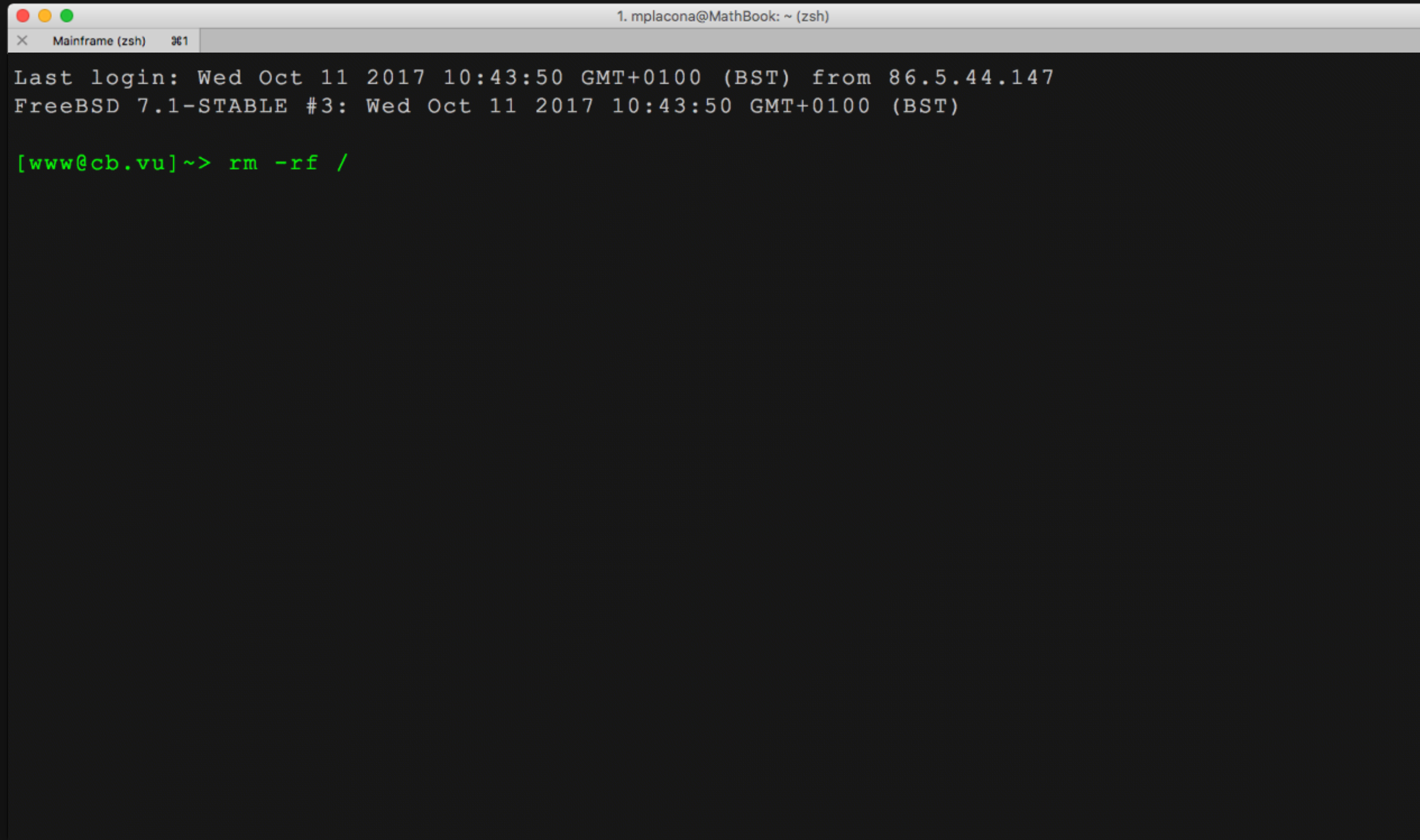


# Going Serverless with Kotlin



```
1. mplacona@MathBook: ~ (zsh)
Mainframe (zsh) 361
Last login: Wed Oct 11 2017 10:43:50 GMT+0100 (BST) from 86.5.44.147
FreeBSD 7.1-STABLE #3: Wed Oct 11 2017 10:43:50 GMT+0100 (BST)

[www@cb.vu]~> rm -rf /
```



# *SERVER ⚡ LESS*



## Marcos Placona



 **marcos\_placona**

 **mplacona**

 **androidthings.rocks**

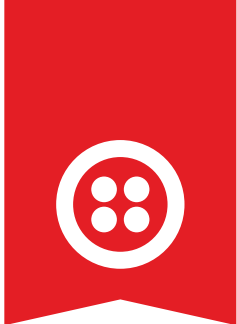
 **androissecurity.info**

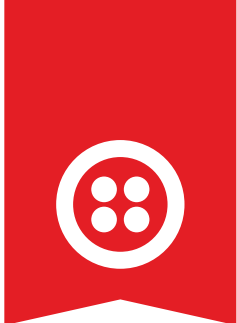


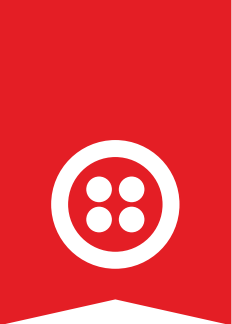
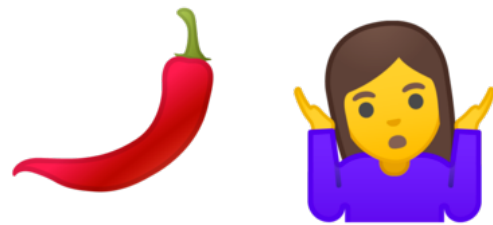












