



@ngrx/store

Using HttpClient Directly



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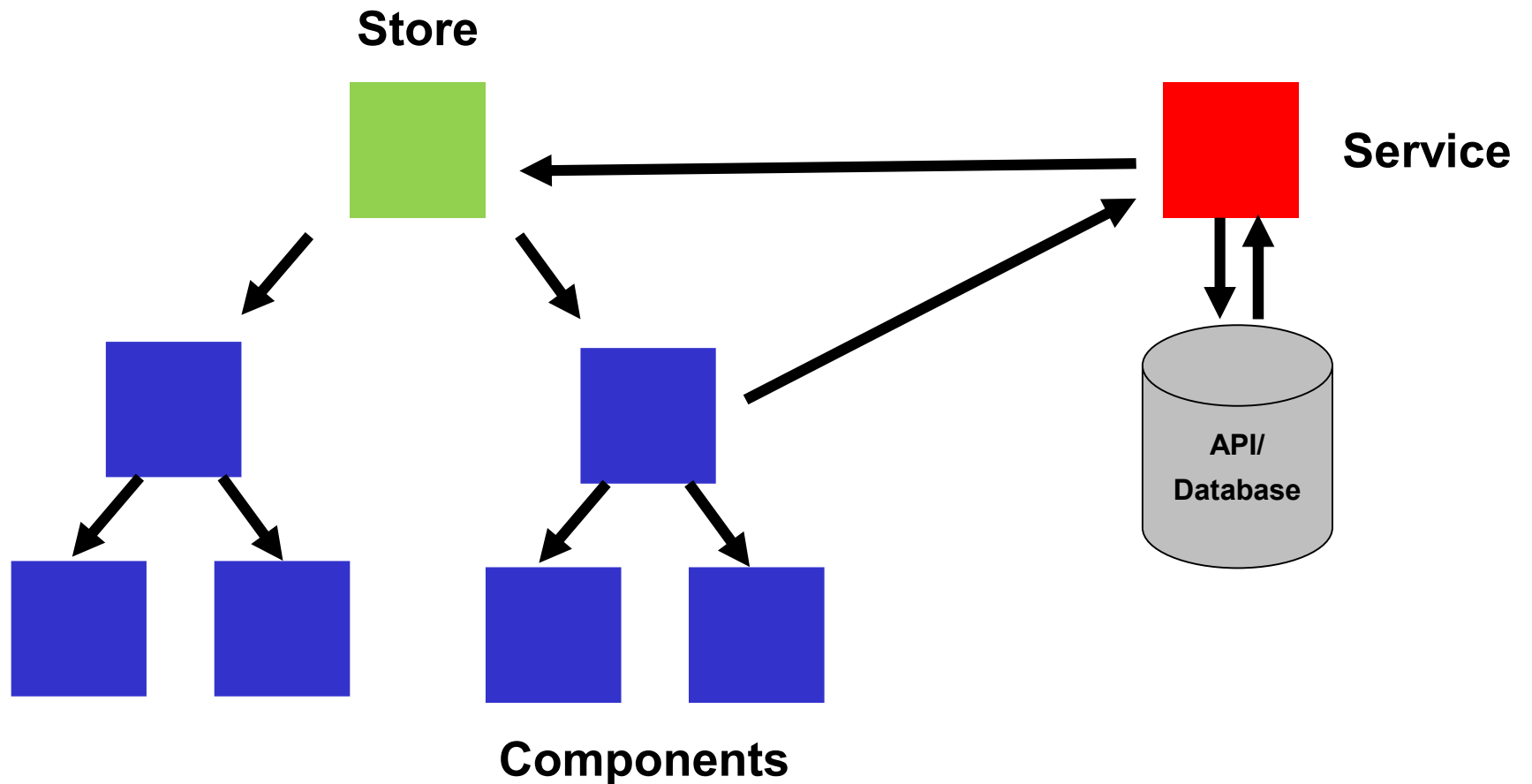


Using HttpClient directly

Talking RESTful to real API's – plain and simple!

