Ng2 vs React

React?

- Front-End Lib (View)
  - Facebook, ...
- Component-based
- JSX -> XMLish: JS + HTML
- One-way data flow (Redux)
- Virtual DOM

Syntax

- JSX vs Typescript
- Type safety?
  - Proptypes/Flow
- Typescript supports JSX

(Folder) Structure

- Main index.html + Main root component
- Components, components, components
- React usually less split-up than Ng 2
  - Services, templates, ...
- High flexibility/boilerplates

Building the App

- Great CLI for both
- Root Component/Module
  - Routing, Redux
  - Load in EVERYTHING for Ng 2
- Components build similarly with imports, ctor, etc

Data-Binding

- React initially one-way binding but can be extended with Redux library
- Ng 2 = unidirectional

DOM

- Regular DOM vs virtual DOM
  - virtual DOM = abstraction of regular DOM (blueprint)
- Ng 2 uses regular DOM
- React uses virtual DOM
  - Faster re-rendering

Difficulty

- React easier to start (~ couple hours)
  - Redux pretty hard to learn
- Ng 2 harder to grasp (~ couple days-week)

Performance Testing

- React 13MB, Ng2 11.8MB -> 57.3MB <-> 53.4MB
- 10.000 rows testing

Average number of 10 iterations taken in milliseconds (ms)	React	Angular 2
Make 1000 rows	199,7	208,8
Make 10.000 rows	2.127,2	2.433,6
Append 1000 rows	254,2	259,4
Update every 10th	159,9	129,2
Clear all rows	361,5	287,2
Swap random rows	175,6	176,5
Delete one row	561,4	601,5
Select row and colour it	36,6	12,1
Bootup time	51	49,5

Conclusion

- React and Ng 2 pretty much same performance
- It is said Ng 2 struggles with large applications
- Choice comes down to preference