+

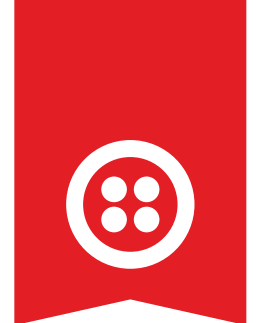






“Serverless architectures refer to applications that significantly depend on third-party services or on custom code that's run in ephemeral containers.”


–Martin Fowler



Geoff Greer on Twitter: "server x"

Twitter, Inc. [US] | https://twitter.com/ggreer/status/839171195920498688

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Geoff Greer










@ggreer

Follow

serverless /'sɜːvə-lɪs/  
(adj) 1. Using someone else's Kubernetes cluster.

5:49 PM - 7 Mar 2017


385 Retweets 523 Likes




4

385

523



Tweet your reply



Rafi Khardalian @rmk40 · Mar 8

Replying to @ggreer

@markimbriaco

We've had a lot of stupid terms in tech over the years, but "serverless" takes the cake.

2 5 11

4 more replies

Geoff Greer

@ggreer

I like to write code. CEO & co-founder of @Floobits. Author of ag: [github.com/ggreer/the\\_silence](https://github.com/ggreer/the_silence). Previously at Rackspace, Cloudkick, Bloglines.

© 2017 Twitter

About

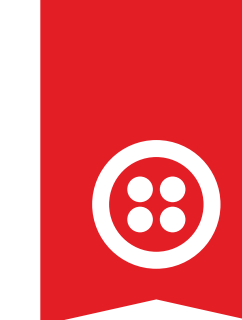
Help Center

Terms

Privacy policy

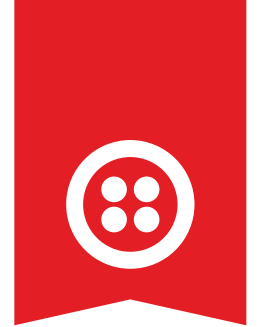
Cookies

Ads info



**no ops**





```
version: "3"

services:
  vote:
    build: ./vote
    command: python app.py
    volumes:
      - ./vote:/app
    ports:
      - "5000:80"
    networks:
      - front-tier
      - back-tier

  result:
    build: ./result
    command: nodemon --debug server.js
    volumes:
      - ./result:/app
    ports:
      - "5001:80"
      - "5858:5858"
    networks:
      - front-tier
      - back-tier

  worker:
    build:
      context: ./worker
    networks:
      - back-tier
```



```
- 5001:80
- "5858:5858"
networks:
  - front-tier
  - back-tier

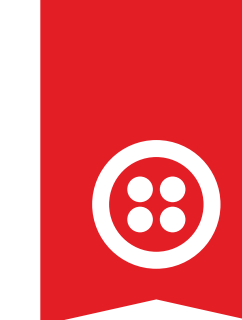
worker:
  build:
    context: ./worker
  networks:
    - back-tier

redis:
  image: redis:alpine
  container_name: redis
  ports: ["6379"]
  networks:
    - back-tier

db:
  image: postgres:9.4
  container_name: db
  volumes:
    - "db-data:/var/lib/postgresql/data"
  networks:
    - back-tier

volumes:
  db-data:

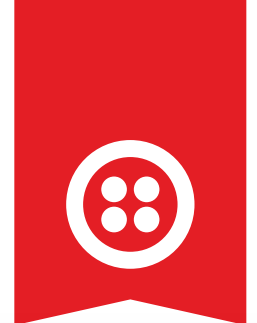
networks:
  front-tier:
  back-tier:
```



**free**

**Not really**








Serverless Cost Calculator

serverlesscalc.com

Serverless Cost Calculator

Peter Sbarski and the A Cloud Guru Team.