Architecture

Call API in Service, dispatch to Store, subscribe in Components

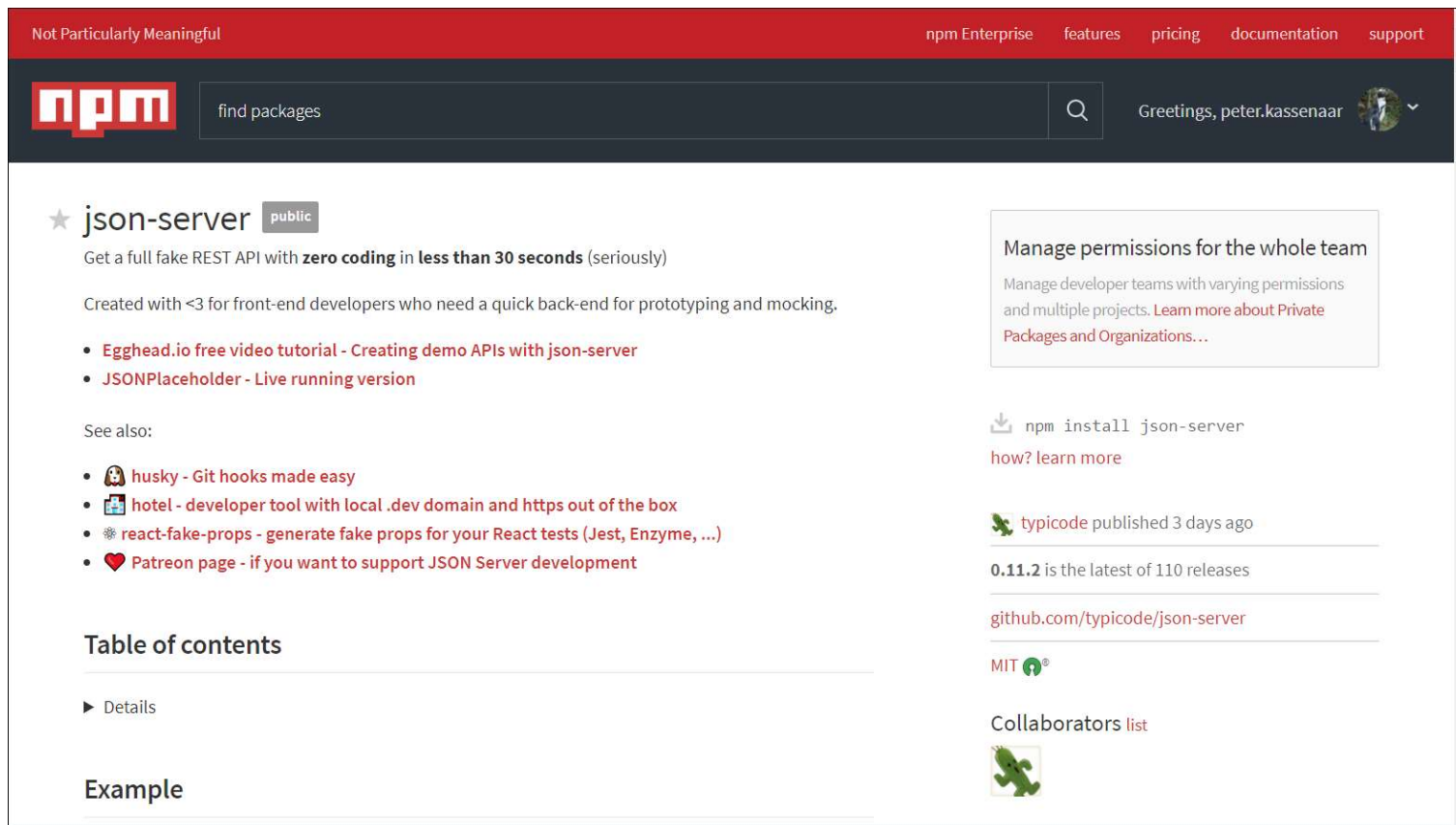


Actions and Reducers

- **No changes** on Actions and reducers.
- Add a **service** (if you haven't done so already) that talks to the outside world
- When a result comes back, **dispatch** the result to the store.

First – add a server

- We're using `json-server` here
- Provides a simple RESTful API, based on `.json`-file in webroot



The screenshot shows the npm package page for `json-server`. The page has a red header with the npm logo and navigation links. The main content area is white and contains the package name, a description, and a list of related packages. On the right side, there is a sidebar with additional information, including a command to install the package and a link to the GitHub repository.

Not Particularly Meaningful

npm Enterprise features pricing documentation support

npm find packages

Greetings, peter.kassenaar

★ json-server public

Get a full fake REST API with **zero coding** in **less than 30 seconds** (seriously)

Created with <3 for front-end developers who need a quick back-end for prototyping and mocking.

