Serverless

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The developer's dream

Commit code and go to the beach

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We have come a long way...

- Physical machines
- Virtual machines
- Containers
- Platform as a Service (PaaS)
- Function as a Service (FaaS)

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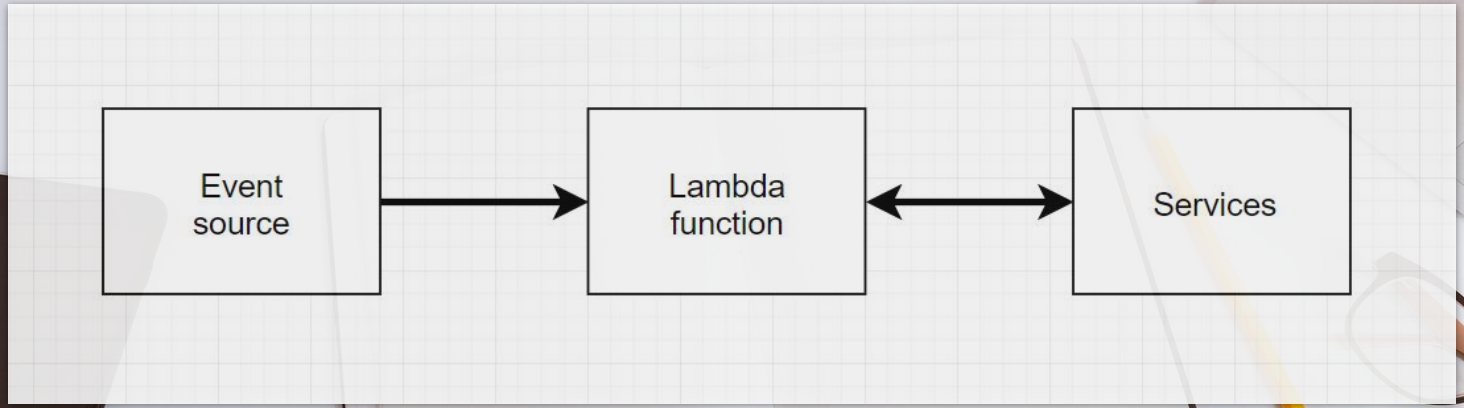
What is serverless?

- Single purpose functions (FaaS)
- Short-lived
- No state
- Select runtimes
  - E.g. Java 11, NodeJS 12.x, Python 3.8
- Event driven
- Billing per invocation
- Auto-scaling

Photo by Glen Carrie on Unsplash



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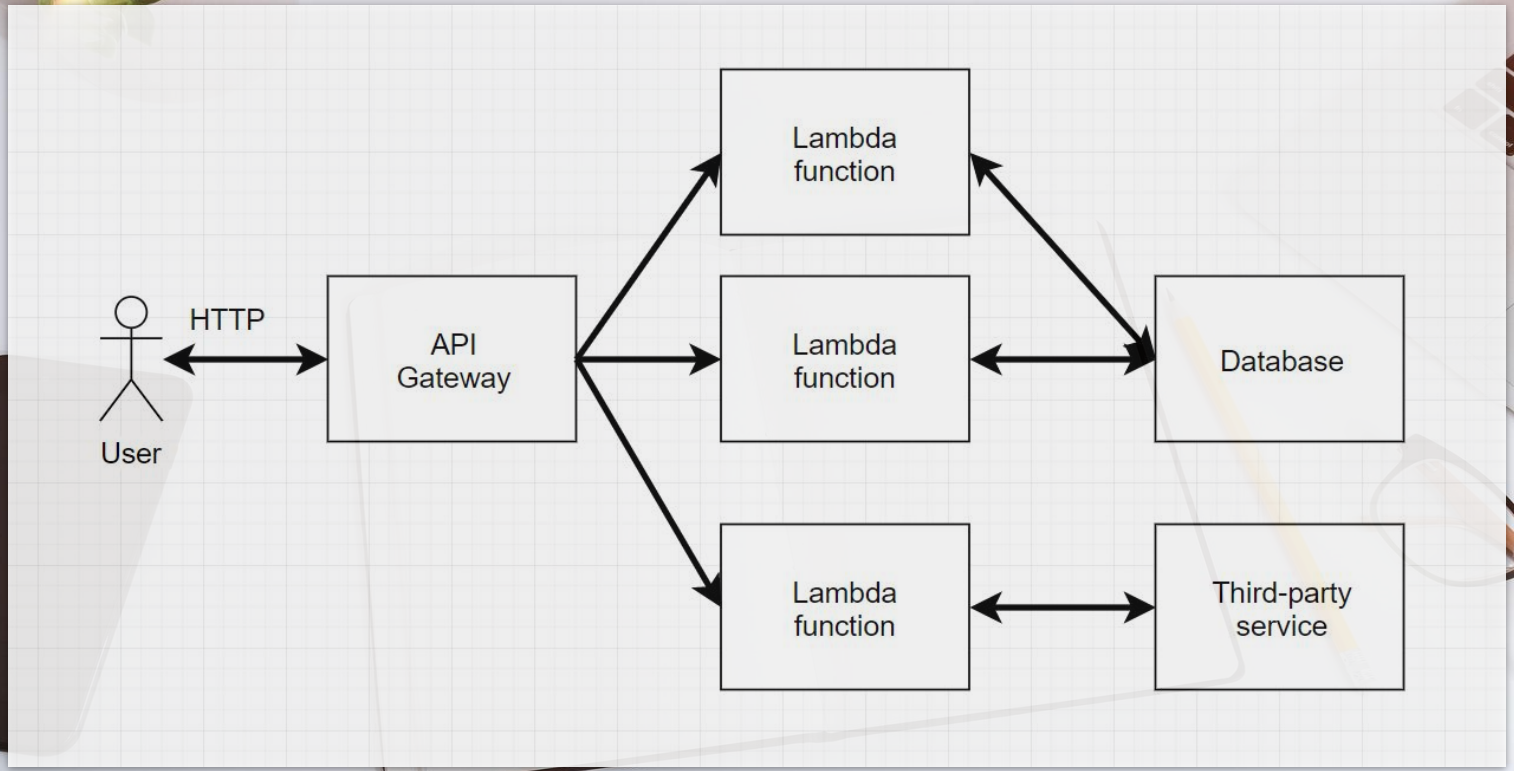

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When would you use it?

Your application characteristics:

- Event driven architecture
- Sporadic and infrequent invocation
- Stateless backend

Your team characteristics:

- Small team / limited DevOps resources
- Frequently changing requirements

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Why would you use it?

- Reduced cost
  - 128MB RAM: $ 0.000000208 / 100ms
  - or $0.208 / 1M invocations (<100ms)
- Risk mitigation
- Easy scaling
- Easier monitoring

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Drawbacks

- Vendor lock-in
- Slow cold start
- Not good for “bigger” tasks
- Architectural complexity
- Tooling

Photo by wu yi on Unsplash

OK, where do I get mine?

- AWS Lambda
- Google Cloud Functions
- Microsoft Azure Functions
- Cloudflare workers
- many more...

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Photo by Maxime Agnelli on Unsplash

```
plugins:

- serverless-offline # run functions on your dev environment
- serverless-webpack # dependency management and bundling
- serverless-pseudo-parameters # access to AWS parameters
```

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thank you!

we are hiring!

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