Grab our book [Serverless Architectures on AWS.](#)



© Peter Sbarski (A Cloud Guru) | Design: [HTML5 UP](#)

Calculating cost for AWS Lambda, Azure Functions, Google Cloud Functions, and IBM OpenWhisk

1 Million!


1000000


500


128MB


☒ True ☐ False


☒ True ☐ False

 [Number of Executions](#)

 [Estimated Execution Time \(ms\)](#)

 [Memory Size](#)

 [Include Free-Tier](#)



 [HTTP Requests](#)

Vendor	Request Cost	Compute Cost	Total
AWS Lambda	\$0.00	\$0.00	\$0.00
Azure Functions	\$0.00	\$0.00	\$0.00
Google Cloud Functions	\$0.00	\$0.00	\$0.00
IBM OpenWhisk	\$0.00	\$0.00	\$0.00

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 Estimated Execution Time (ms)


128MB

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☒ True ☐ False

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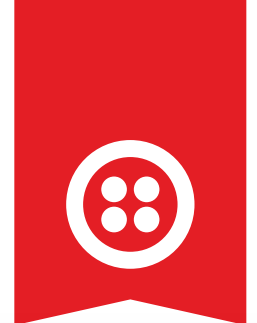
 HTTP Requests

Vendor	Request Cost	Compute Cost	Total
AWS Lambda	\$0.00	\$0.00	\$0.00
Azure Functions	\$0.00	\$0.00	\$0.00
Google Cloud Functions	\$0.00	\$0.00	\$0.00
IBM OpenWhisk	\$0.00	\$0.00	\$0.00



cheap








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serverlesscalc.com

Serverless Cost Calculator

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7000000

>5 Million!

Number of Executions

500

</> Estimated Execution Time (ms)

128MB

⚙️ Memory Size

☒ True ☐ False

☒ True ☐ False

☒ Include Free-Tier



☒ HTTP Requests

Vendor	Request Cost	Compute Cost	Total
AWS Lambda	\$22.20	\$0.63	\$22.83
Azure Functions	\$1.20	\$0.60	\$1.80
Google Cloud Functions	\$2.00	\$5.09	\$7.09
IBM OpenWhisk	\$0.00	\$0.64	\$0.64

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Calculating cost for AWS Lambda, Azure Functions, Google Cloud Functions, and IBM OpenWhisk

7000000

>5 Million!


500

</>


128MB

☒ True ☐ False


☒ True ☐ False




Number of Executions




Estimated Execution Time (ms)



Memory Size

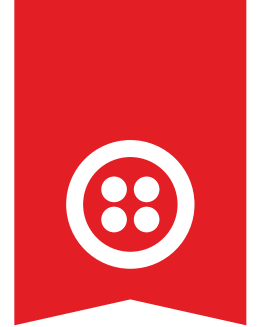


Include Free-Tier

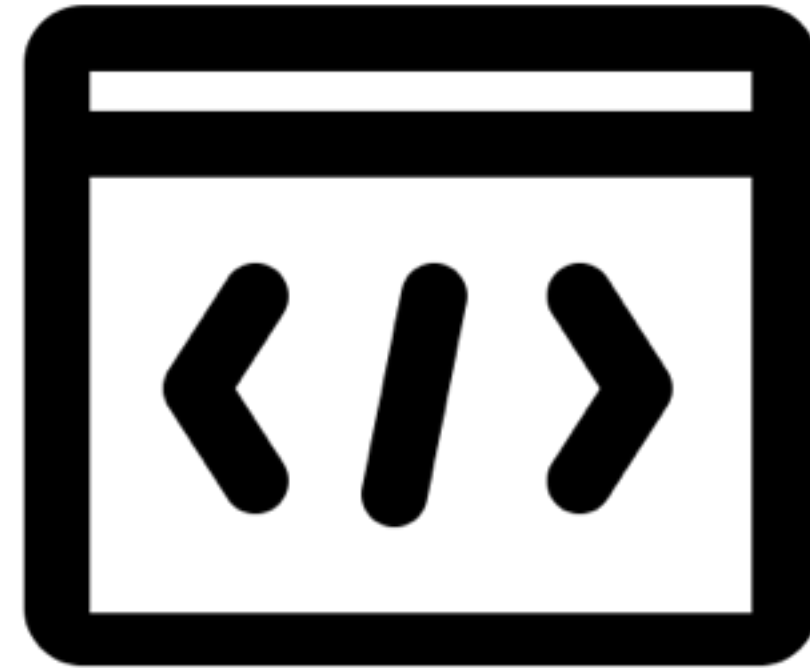


HTTP Requests

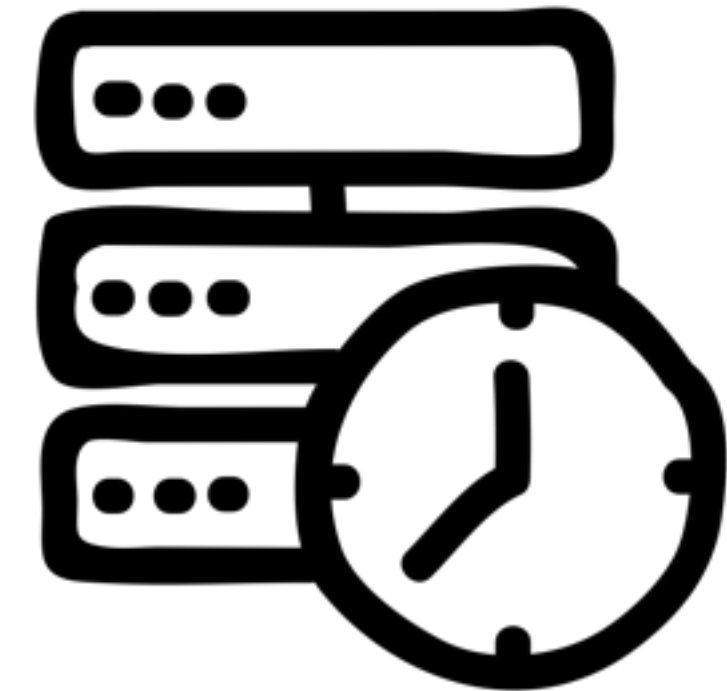
Vendor	Request Cost	Compute Cost	Total
AWS Lambda	\$22.20	\$0.63	\$22.83
Azure Functions	\$1.20	\$0.60	\$1.80
Google Cloud Functions	\$2.00	\$5.09	\$7.09
IBM OpenWhisk	\$0.00	\$0.64	\$0.64



