



Pantech e Learning
DIGITAL LEARNING SIMPLIFIED

Amazon Web Services

MLOps with AWS

Masterclass



Machine Learning

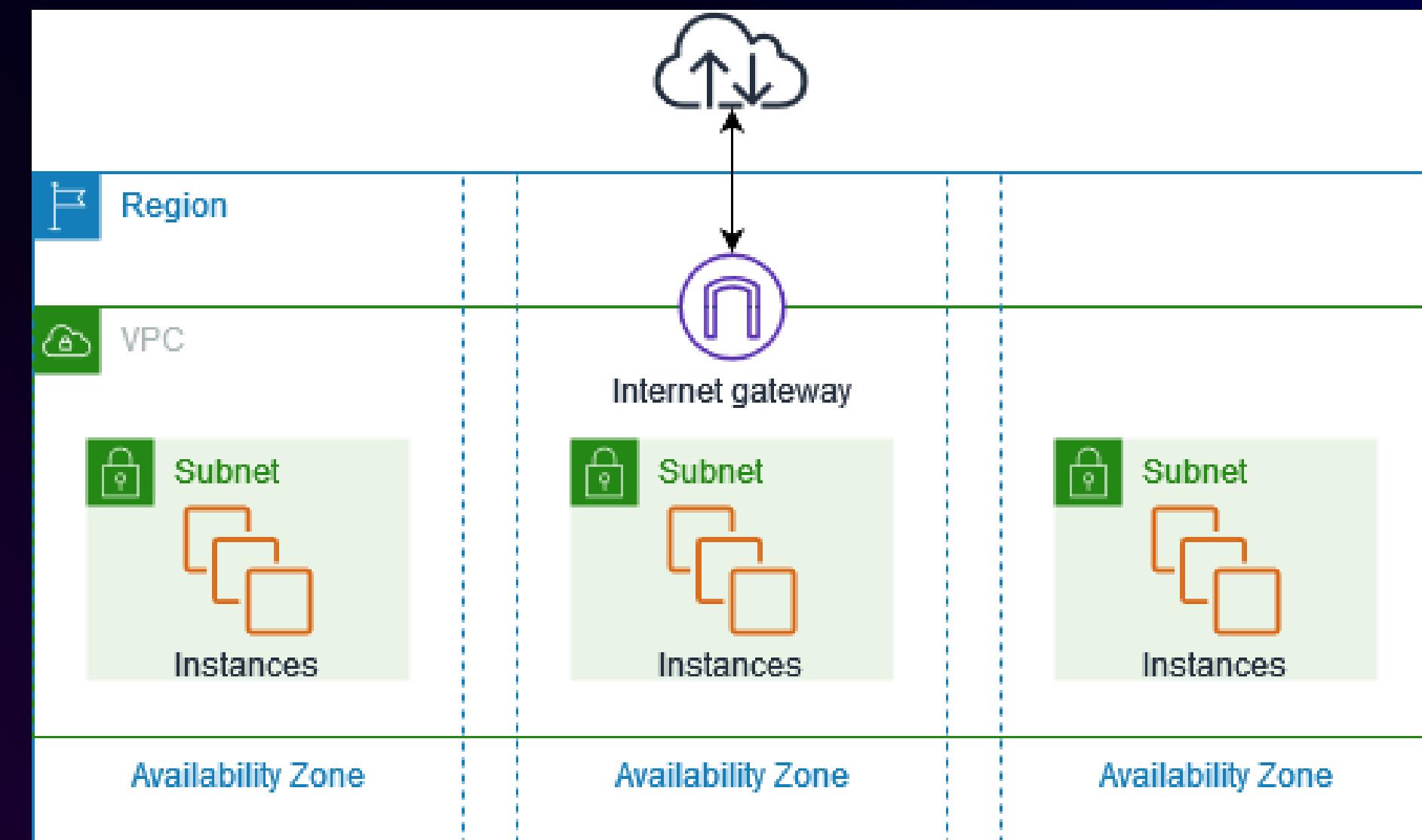
Operations with AWS

Day -3



Pantech e Learning
DIGITAL LEARNING SIMPLIFIED

VPC (Virtual Private Cloud)



VPC (Virtual Private Cloud)



Amazon Virtual
Private Cloud (VPC)

VPC (Virtual Private Cloud)



A virtual private cloud (VPC) is a private cloud within a public cloud. It is logically isolated from other virtual networks in the AWS Cloud.



