

Work Log

Time	Progress
2019.1.29 morning	Download and install Nodejs. Try use AngularJS, found deprecated. Start learning Angular Framework by following two tutorials.
2019.1.29 afternoon	Build the first version by mimicking tutorials. Add basic functions: HTTP, Search, Item list show.
2019.1.29 evening	Read more deeply into documents. Switch to reactive form instead of template-driven form.
2019.1.30 morning	Optimize UI by adopting Bootstrap CSS. Add pagination function.

Introduction

As I have used AngularJS 1.3 about four years ago, I decided to use it again in this test. But I found it was deprecated and replaced instead by Angular Framework. So I have to spend time learning Angular Framework again.

I also don't have time to investigate Angular Material, but used Bootstrap instead because I used it once four years ago.

Build

Install [nodejs v10](#).

Open cmd or shell, cd to hacker-news directory

```
cd hacker-news
```

Install Angular CLI:

```
npm install -g @angular/cli
```

Install dependent NPMs. You may need a good network connection here.

```
npm install
```

Run in test mode, it will open an browser window automatically. You may need latest Chrome version in order to open it correctly.

```
ng serve --open
```

Build distribution. The result will be in dist directory. It can't be open directly from the file system, but needs to be served by a HTTP server.

```
ng build
```

If you don't have a HTTP server but want to run in distribution mode. You can setup a HTTP server by nmp:

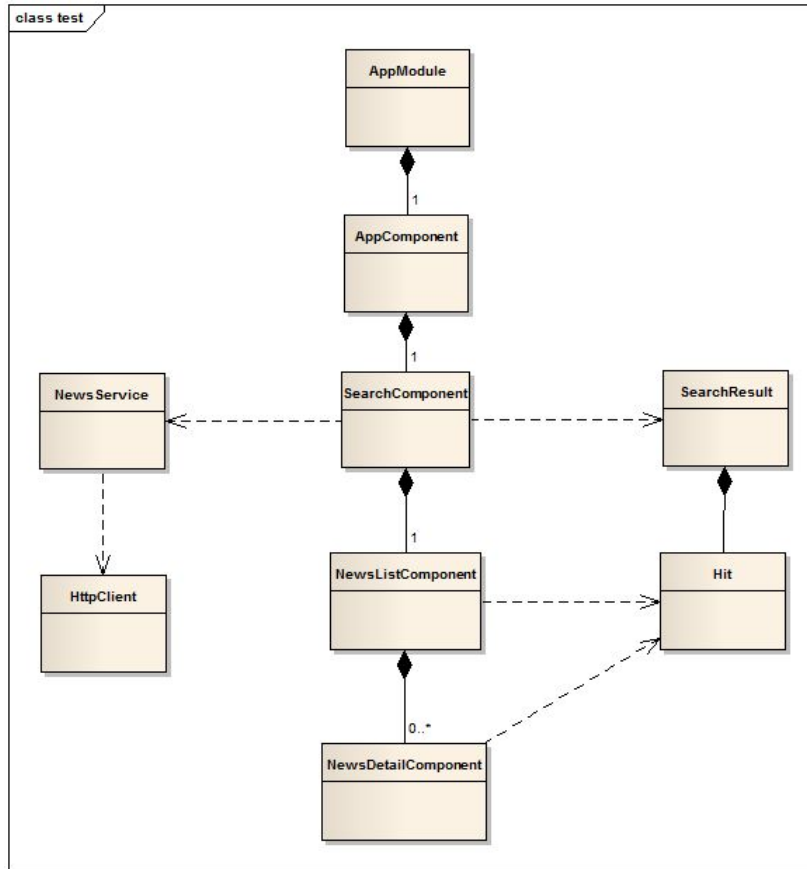
```
npm install -g http-server  
cd dist\hack-news  
http-server
```

Then open the address in a browser: <http://127.0.0.1:1080>

Design

Bellow is the class relationships between components and services.

- SearchComponent shows search related UI, gathers search parameters, and delegate to NewsService for remote data fetching.
- NewsService depends on Angular HttpClient to fetch data remotely. Data is returned as type SearchResult with Hit inside.
- SearchCompoent depends on NewsListComponent to show a list of search Hits.
- NewsListComponent depends on NewsDetailCompoent to show individual search Hit.



Future Plan

- Unit testing is barely done. I only make generated tests pass. In real products, I will learn the Jasmine test framework and then add more test cases.
- Although I tried to make the design as elegant as possible. But due to my shallow understanding of Angular Framework, there must places that can be improved.
- Investigate Angular Material, in comparison with Bootstrap.
- A more elegant way of writing CSS is needed.
- More function can be added, e.g. more user-friendly interaction is possible.