**10 Minutes**

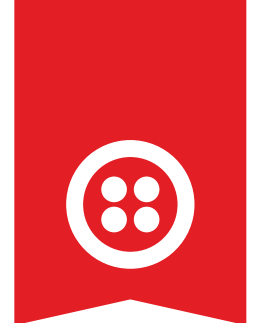


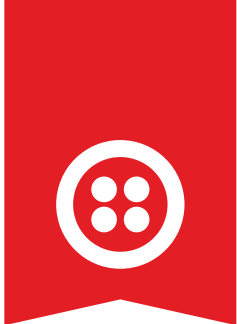
**1 Minute**

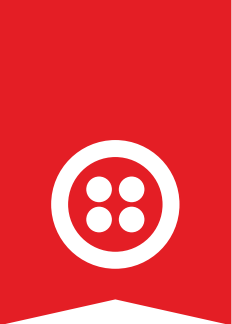
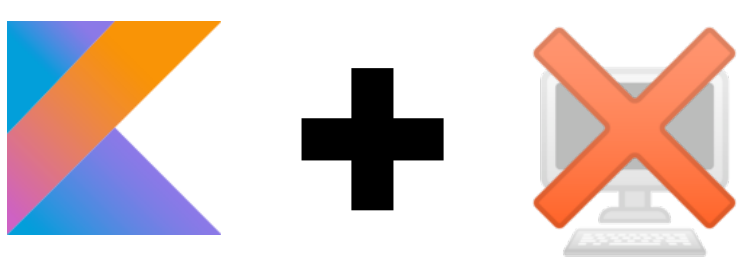


**9 Minutes**

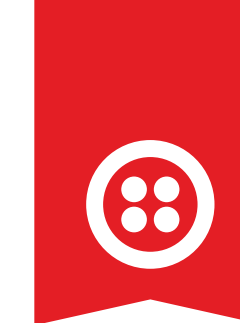
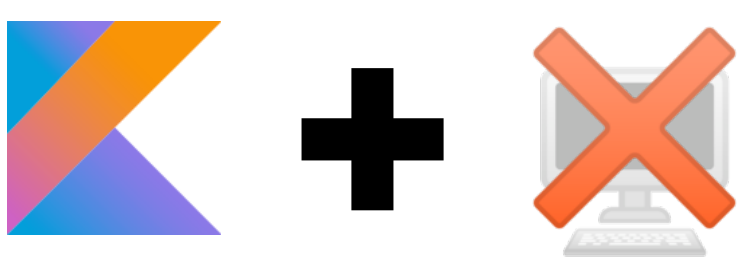




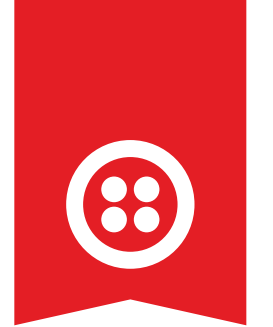
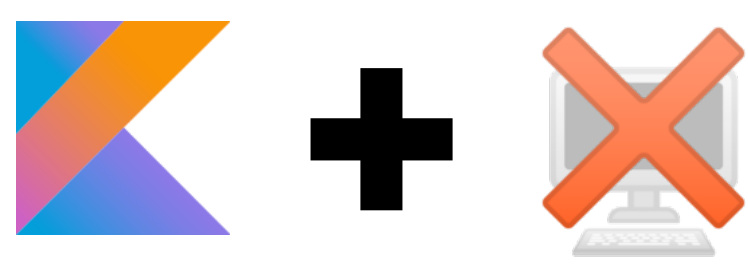








 **demo** 



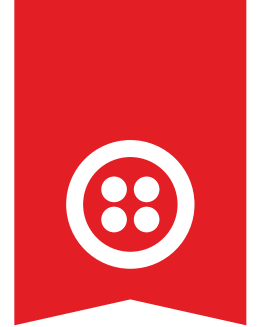
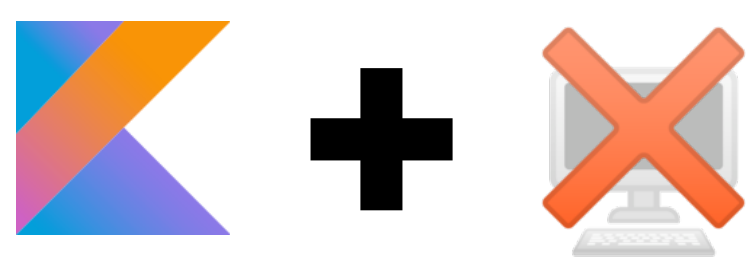
Pros:

- It doesn't care about what you're building
- No vendor dependencies

Cons:

- Docs are fragmented AF!