VPC

VPC

VPC

VPC

VPC



VPC



Internet Gateway

VPC

VPC

VPC



VPC

VPC



Internet Gateway

VPC

VPC

SUBNET

VPC

VPC

VPC



Internet Gateway

VPC

Route

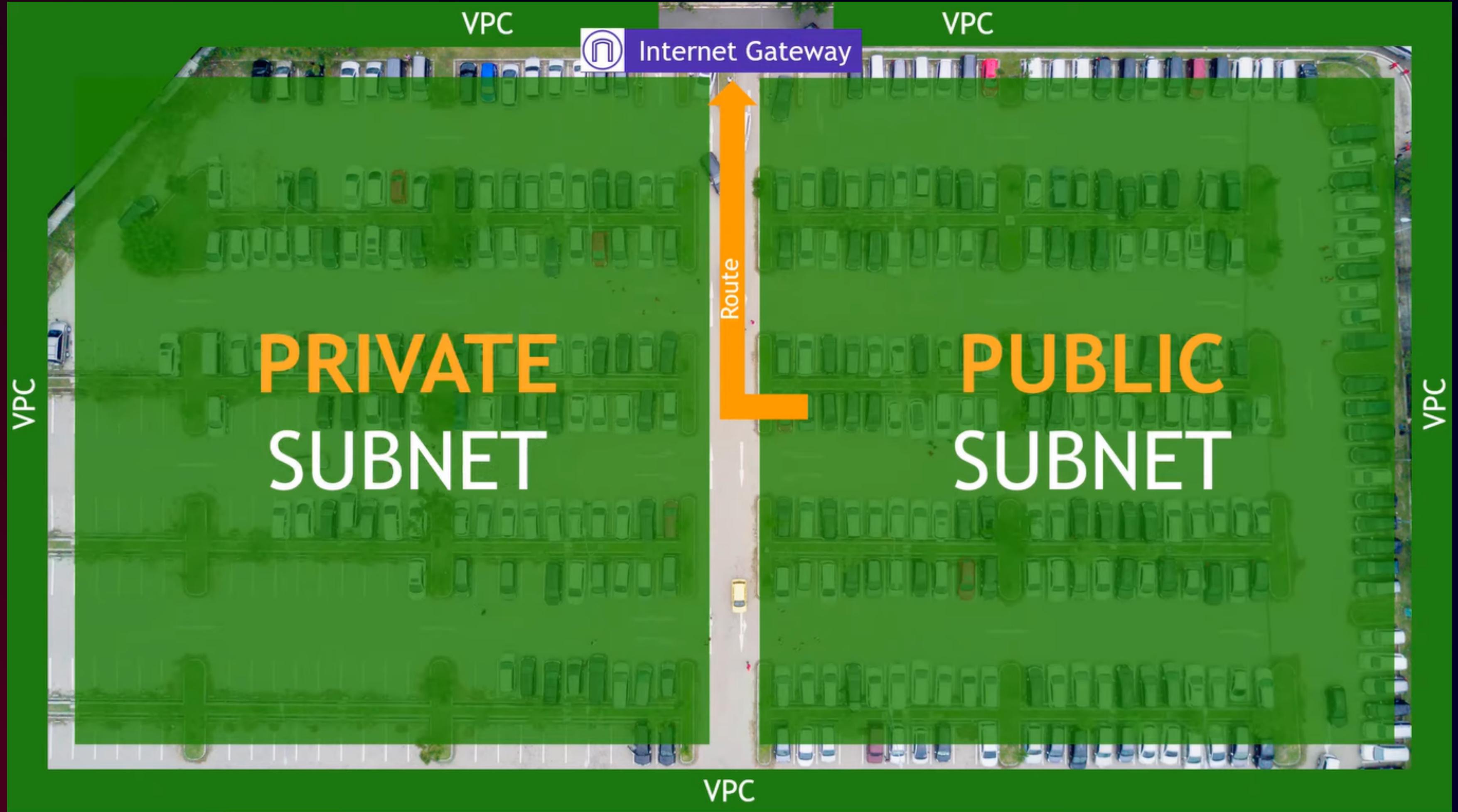
VPC

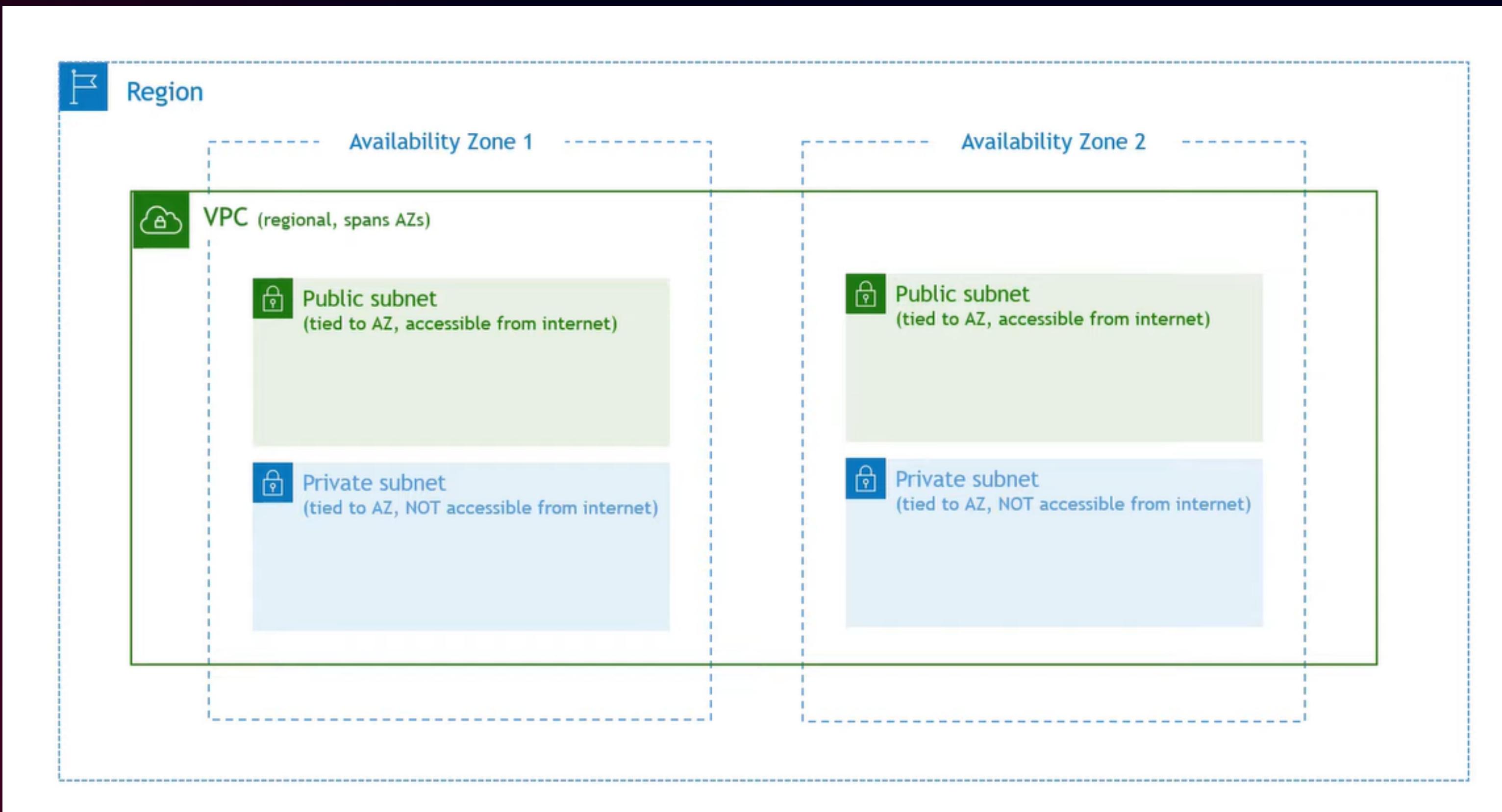
SUBNET

SUBNET

VPC

VPC

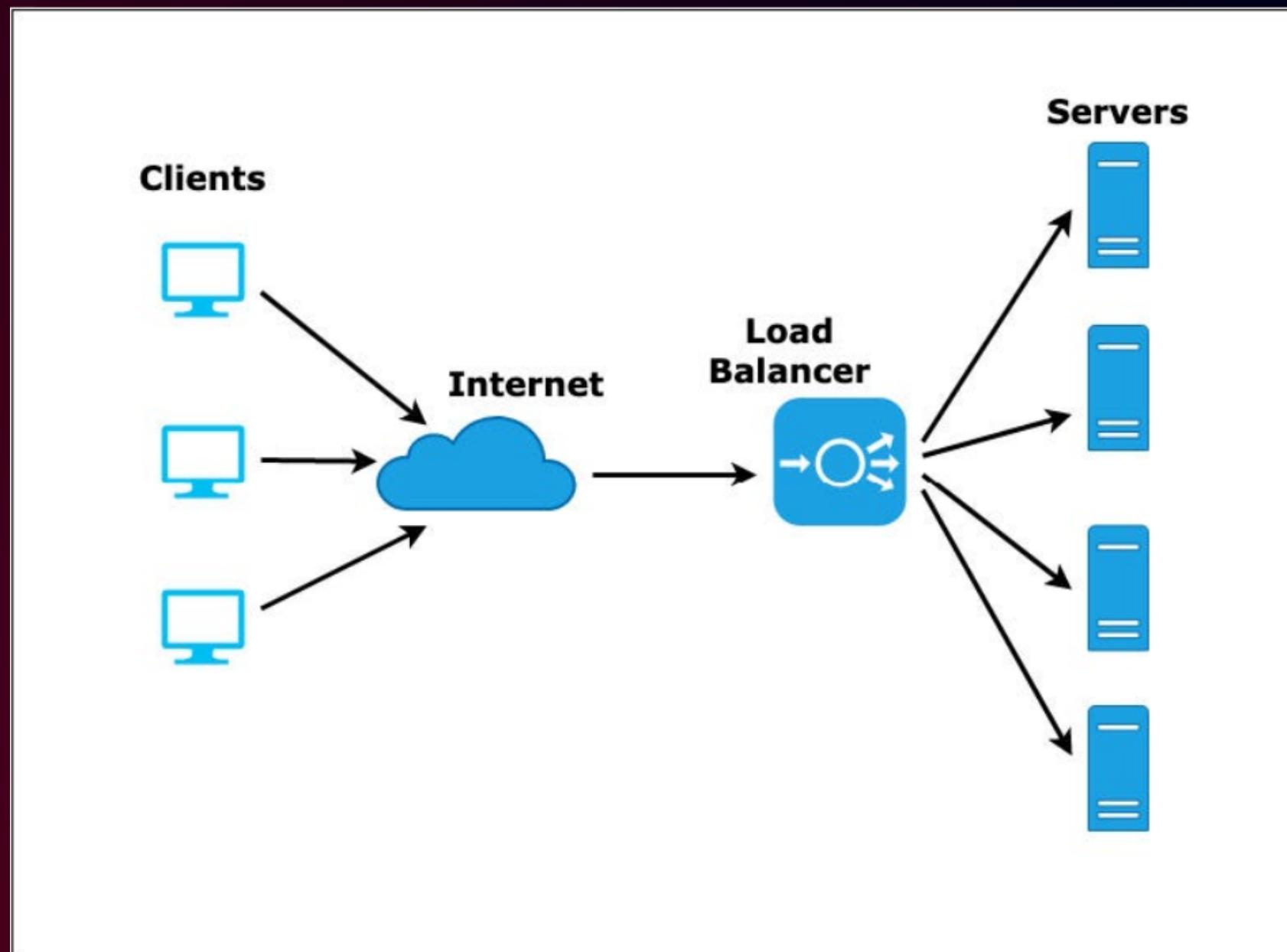




Elastic Load Balancing (ELB)



Elastic Load Balancing (ELB)



Elastic Load Balancing (ELB) automatically distributes incoming application traffic across multiple targets and virtual appliances in one or more Availability Zones (AZs).

Elastic Load Balancing (ELB)

Load balancer types

Application Load Balancer [Info](#)

The Application Load Balancer (ALB) handles traffic at the application layer (HTTP and HTTPS). It routes requests to targets like Lambda functions, databases, and microservices.

