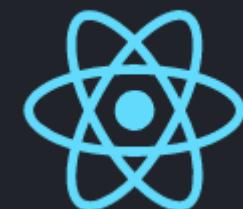


REACT

01 FUNDAMENTALS AND INSTALLATION

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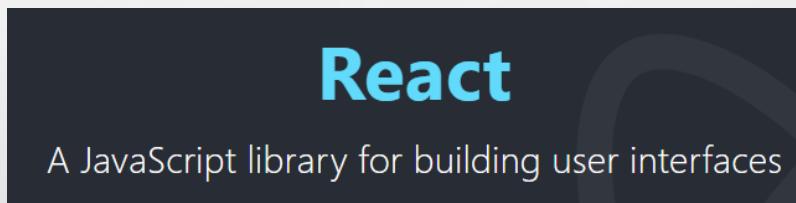
React

SYLLABUS

- **01 Fundamentals And Installation**
- 02 Components And Props
- 03 State
- 04 Handling Events
- 05 SetState And Lifecycle
- 06 Lists And Keys
- 07 Forms
- 08 PropTypes
- 09 Refs
- 10 React Router v4

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מה זה REACT

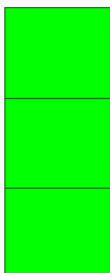


Declarative

A tower of 3 blocks

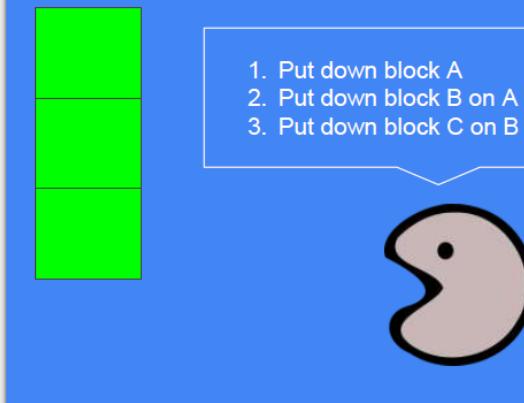


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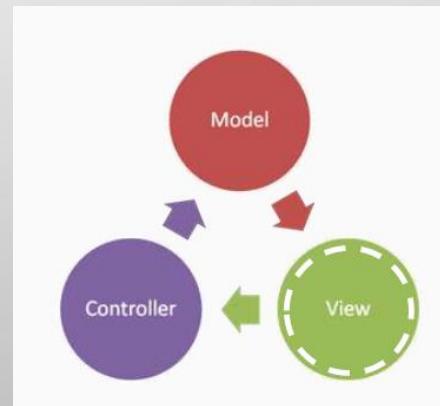


Imperative

1. Put down block A
2. Put down block B on A
3. Put down block C on B



- ספירה לפיתוח UI של צד לקוח בסר.



- מטור MVC

• DECLERATIVE - מתכוננים את המה רוצחים
לעשות? ולא את האיר מושגים את זה?