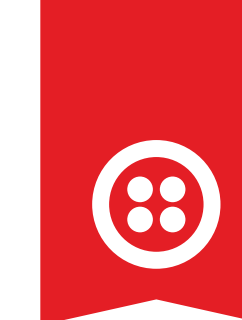
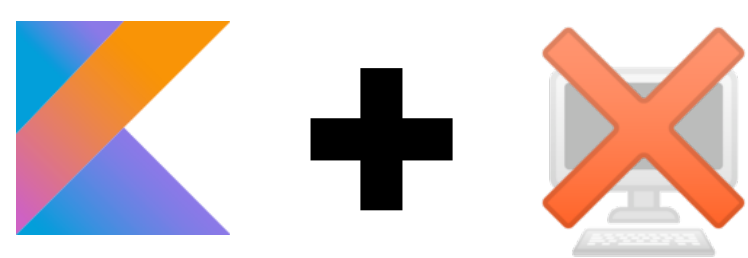




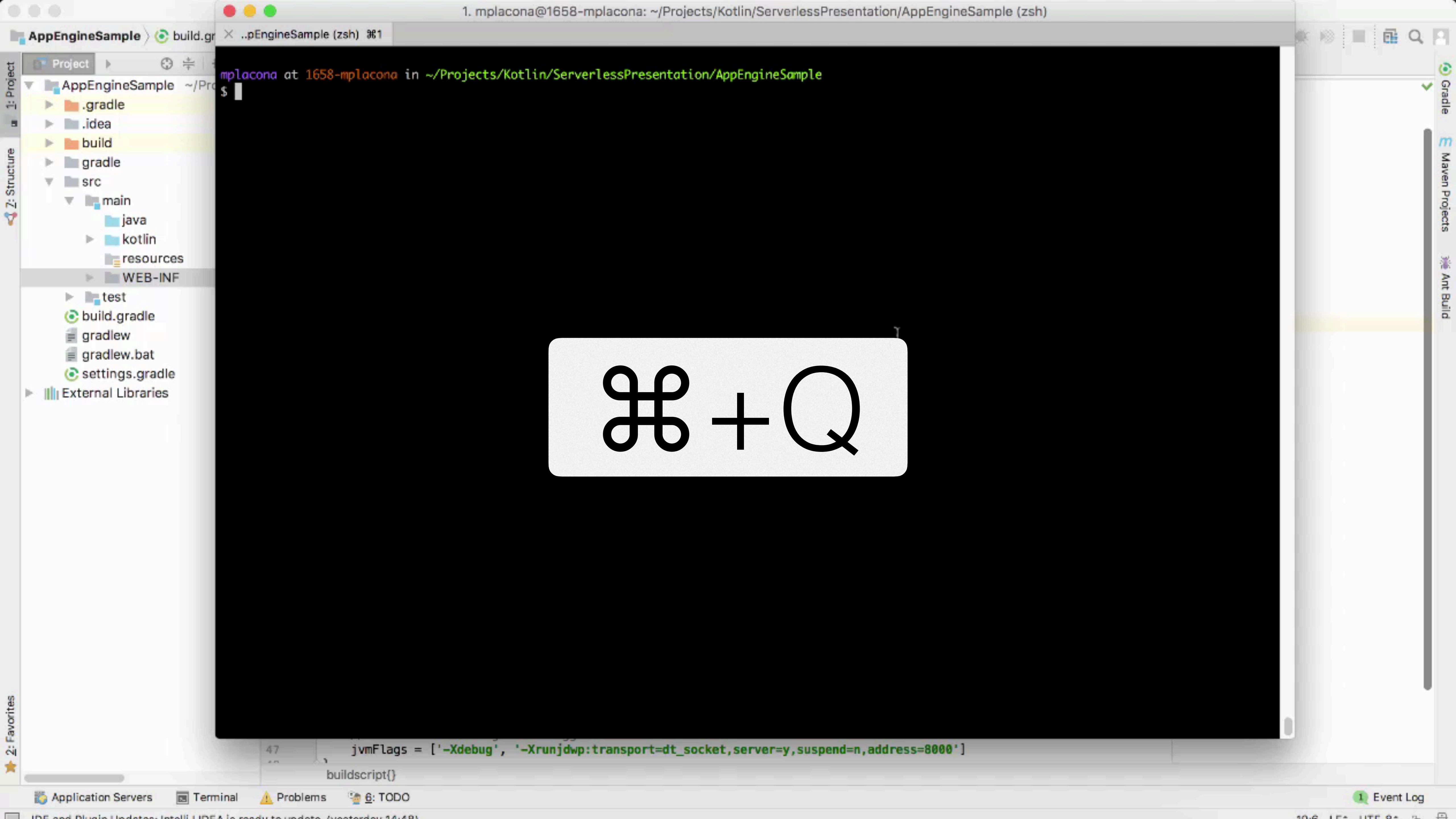
Pricing:

- FREE for up to 5M requests a month

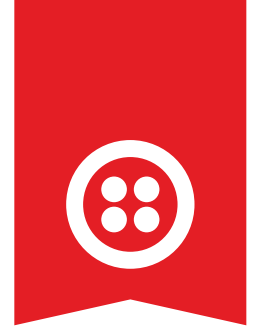
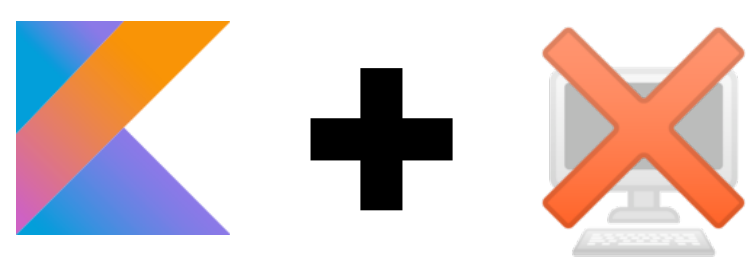




demo λ



⌘ + Q

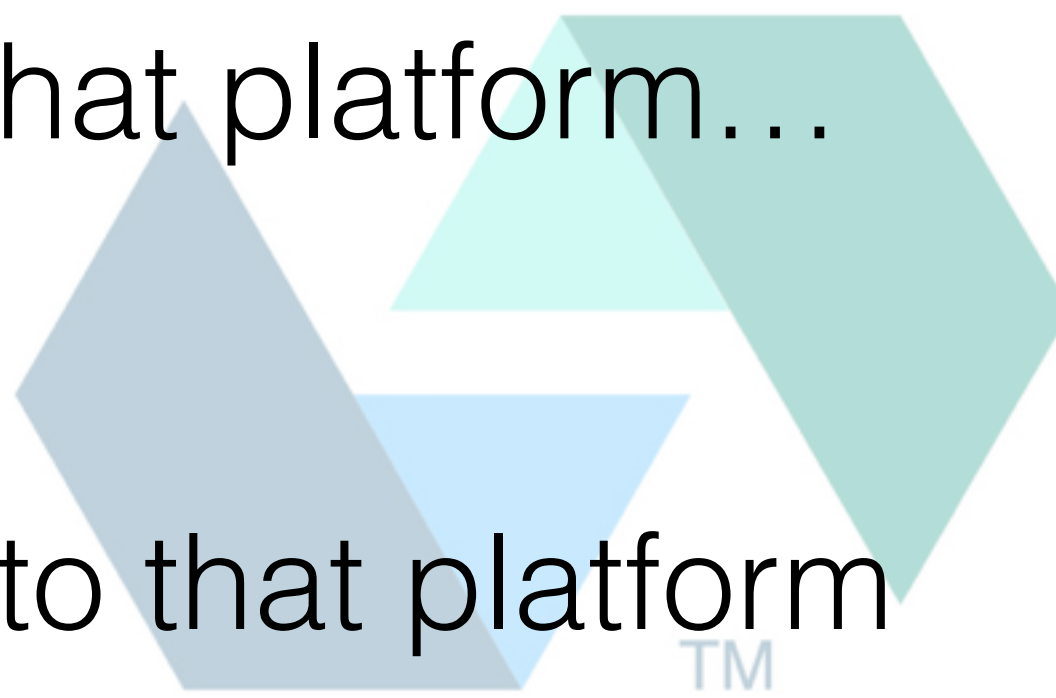


Pros:

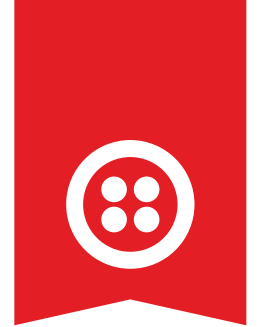
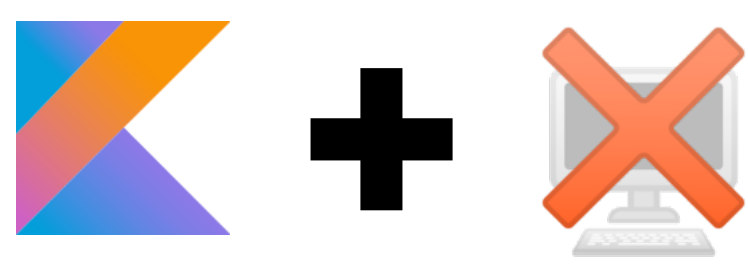
- If you're already on that platform...