- [Egghead.io free video tutorial - Creating demo APIs with json-server](#)
- [JSONPlaceholder - Live running version](#)

See also:

- [husky - Git hooks made easy](#)
- [hotel - developer tool with local .dev domain and https out of the box](#)
- [react-fake-props - generate fake props for your React tests \(Jest, Enzyme, ...\)](#)
- [Patreon page - if you want to support JSON Server development](#)

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Example

Manage permissions for the whole team

Manage developer teams with varying permissions and multiple projects. [Learn more about Private Packages and Organizations...](#)

npm install json-server

[how? learn more](#)

[typicode](#) published 3 days ago

0.11.2 is the latest of 110 releases

[github.com/typicode/json-server](#)

MIT

Collaborators

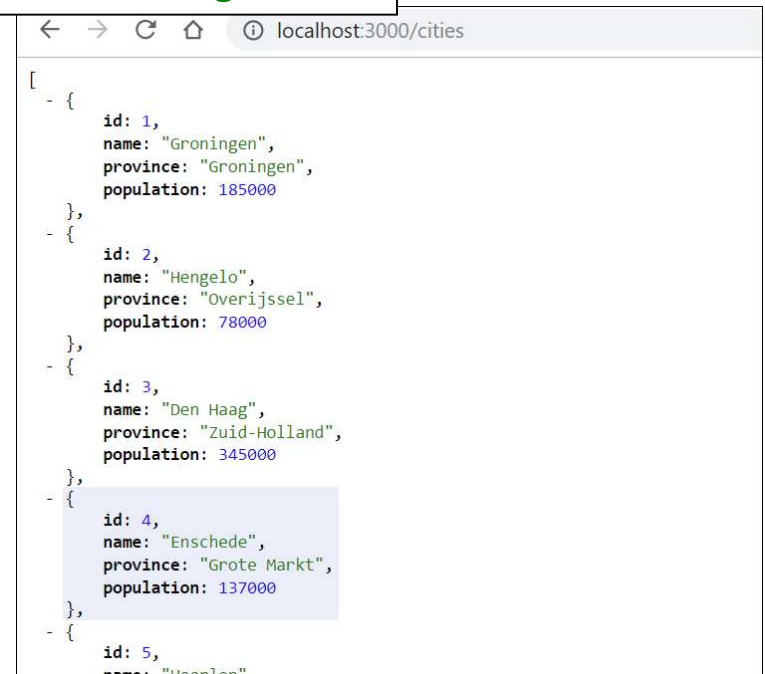
[list](#)

<https://www.npmjs.com/package/json-server>

Add a script to start json-server

- NOT necessary if you talk to a 'real' endpoint.
- But we're using `cities.json` and `json-server` here. So add to `package.json`

```
"json-server": "json-server --watch cities.json"
```



Add HttpClientModule to application

- Update `app.module.ts` and `city.service.ts`
- Since we're using services, the HTML and Component are unaltered
- Use `HttpClientModule` in Module and Service

```
import {http[Client]Module} from '@angular/common/http';
...
@NgModule({
  ...
  imports      : [
    HttpClientModule,
  ],
  ...
})
```

Edit city.service.ts

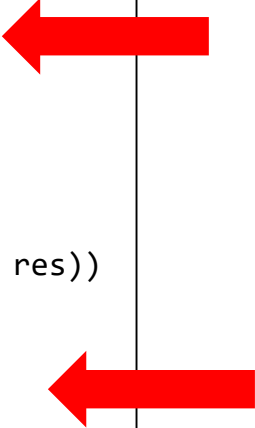
Add `Http` and call API in `loadCities()`.

Upon subscription, dispatch data to the store

```
// Some stuff that our server (json-server) needs:
const BASE_URL = 'http://localhost:3000/cities';
const HEADERS = {
  headers: new HttpHeaders().set('Content-Type', 'application/json')
};

@Injectable({ providedIn: 'root' })
export class CityService {
  constructor(private store: Store<CitiesState>,
              private http: HttpClient) {
    this.loadCities(); // load cities once the service is started
  }

  loadCities() {
    this.http.get(BASE_URL)
      .pipe(
        tap(res => console.log('We talked to json-server and received: ', res))
      )
      .subscribe((response: City[]) => {
        return this.store.dispatch(loadCities({cities: response}));
      });
  }
}
```



Adding and deleting cities

- Same procedure...

```
removeCity(city: City) {  
  this.http.delete(BASE_URL + `/${city.id}`, HEADERS)  
    .subscribe(() => {  
      console.log('City removed', city);  
      // optimistic delete - assume everything went fine in the backend,  
      this.store.dispatch(removeCity({city}));  
    });  
}  
addCity(city: City){  
  ...  
}
```

Workshop

- Use your own app, add a service and call HTTP to load .json-data
- OR: Start from `../215-ngrx-store-http`
- Make yourself familiar with the store concepts and http-flow. Study the example code.
- Add the `addCity()` method on the service, that adds a city to the .json file via json-server
- Add the `updateCity()` method on the service, to edit an existing city