Network Load Balancer [Info](#)

The Network Load Balancer (NLB) handles traffic at the connection level (TCP, UDP, and TLS). It routes requests to targets like ALBs, databases, and microservices.

Gateway Load Balancer [Info](#)

The Gateway Load Balancer (GWLB) is used for third-party virtual appliances. It routes requests to targets like cloud providers, databases, and microservices.

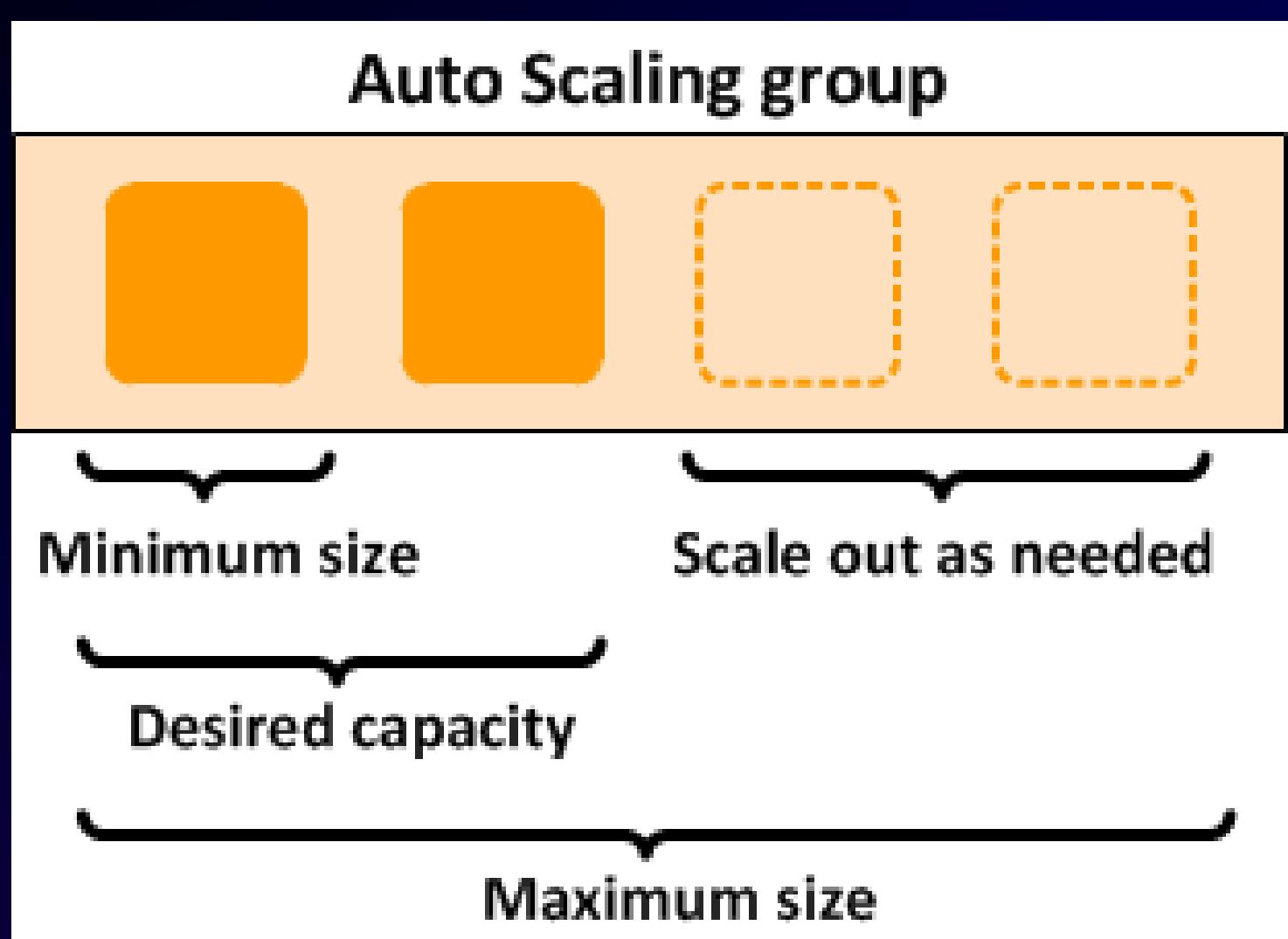
Choose an Application Load Balancer when you need a flexible feature set for your applications with HTTP and HTTPS traffic. Operating at the request level, Application Load Balancers provide advanced routing and visibility features targeted at application traffic.

Choose a Network Load Balancer when you need ultra-high performance, TLS offloading at scale, centralized certificate deployment, support for UDP, and static IP addresses for your applications. Operating at the connection level, Network Load Balancers are ideal for high-throughput traffic.

Choose a Gateway Load Balancer when you need to deploy and manage a fleet of third-party virtual appliances that support GENEVE. These appliances enable you to improve security, compliance, and policy controls.