Cons:

- Your code is locked to that platform





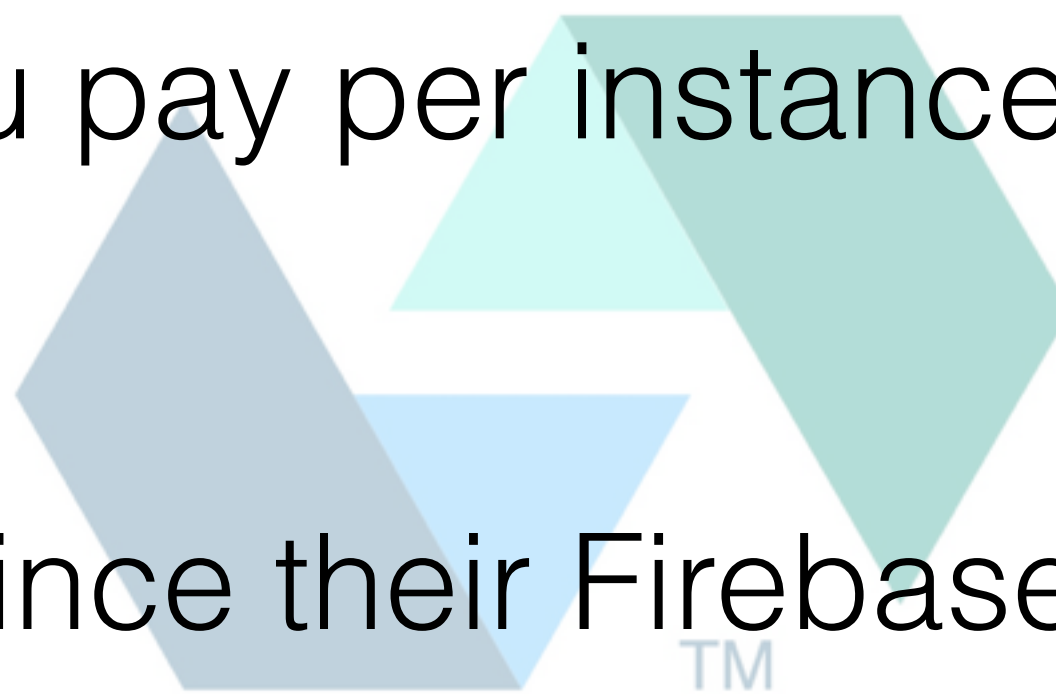


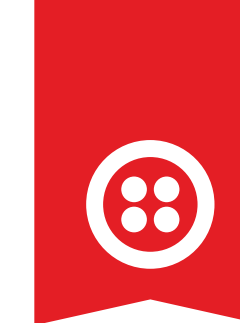
Pricing:

- Unlike the others you pay per instance. Not FaaS

Caveat:

- Unfair comparison since their Firebase Cloud does that





**story time**



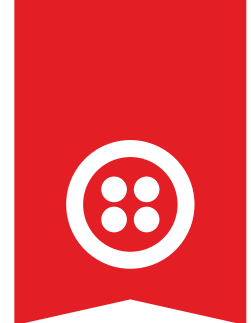
Working from home

















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## Build a smart doorbell with Twilio and Android Things



by Marcos Placona on June 6, 2017



Working from home and being an avid Marilyn Manson fan means I usually miss out when someone's knocking on my door. We have a doorbell but it's not nearly

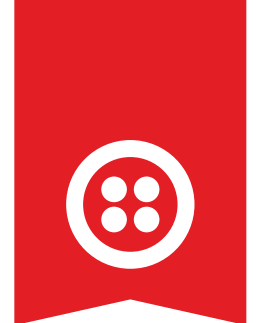
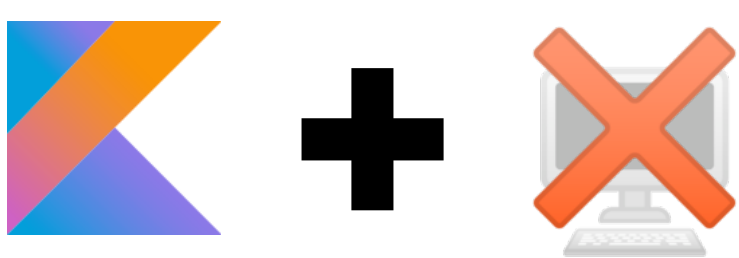
Power modern communications.  
Build the next generation of voice  
and SMS applications.

