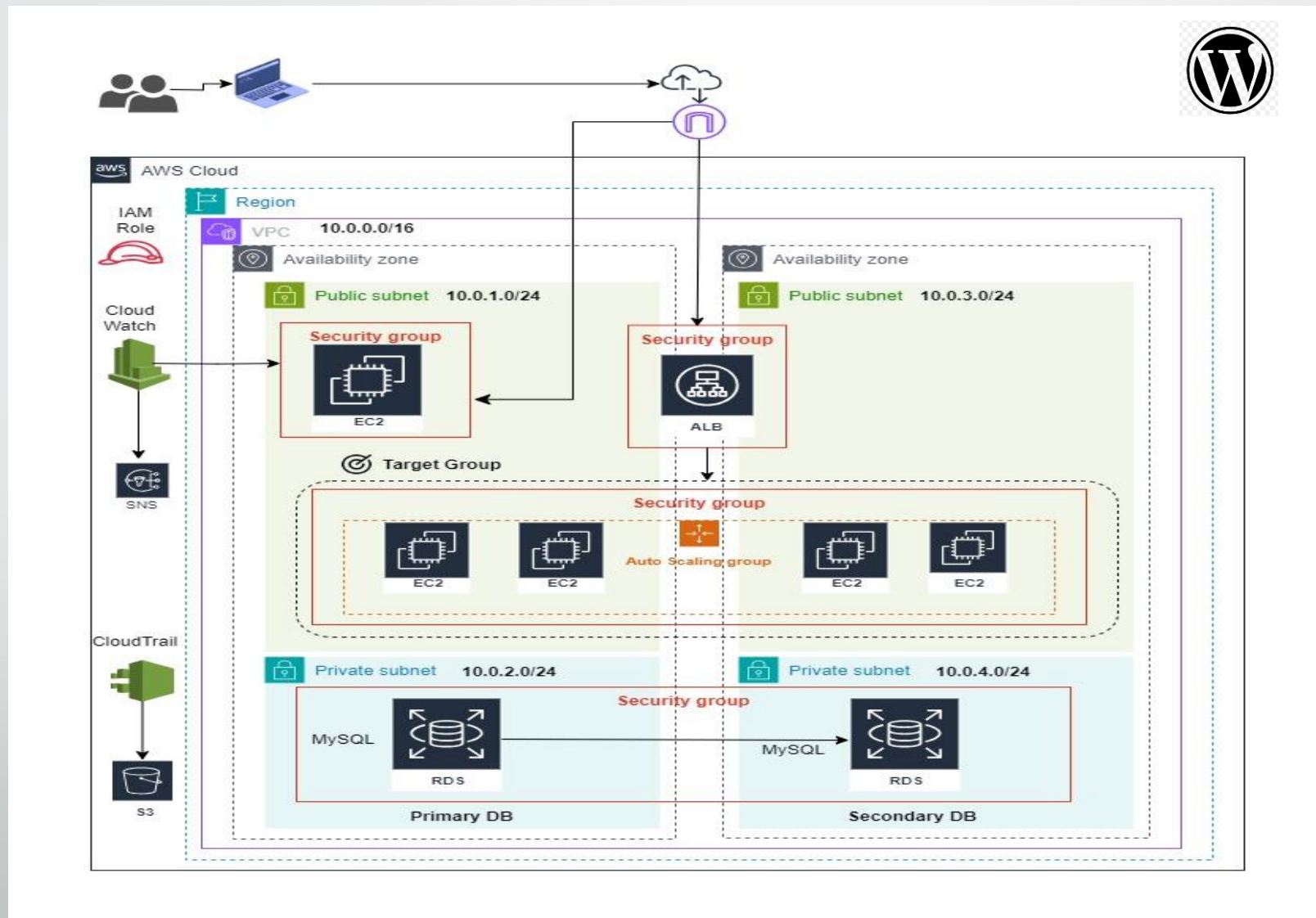


Exploring the Problem Statement

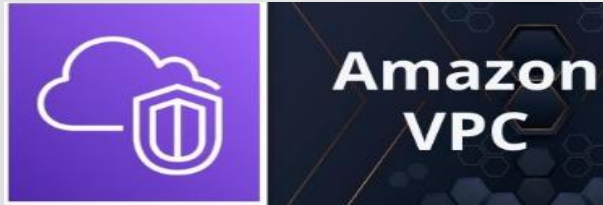
Crafting a resilient and scalable WordPress solution, by utilizing AWS services to ensure high availability, scalability , for efficient resource management.



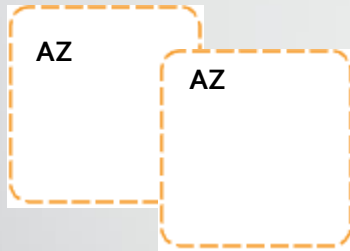
Aligning Requirements with Vision



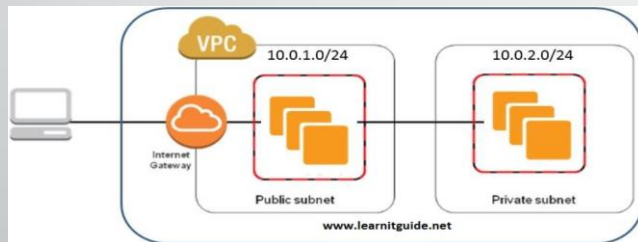
Exploring AWS Architecture



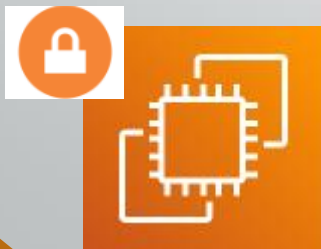
Amazon VPC to provision a logically isolated section of the Amazon Web Services (AWS) cloud.



Distributing workloads across **multiple AZs** allows for better scalability, high availability and performance optimization, that remains operational even in the event of failures or outages in a single AZ.