[Create](#)

Auto-Scaling



Auto-Scaling

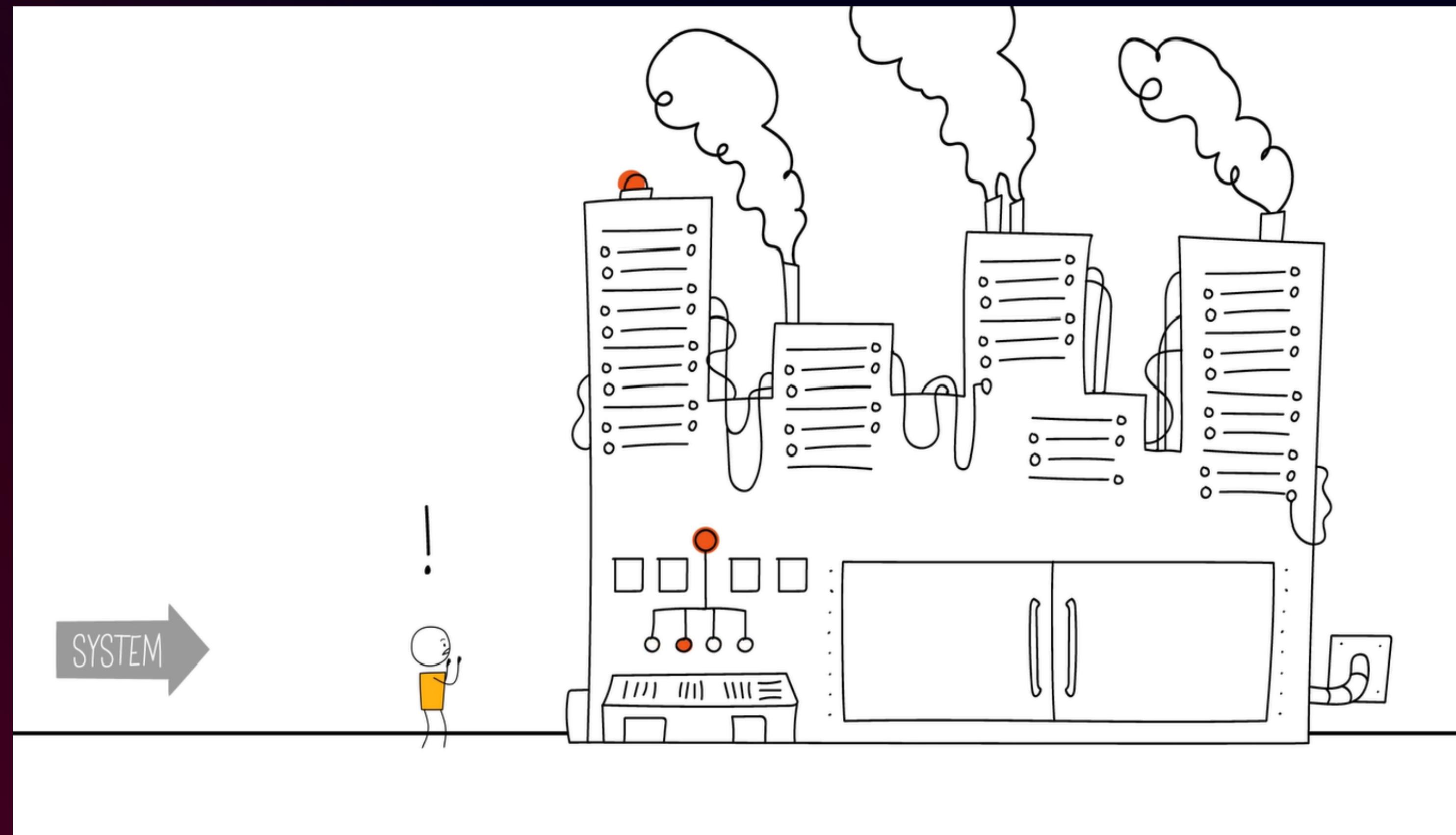
AWS Auto Scaling is a service that automatically adjusts capacity of AWS services for application performance.