[Start Building For Free](#)

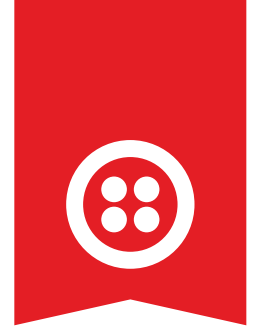
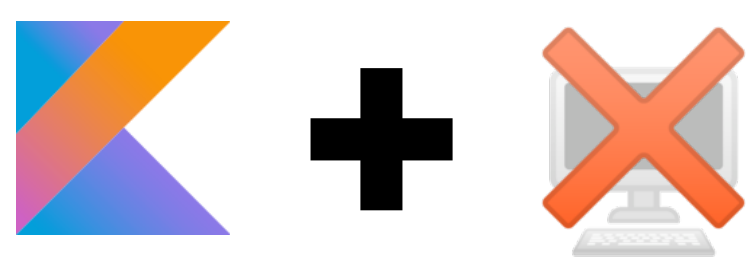
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### Posts By Product



**demo**

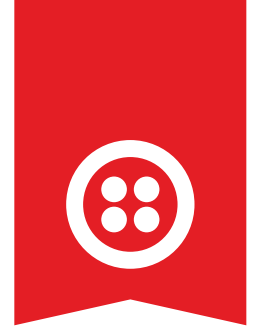
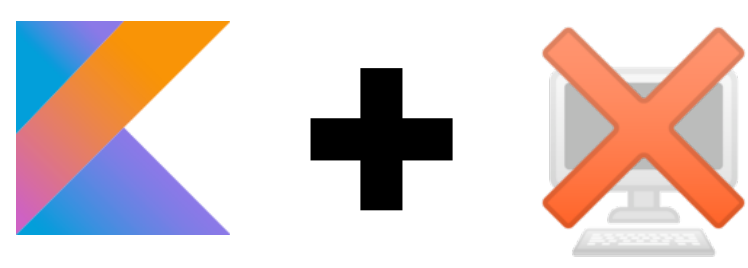


### Pros:

- A lot of people already use AWS. Easy to troubleshoot
- No vendor dependencies
- Comprehensive API Console

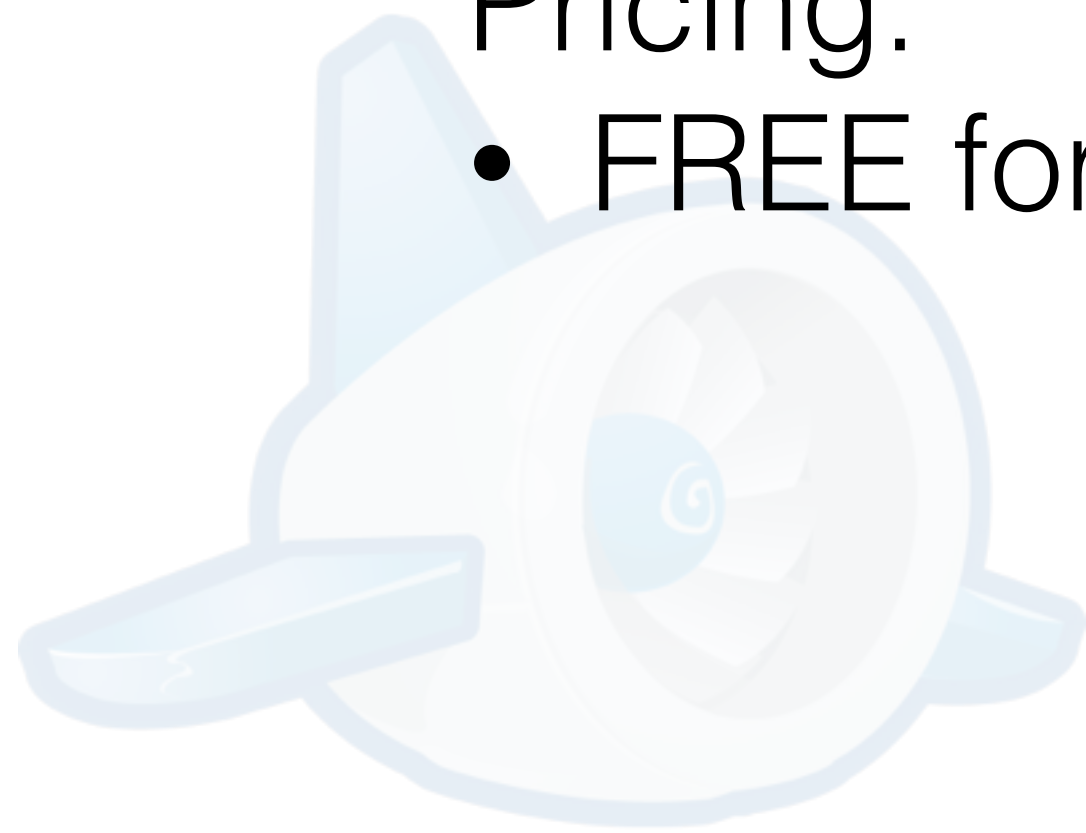
### Cons:

- Docs are a bit all over the place
- Free tier is not as generous
- Can't invoke Lambda's directly via HTTP

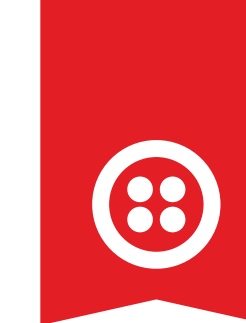


Pricing:

- FREE for up to 1M requests a month







**serverless  $\neq$  future**

# *SERVER ⚡ LESS*



## Marcos Placona



 **marcos\_placona**

 **mplacona**

 **androidthings.rocks**

 **androissecurity.info**