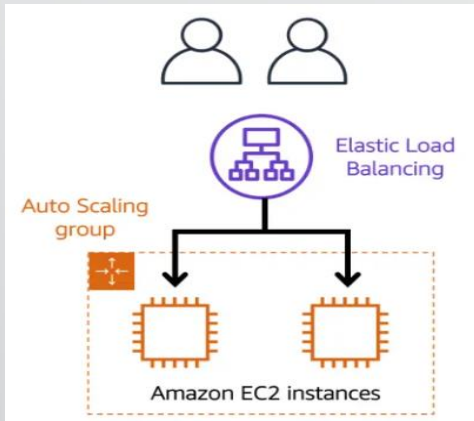


Public Subnet has a direct route to an internet gateway. EC2 resource in a public subnet can access the public internet. Setting up a **Private subnet** for a Database within a Virtual Private Cloud (VPC) that does not have direct access to the internet



Amazon EC2, versatile and scalable cloud computing service that empowers to build and deploy a WordPress application and workloads in the cloud with ease and efficiency. A **security group** controls the traffic that is allowed to reach and leave the resources that it is associated with

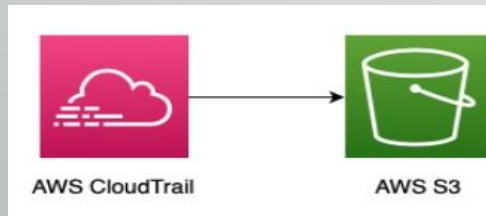
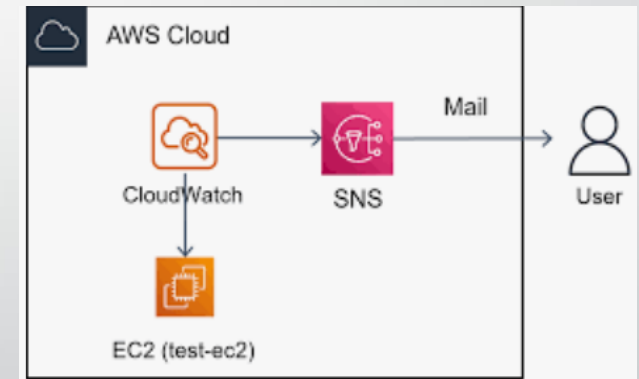
Exploring AWS Architecture cont....



