



# Getting Started with Firebase

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currently writing my thesis

neural networks in the web

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# The Problem

- Fat clients
- Backends always very similar (“dumb backend”)
- Lots of code for a simple backend
- Hosting (\$\$\$)
- Security
- Monitoring
- Scaling
- ...

# The Solution

- BaaS - “Backend as a Service”
- a.k.a Serverless Apps
  
- Hosted Service
- Generic APIs (`get` and `set`)
- Register and ready to go (“in the cloud”)



# Firebase 🎉

- Maintained by Google since 2014
- Realtime-Database
- Lots of auxiliary features
- Free for small apps
- iOS, Android and Web ...

iOS



# Features



Authentication by Google, Facebook, GitHub, E-Mail



Integrated Hosting



File-Storage



Security Rules for Database



Cloud Messaging

# Web-like features for Android and iOS



Analytics

→ Google Analytics



Dynamic Links

→ `<a href="myapp.com/deep/link">Click me</a>`



App Indexing

→ Webmaster Tools



AdWords Integration

→ AdWords

# Example

- Twitter-Clone
- 30 mins from scratch
- HTML / CSS / Javascript

## Features:

- Login via Google
- Realtime-Updates
- Search-Function





# Demo-Time

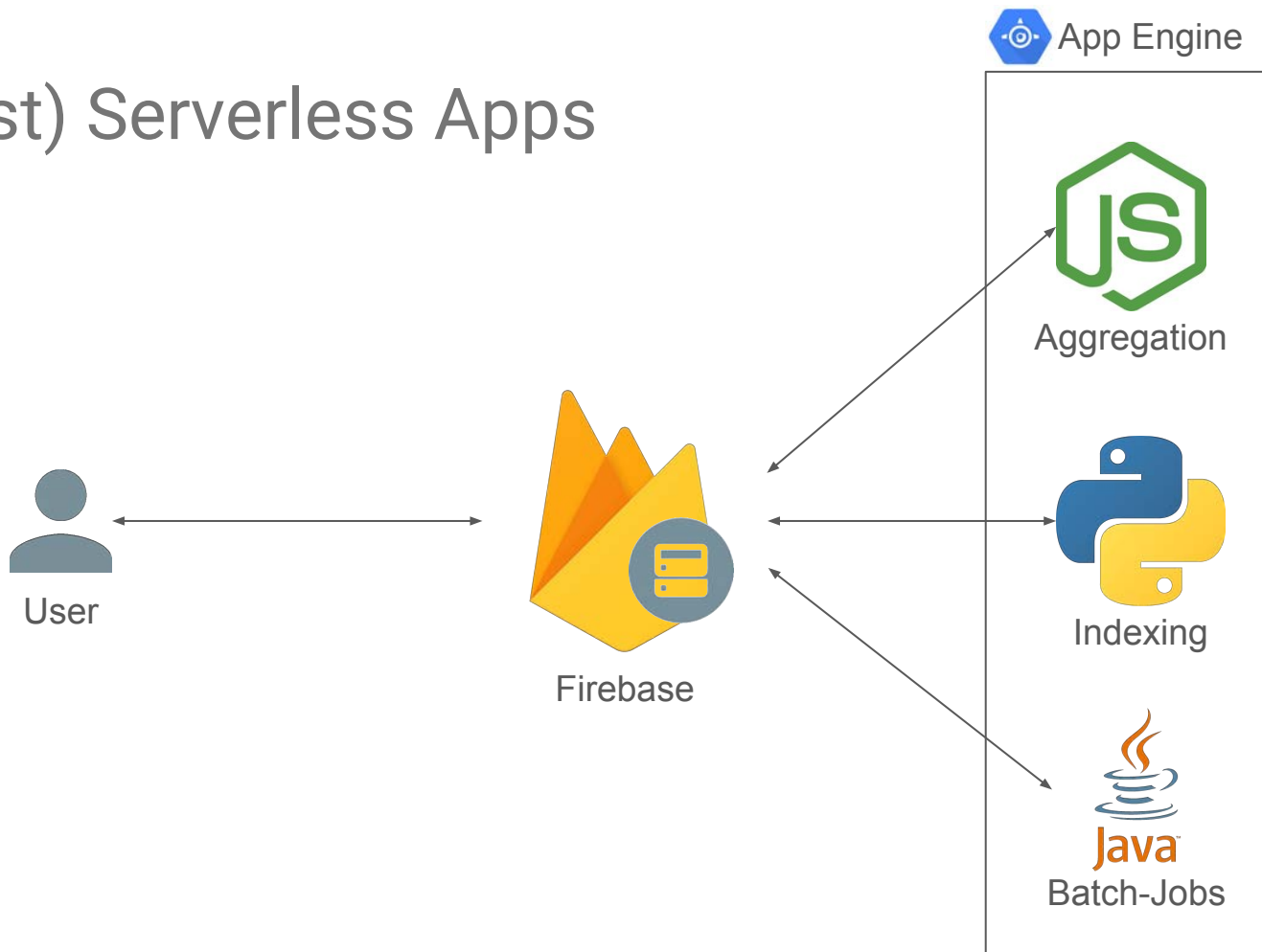


# Takeaways

- Very fast prototyping
- Security can be tricky
- No full-fledged database
  - Advanced Indexing
  - Aggregation
  - ...

→ Possible solution: Microservices connected to Firebase

# (Almost) Serverless Apps



# Upshot

- Fast development
- Easy to use
- Focus on the business logic
- Lots of features
- Not suited for all apps



# Thank you

Code: [github.com/flash1293/gdg-firebase-demo](https://github.com/flash1293/gdg-firebase-demo)