

# Serverless Architecture

# Cloud Based?

The cloud is just a metaphor for the Internet.

- PC Mag

Cloud computing is the on-demand delivery of compute power, database storage, applications, and other IT resources through a cloud services platform via the internet with pay-as-you-go pricing.

- Amazon Web Services

# Function-as-a-Service

**Function as a Service (FaaS)** is a category of cloud computing services that provides a platform allowing customers to develop, run, and manage application functionalities without the complexity of building and maintaining the infrastructure typically associated with developing and launching an app [1]. Building an application following this model is one way of achieving a "serverless" architecture, and is typically used when building microservices applications.

FaaS is an extremely recent development in cloud computing, first made available to the world by hook.io in October 2014,<sup>[1]</sup> followed by AWS Lambda,<sup>[2]</sup> Google Cloud Functions and Microsoft Azure Functions in 2016 which are available for public use. IBM's OpenWhisk is an OpenSource / on premises system which can provide the same capabilities. FaaS capabilities also exist in private platforms as demonstrated by Uber's Schemaless triggers [2].

- Wikipedia

# Serverless Computing

**Serverless computing**, also known as **function as a service (FaaS)**, is a cloud computing code execution model in which the cloud provider fully manages starting and stopping of a function's container platform as a service (PaaS) as necessary to serve requests, and requests are billed by an abstract measure of the resources required to satisfy the request, rather than per virtual machine, per hour.<sup>[1]</sup>

Despite the name, it does not actually involve running code without servers.<sup>[1]</sup> The name "serverless computing" is used because the business or person that owns the system does not have to purchase, rent or provision servers or virtual machines for the back-end code to run on. Serverless code can be used in conjunction with code written in traditional server style, such as microservices. For example, part of a web application could be written as microservices and another part could be written as serverless code. Alternatively, an application could be written that uses no provisioned servers at all, being completely serverless.<sup>[2]</sup>

Serverless code can either be triggered by specific events (such as user registration with Amazon Cognito), or be configured to run behind an API management platform in order to expose it as a REST API endpoint.<sup>[2]</sup>

- Wikipedia

## Technology Can Be:

Highly Scalable

Low Maintenance

Loosely Coupled

Easily Reusable

How Many Times  
Have You Heard  
This Before?

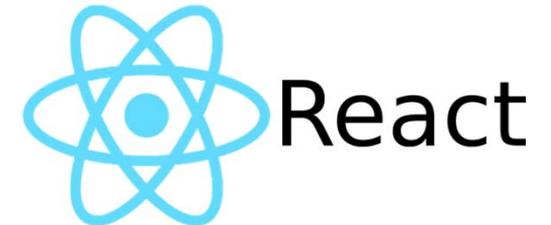
# Technologies



REST API



Vue.js



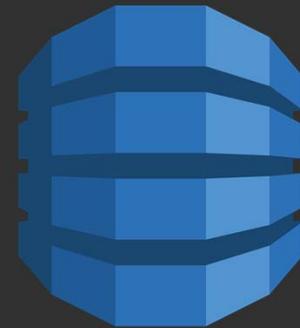
# Serverless Architecture



AWS API Gateway  
GET /api/user/justin



AWS Lambda  
getUser('justin')



AWS DynamoDB  
{ "username" : "justin" }