Learn once, write anywhere

מה זה ?REACT

Write once, run anywhere

It's Java



React Native



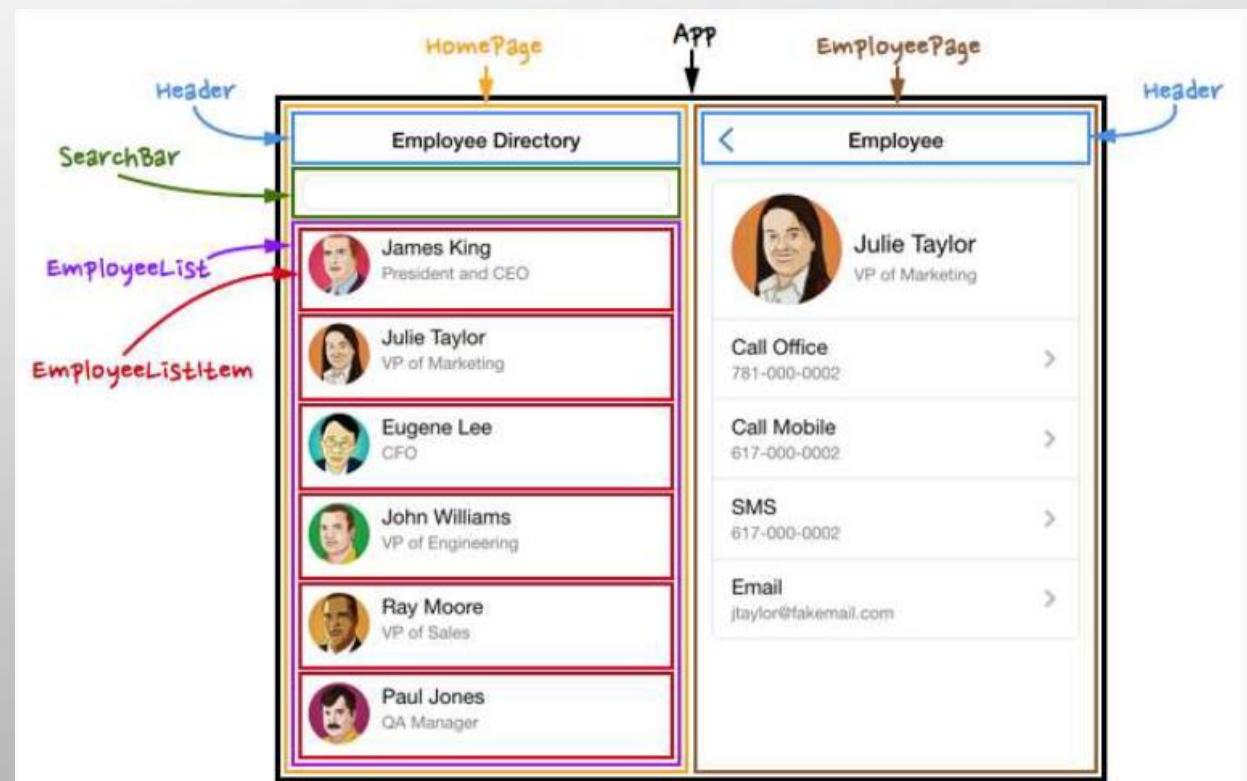
©NIR CHEN

- LEARN ONCE,

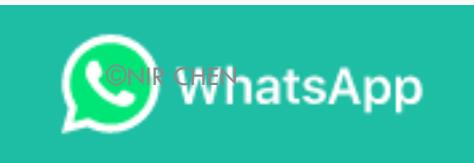
- WRITE ANYWHERE

– משתמש עם
טכנולוגיות אחרות,
רץ גם בשרת, יש גם
REACT ANATIVE

- הכל זה COMPONENT



מי משתמש?



Udemy

vevo

Walmart

wix

YAHOO!

The New York Times

wework

KHANACADEMY

codecademy

כלל ANGULAR 2

angular

One framework. Mobile & desktop.

TypeScript ★ 29.6k ⚡ 7.4k

angular.js

AngularJS - HTML enhanced for web apps!

JavaScript ★ 57.4k ⚡ 28.7k

react

A declarative, efficient, and flexible J interfaces.