Application Load Balancer (ALB) Configuring ALB to distribute incoming traffic evenly across EC2 instances.

Autoscaling Set up autoscaling policies based on metrics such as CPU utilization to automatically adjust the number of instances in response to traffic fluctuations.

CloudWatch functionality enables real-time monitoring of AWS resources by triggering notifications through **Simple Notification Service (SNS)**, facilitating rapid response to system events and performance metrics.

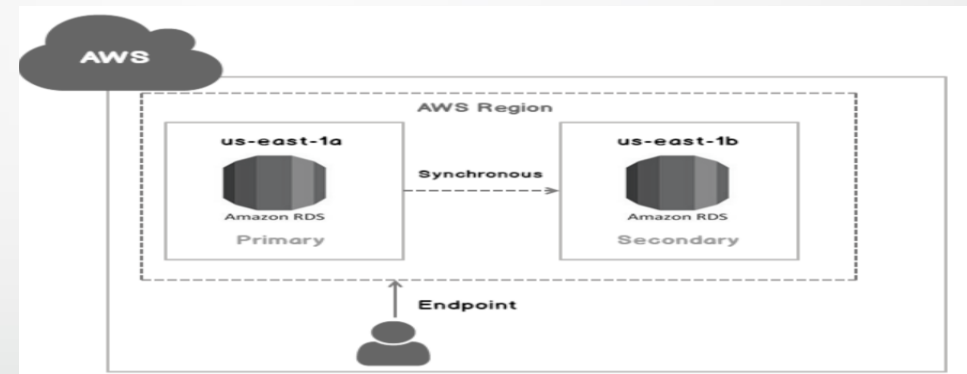


CloudTrail logs AWS API activity for auditing and compliance, storing records in **S3** for secure, durable storage and easy access.

Exploring AWS Architecture cont....



Amazon Relational Database Service (Amazon RDS) , Fully managed services that makes it simple to set up, operate, and scale databases in the cloud

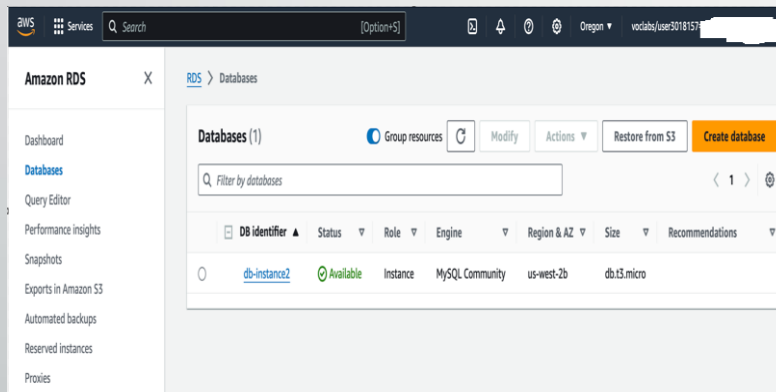


Amazon RDS Multi-AZ deployment, When it detects a failure, Amazon RDS automatically fails over to a standby instance without manual intervention.

Decoding Terraform: Infrastructure as Code



Terraform as **laC** for a WordPress project provides automation, consistency, and scalability enabling us to manage your infrastructure more effectively.