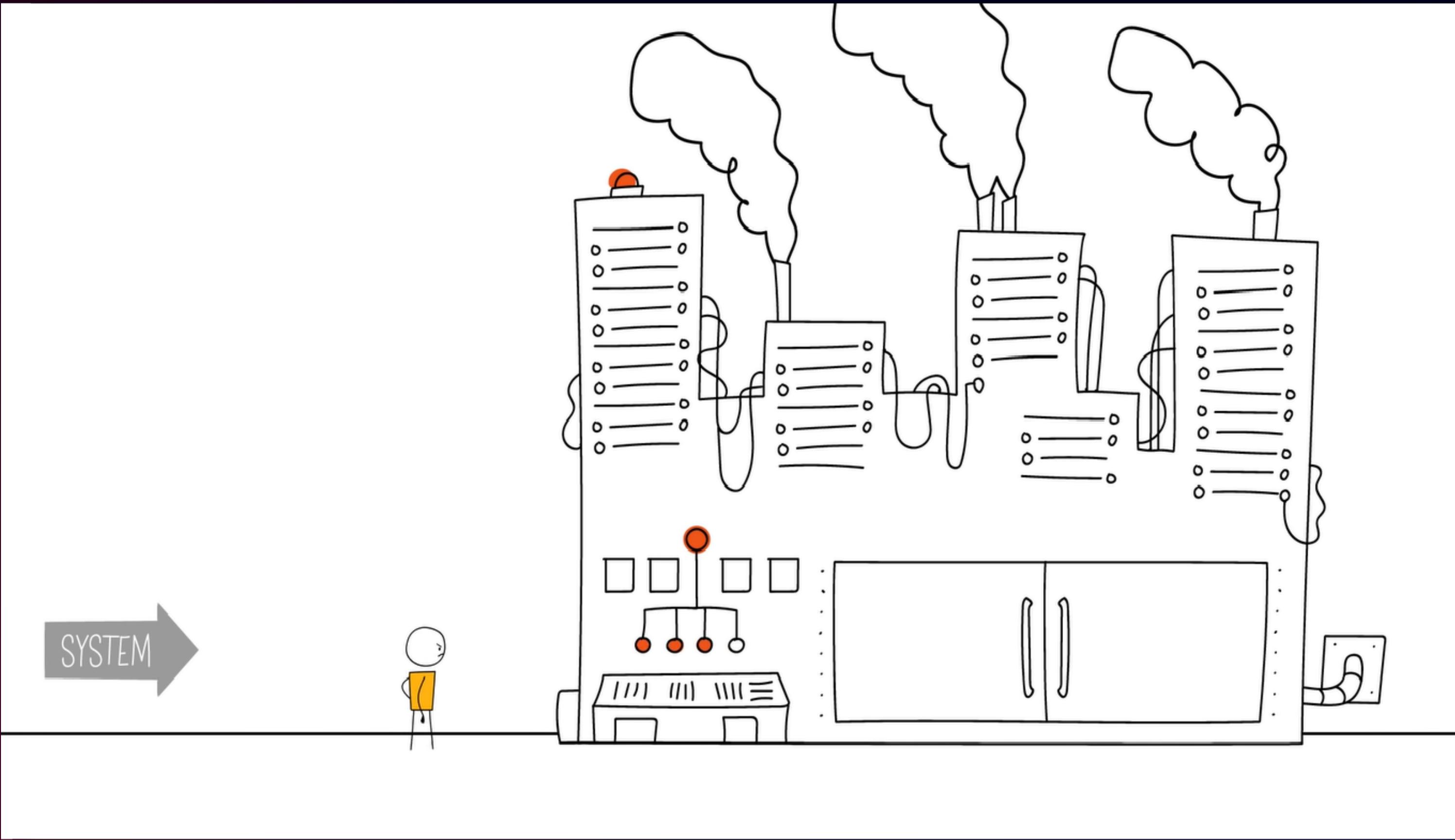
Elastic Beanstalk

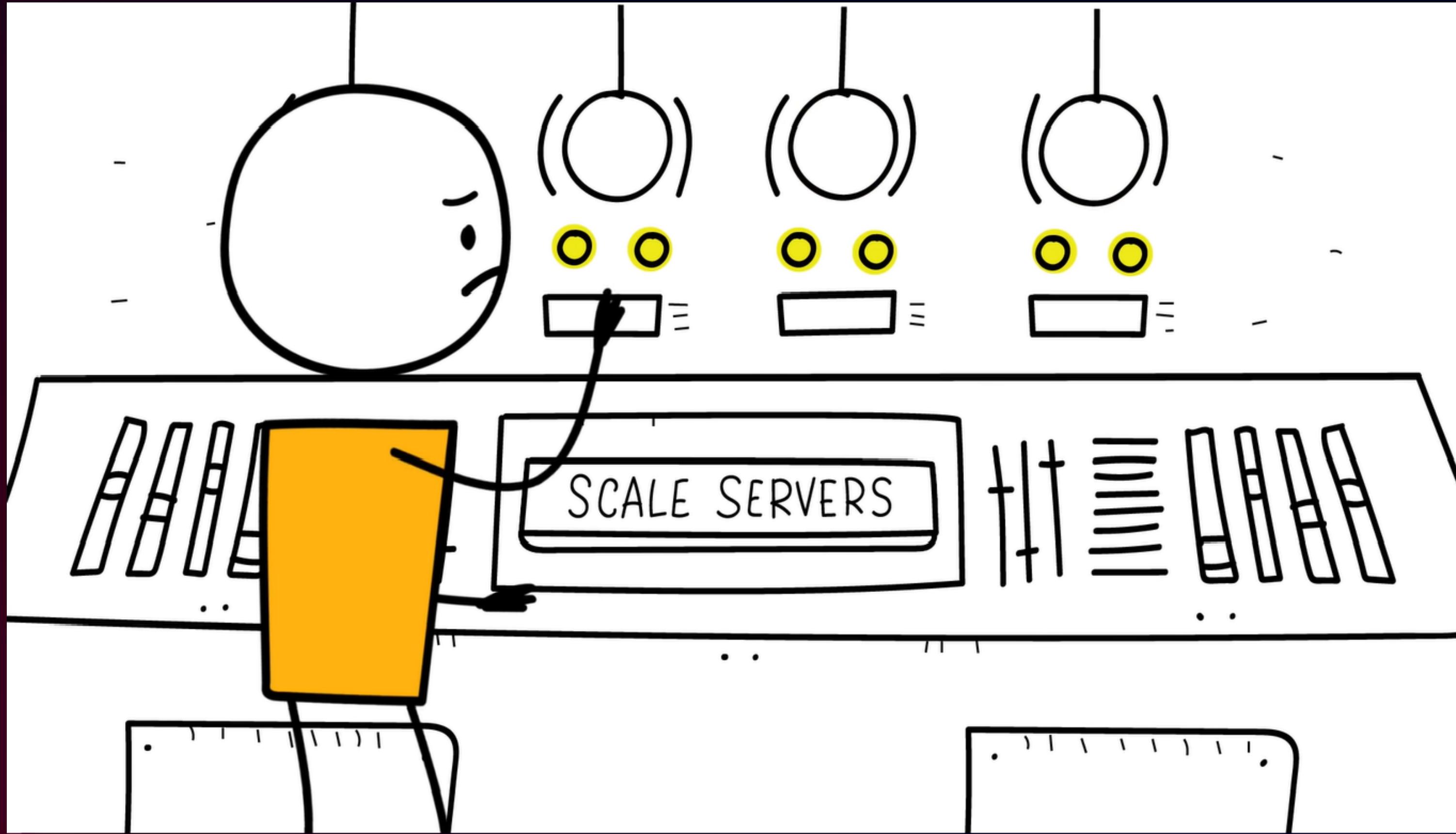
for web application deployment

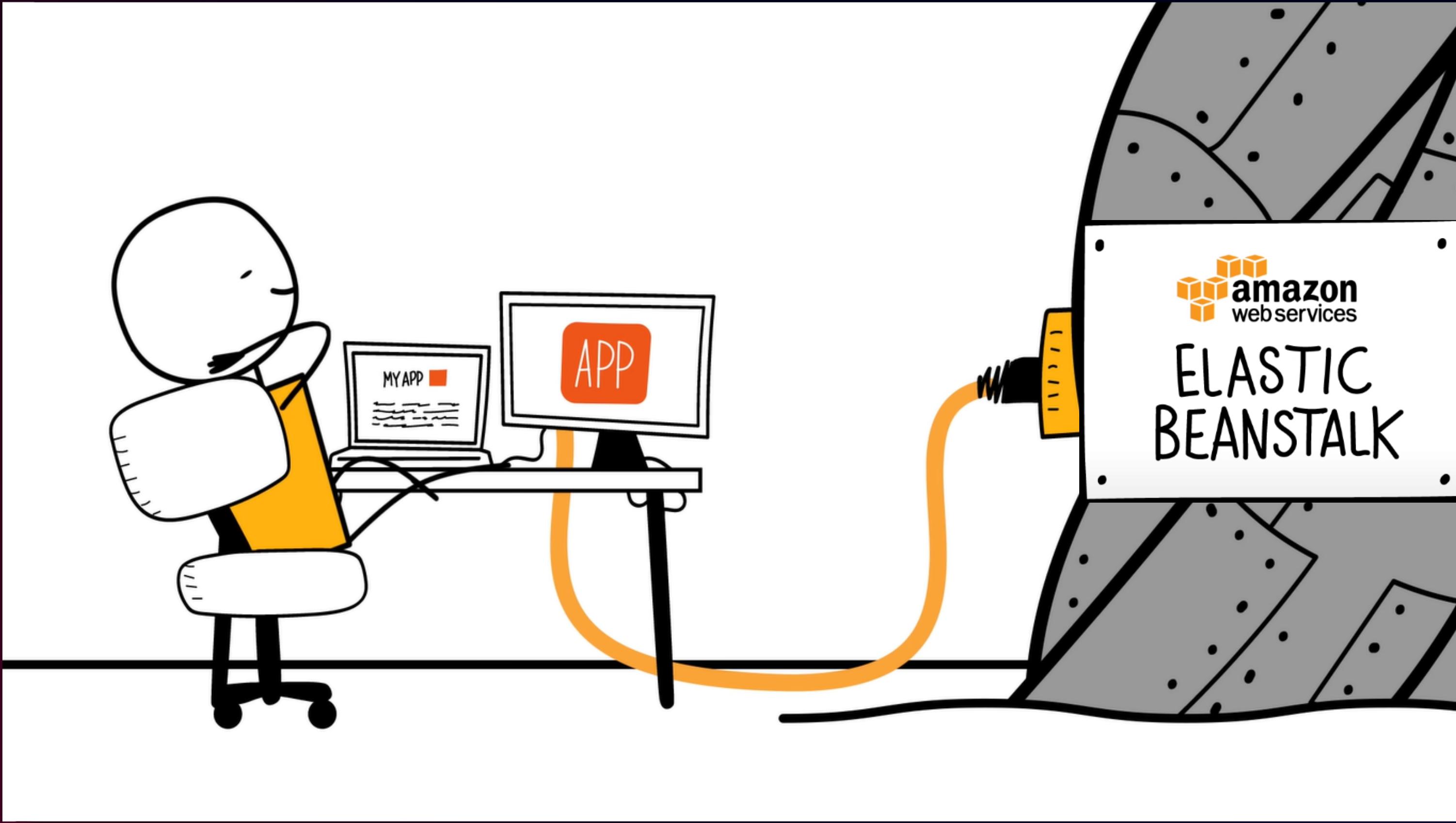