frontend declarative ui lib

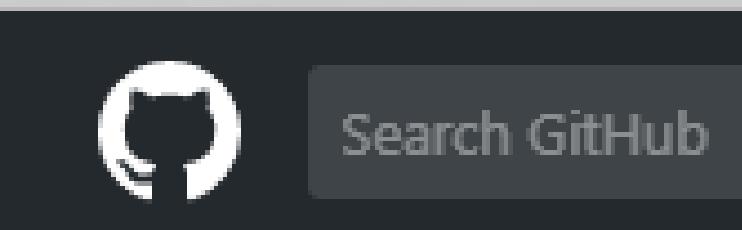
JavaScript ★ 80,221 ⚡ 15,201

react-native

A framework for building native app

JavaScript ★ 55,430 ⚡ 12,928

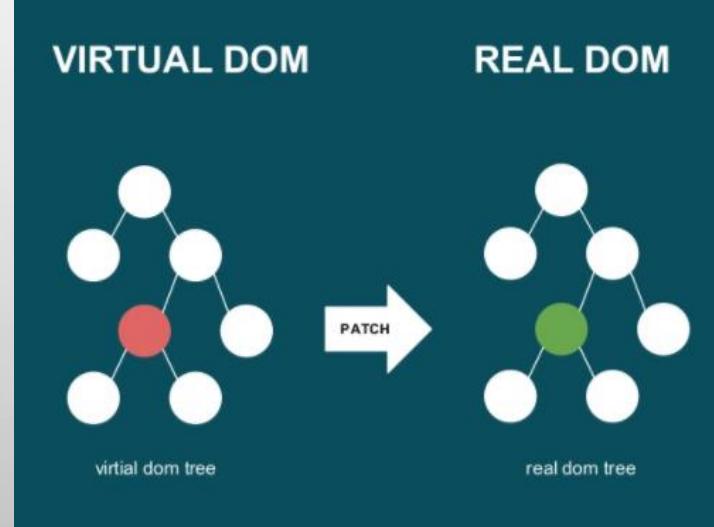
פופולריות



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Rank	Repository	Stars
1.	freeCodeCamp/freeCodeCamp	★ 291193
2.	twbs/bootstrap	★ 114834
3.	EbookFoundation/free-programmer	★ 92555
4.	facebook/react	★ 74873
5.	tensorflow/tensorflow	★ 68969
6.	d3/d3	★ 67875
7.	getify/You-Dont-Know-JS	★ 66736
8.	vuejs/vue	★ 65590
9.	sindresorhus/awesome	★ 64991
10.	robbyrussell/oh-my-zsh	★ 58591
11.	airbnb/javascript	★ 57906
12.	angular/angular.js	★ 56966
13.	github/gitignore	★ 54224
14.	facebook/react-native	★ 52994

מרכיבים עיקריים



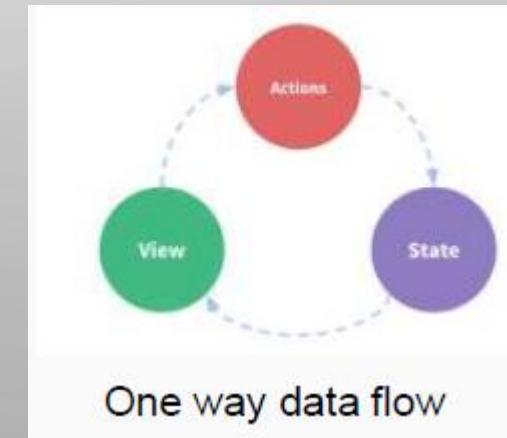
VIRTUAL DOM •



COMPONENTS •



JSX •



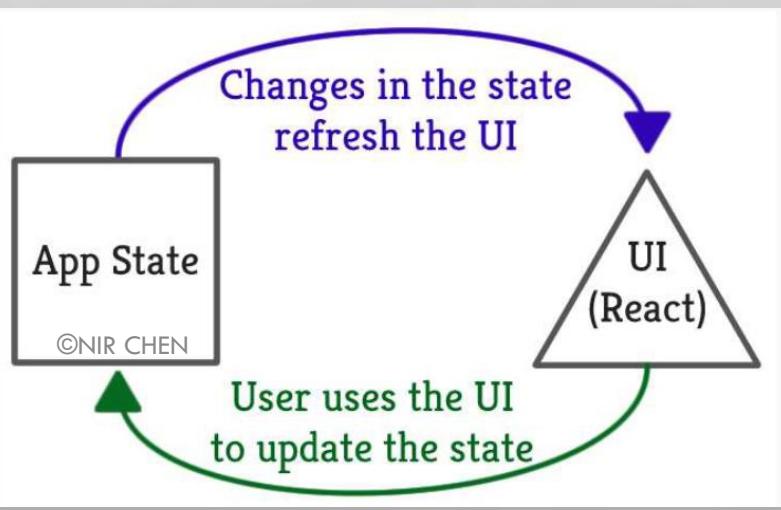
• המידע זורם בכיוון אחד

מרכיבים עיקריים

- הכי מהירה בצד לקוח (יותר מAMBER, ANGULAR...) בגלל FPS 60 . VIRTUAL DOM



DOM VS Virtual DOM



- הכנסת ה "HTML" (JSX) לתוכן SJR לעומת שפות אחרות שמכניסות את ה SJR לתוכן HTML. (נראה בהמשך)
- משנים את המצב של התוכנית והוא מעודכנת אוטומטית את ה UI.

עזרים

BABEL Babel is a JavaScript compiler.

Use next generation JavaScript, today.



npm is the package manager for JavaScript and the world's largest software registry. Discover packages of reusable code — and assemble them in powerful new ways.

Use npm to install, share, and distribute code; manage dependencies in your projects; and share & receive feedback with others.