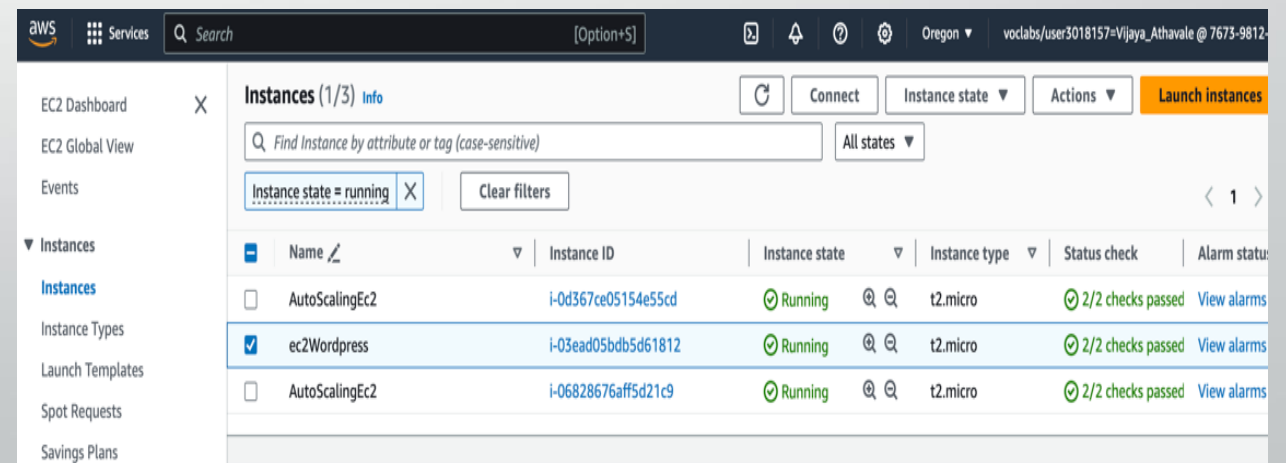
```
locals {
  # The name of the EC2 instance
  name = "awsrestartproject"
  owner = "ds"
}

### Select the newest AMI

You, 2 days ago | 1 author (You)
data "aws_ami" "latest_linux_ami" {
  most_recent = true
  owners      = ["amazon"]
}
```

```
#Creating DB subnet
You, 2 days ago | 1 author (You)
resource "aws_db_subnet_group" "db-subnet"
  name       = "db-subnet"
  subnet_ids = [aws_subnet.dev_subnet3.id, a

You, 2 days ago | 1 author (You)
tags = {
  Name = "DB subnet group"
}
```



Unwind and enlighten with a Yoga on WordPress, gracefully powered by AWS for seamless serenity



Why I Started Practicing Yoga

1. **Physical health:** Yoga offers numerous physical benefits, such as increased flexibility, strength, and balance. Many people start practicing yoga to improve their overall fitness and well-being.
2. **Stress relief:** Yoga incorporates breathing techniques and mindfulness practices that can help reduce stress and promote relaxation. People often turn to yoga as a way to cope with the demands of daily life and find inner peace.
3. **Mental health:** Yoga has been shown to have positive effects on mental health, including reducing symptoms of anxiety, depression, and PTSD. Some individuals start practicing yoga as a form of self-care and to improve their mental resilience.



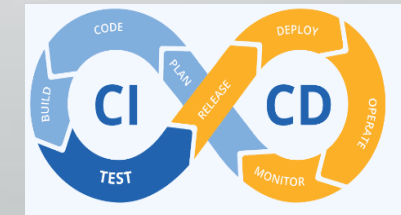
Conclusion: Charting Our Path Forward

Through this presentation, we have highlighted the synergies between AWS services and Terraform, and the benefits they bring to our project.



As we move forward, we will continue to leverage the combined strengths of AWS and Terraform to drive innovation, optimize efficiency,.

Stay Tuned: Something Awesome is on the Horizon!



Let's Talk AWS & Terraform!



Thank You for Being a Part of Our Journey!