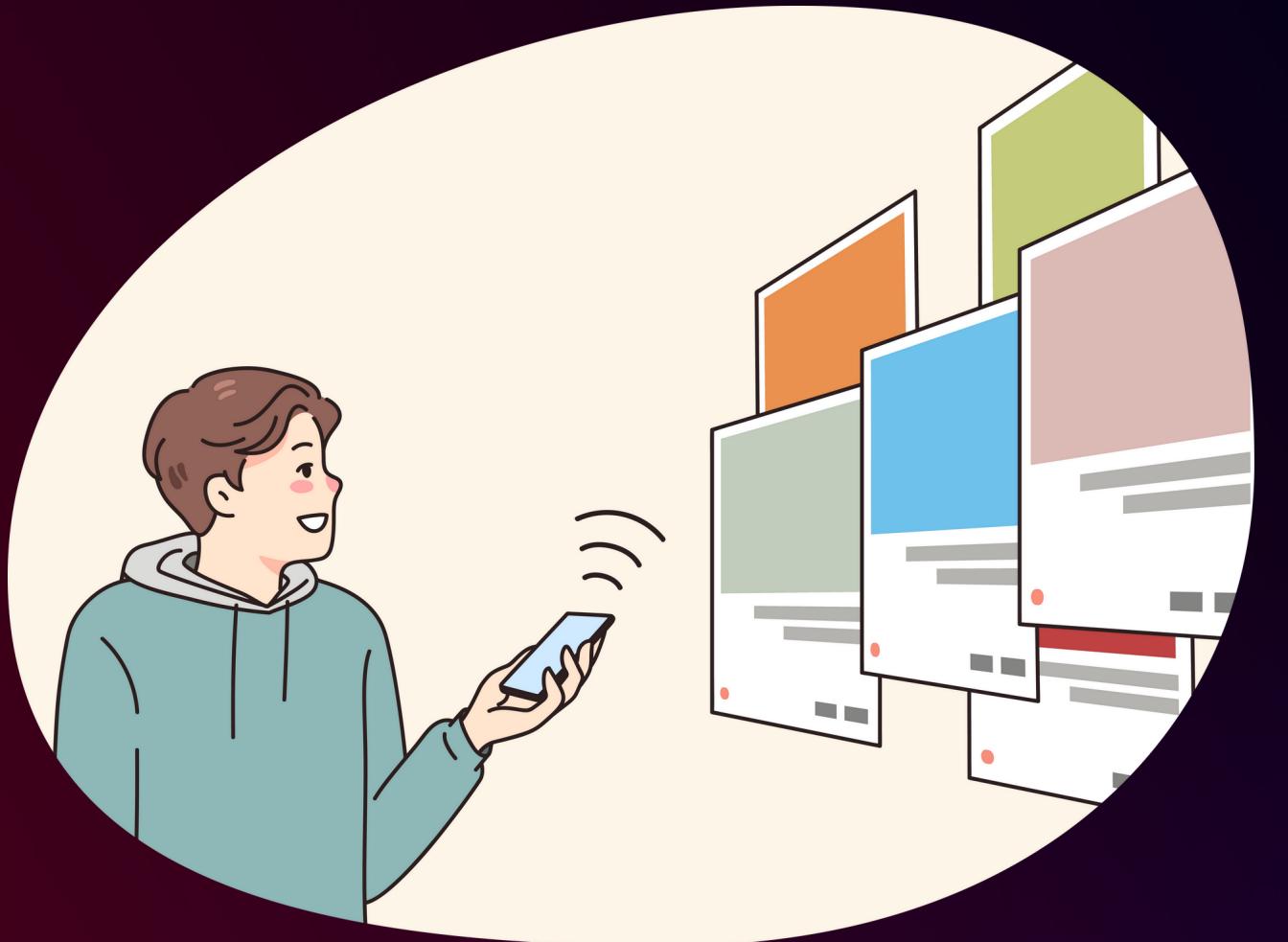


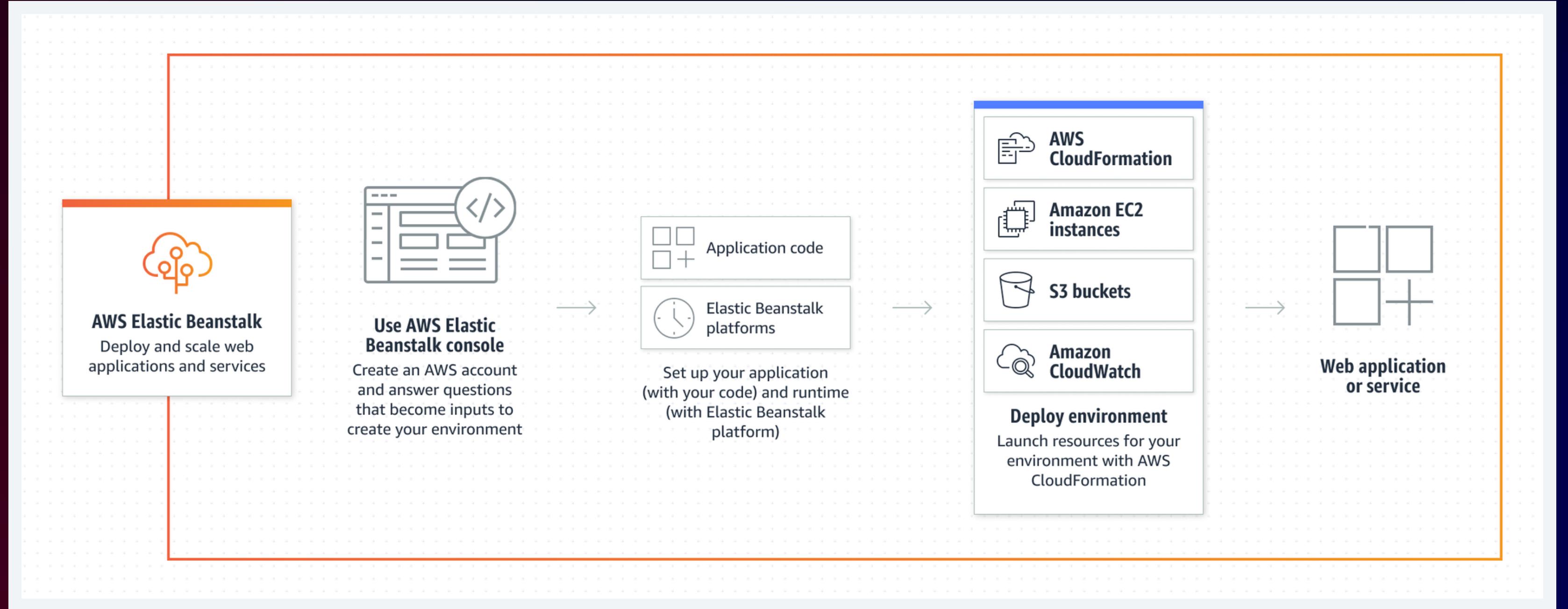




Elastic Beanstalk is a service for deploying
and scaling web applications and services.

Upload your code and Elastic Beanstalk
automatically handles the deployment—from
capacity provisioning, load balancing, and
auto scaling to application health monitoring.





AWS Lambda



Thank you