- יודע גם לתרגם מES6 לJS ישן

כך שייעבוד בדףנים ישנים

- NPM – עוזר לארגן את הפרויקט להוריד ספריות וליצור גרסת הרצה

עזרים



At its core, webpack is a *module bundler* for modern JavaScript applications. When webpack processes your application, it recursively builds a *dependency graph* that includes every module your application needs, then packages all of those modules into one or more *bundles*.

- **WEBPACK** – מייצר קבצים להרצה כך שיהיו מאוחדים, וקטנים יותר ללא כפליות.



Linting tools like ESLint allow developers to discover problems with their JavaScript code without executing it.

- **מעין קומפיילר לסג' – JSX**



- **סביבה העבודה שלנו תהיה**

הרצה

FOR DEVELOPMENT

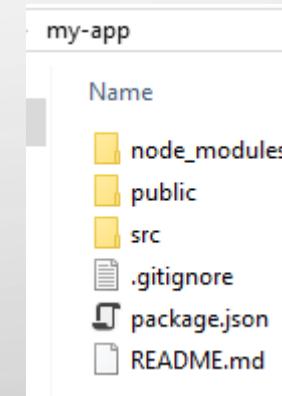
```
npx create-react-app my-app  
cd my-app  
npm start / npm run build
```

FOR PRODUCTION

```
npx create-react-app my-app  
cd my-app
```

npm run build

npm install -g serve
Serve -s build



RUN ON SERVER

FOR PRODUCTION

```
npx create-react-app my-app  
cd my-app  
npm start
```

npm run build

להעתיק את
ספריית BUILD
לשרת

package.json

```
{  
  "name": "my-app",  
  "version": "0.1.0",  
  "private": true,  
  "dependencies": {  
    "react": "^16.0.0",  
    "react-dom": "^16.0.0",  
    "react-scripts": "1.0.17"  
  },  
  "scripts": {  
    "start": "react-scripts start",  
    "build": "react-scripts build",  
    "test": "react-scripts test --env=jsdom",  
    "eject": "react-scripts eject"  
  },  
  "homepage":  
  "http://rupperinmobile.ac.il.prev.../site01/build"  
}
```

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```
module.exports = {  
  "parser": "babel-eslint",  
  // "extends": "airbnb",  
  "extends": ["eslint:recommended",  
    "plugin:react/recommended"],  
  "parserOptions": {  
    "ecmaFeatures": {  
      "jsx": true,  
      "modules": true  
    }  
  },  
  "plugins": [  
    "react",  
    "jsx-a11y",  
    "import"  
  ]  
};
```

.eslintrc.js

שלב ראשון
ליצור את הקובץ
זהה

ESLINT

שלב שני

npm install eslint --save-dev

npm install eslint-plugin-react --save-dev

npm install -g install-peerdeps
install-peerdeps --dev eslint-config-airbnb



Linting tools like ESLint allow developers to discover problems with their JavaScript code without executing it.

BOOTSTRAP

