

productiv

Helping busy people organize their time

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Outline

1. Demo
2. Dive into code
3. Underlying tools and technologies
4. Challenges
5. Key learning takeaways
6. Future work

Demo

Mon, Jun 25 1:56 PM

Activity

Start time

End time

Description (optional)

Add

Overview	
Sun, Jun 24 at 14:30 - 15:30	Oral exam
Sat, Jun 23 at 18:51 - 20:51	Web Tech Project
Sun, Jun 24 at 17:05 - 22:05	Software Engineering

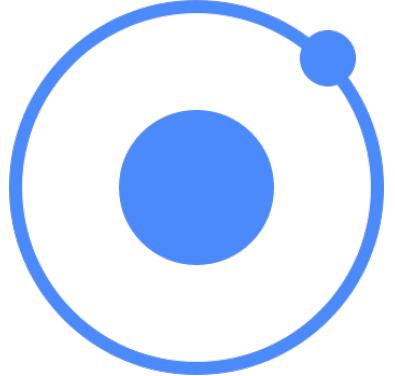
<https://productiv-cdd20.firebaseio.com/>

Dive into code

```
▲ api
  ▲ controllers
    JS activityController.js
  ▲ models
    JS activityModel.js
    JS userModel.js
  ▶ node_modules
  ▲ routes
    JS activityRoutes.js
  {} package-lock.json
  {} package.json
  JS server.js
```

```
▲ client
  ▷ .sourcemaps
  ▷ node_modules
  ▲ src
    ▲ app
      TS app.component.ts
      ◄ app.html
      TS app.module.ts
      ↗ app.scss
      TS main.ts
    ▷ assets
    ▲ models
      TS ActivityModel.ts
    ▲ pages
      ▲ overview
        ◄ overview.html
        ↗ overview.scss
        TS overview.ts
      ▷ tabs
    ▲ track
      ◄ track.html
      ↗ track.scss
      TS track.ts
    ▲ providers
      ▲ activity-service
        TS activity-service.ts
```

Underlying tools and technologies



HTML



express



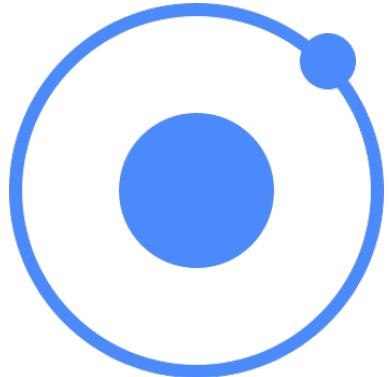


HTML



express

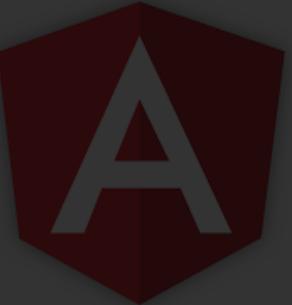




HTML



express





HTML



express



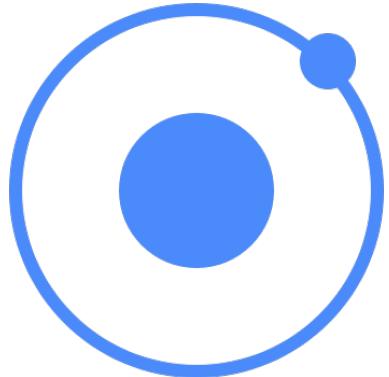


HTML



express





HTML



express



Challenges

1. Backend services
2. Front and backend communication

Backend services – AWS mobile hub



Pros

One application, many services

User authentication

Database

Cloud logic (lambda functions)

Hosting

Cheap \$\$

Cons

Heavy, messy boiler plate code

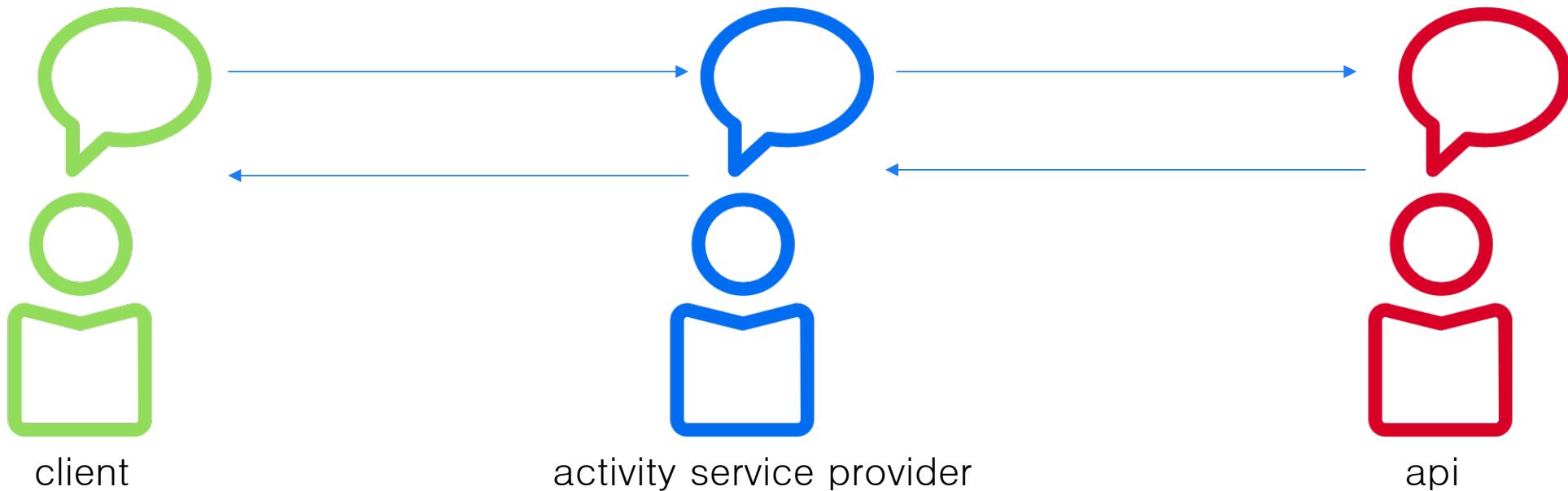
Lacks modularity

Front and backend communication



How can the client talk to the API?

Through Activity Service Provider



Future work

- Automatic reload of activities.
- User authentication.
- Deployment of server-side API.

Key learning takeaways

- Resource modeling.
- RESTful API design.
- Modularization of code.
- Source control.

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```
src
  app
    app.component.ts
    app.html
    app.module.ts
    app.scss
    main.ts
  assets
  models
    ActivityModel.ts
  pages
    overview
      overview.html
      overview.scss
    overview.ts
  tabs
    track
      track.html
      track.scss
    track.ts
  providers
    activity-service
    activity-service.ts
```