## **Summary Report**

This text is a comprehensive guide to AWS Academy Cloud Foundations, specifically focusing on Module 6: Compute. It covers various AWS compute services, including Amazon EC2, AWS Lambda, AWS Elastic Beanstalk, and container services like Amazon ECS and Amazon EKS. The module provides an overview of these services, their use cases, pricing models, and cost optimization strategies. It also includes hands-on labs, activities, and knowledge checks to reinforce learning.

## Key topics include:

- 1 . \*\*Amazon EC2\*\*: Overview, instance types, launching instances, security groups, and cost optimization.
- 2. \*\*Container Services\*\*: Introduction to Docker, Amazon ECS, Amazon EKS, and Amazon ECR.
- 3. \*\*AWS Lambda\*\*: Serverless computing, event sources, function configuration, and use cases.
- 4. \*\*AWS Elastic Beanstalk\*\*: Platform as a service (PaaS) for deploying web applications, supported platforms, and benefits.
- 5. \*\*Cost Optimization\*\*: Strategies for right-sizing, increasing elasticity, choosing optimal pricing models, and optimizing storage.
- 6. \*\*Hands-On Activities\*\*: Labs for launching EC2 instances, creating Lambda functions, and deploying applications with Elastic Beanstalk.
- 7. \*\*Knowledge Check and Exam Preparation\*\*: Sample exam questions and additional resources for further learning.

The module emphasizes practical skills, best practices, and cost-effective solutions for managing compute resources on AWS. It concludes with a summary of key takeaways and resources for deeper exploration of AWS compute services.