```
npm install --save bootstrap
```

index.js

```
import './node_modules/bootstrap/dist/css/bootstrap.min.css';
```



- מתי צריך את-
bootstrap

- If you just need html and css part of bootstrap, it should be fine to not use the library .But if you want use js part of bootstrap for bootstrap transitions, the library is a must

TRY IT YOURSELF



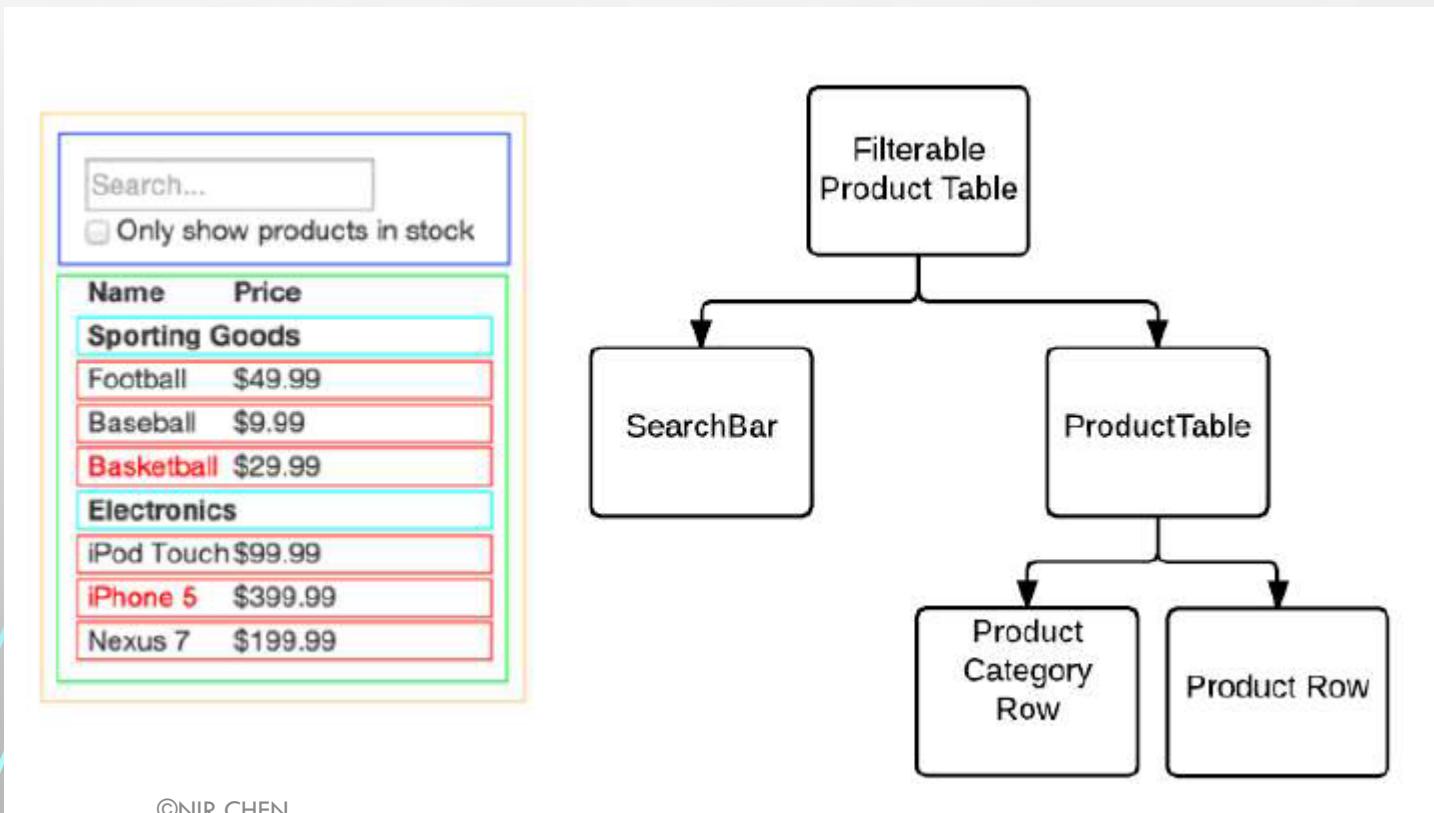
Welcome to React

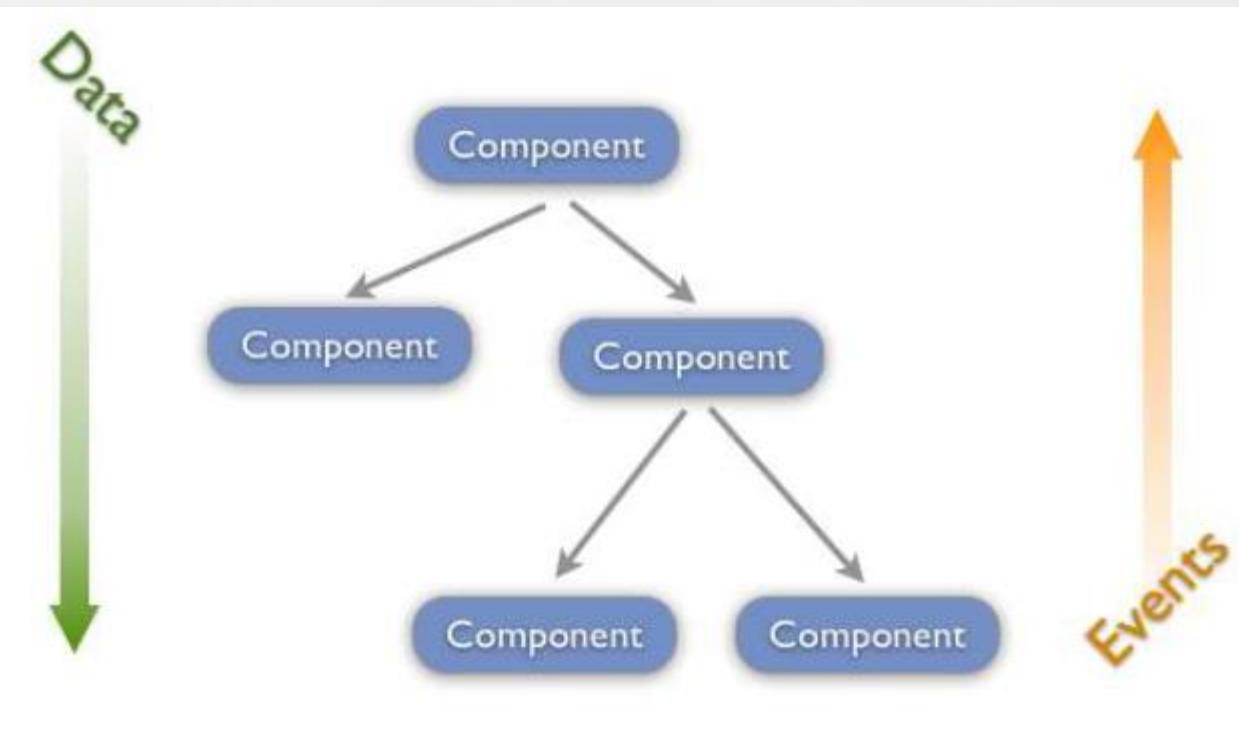
To get started, edit `src/App.js` and save to reload.

Hello, world!

From our React Course:)

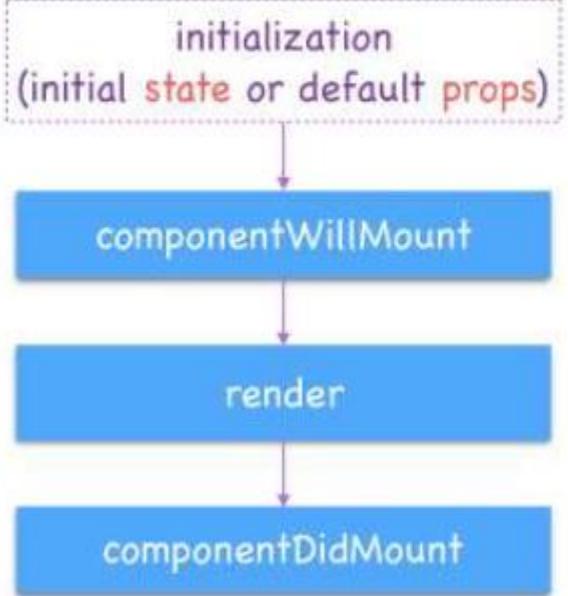
COMPONENTS



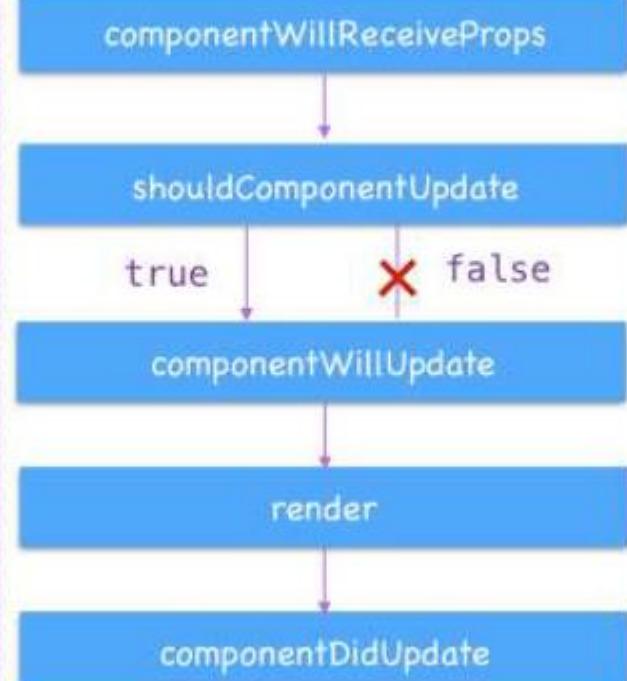


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Mounting



Updating



Unmounting

