

# React

A JavaScript library  
for building user  
interfaces

# React talk

Overview

Understanding the problems

Father of task Runners  
Webpack along with  
Gulp, grunt task runners  
Package.json

Modules overview build with  
react

Building Applications with  
React along with some  
advance concepts

Introducing: React Integration  
with Web Apps



# Overview



React is like other front end libraries and framework which uses Component based system for building large web applications/SPA'S. We don't recommend it for building small dom updates javascript code.

Translation - i18n/i18next

## Virtual DOM

The virtual DOM (VDOM) is a programming concept where an ideal, or “virtual”, representation of a UI is kept in memory and synced with the “real” DOM by a library such as ReactDOM. This process is called reconciliation..



# PROs of Using React

Learning curve – Easy to start writing (if you can get over the syntax)

It boosts productivity and facilitates further maintenance

It guarantees stable code

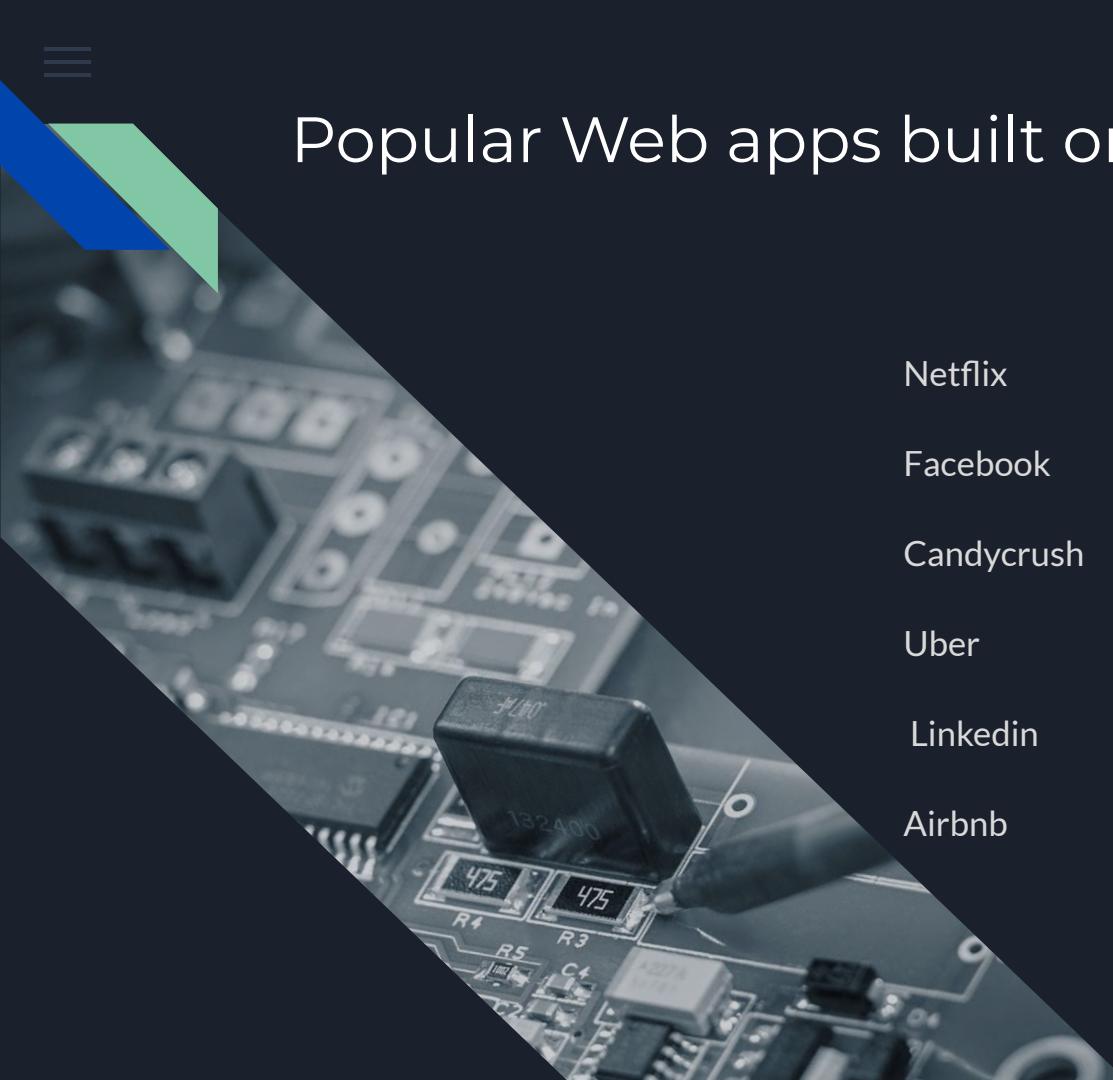
It is SEO friendly

It comes with a helpful developer toolset

It is backed by a strong community

Total separation of data and presentation

Speed – never think about re-rendering!



# Popular Web apps built on Javascript

Netflix

Facebook

Candycrush

Uber

Linkedin

Airbnb

# GULP VS GRUNT VS WEBPACK: COMPARISON OF BUILD TOOLS / TASK RUNNERS

Only a few years ago, usage of JavaScript build tools would sound ridiculous, due to the fact that JS is interpreted by a browser and it isn't compiled. However, projects' complexity tends to increase exponentially with the scope and concerns regarding performance, maintenance and security have received wide publicity. Lately, the boom of single page applications (SPAs) has just added to the problem.

Currently, starting the next JavaScript project, build system setup is among the top priority tasks. Though such variety of options often stands in the way of [developing the app](#) itself. To address the above-mentioned challenges, as well as automate tasks like static code analysis, test cases execution, etc. – task runners are used.

Gulp vs Grunt is the most popular dilemma. They both automate tasks, use Node.js, and they are both powerful and efficient. While Grunt makes use of temporary files, Gulp uses Node streams. Gulp is able to perform several tasks at a time, while Grunt performs tasks one after another. On the other hand, Webpack is a bundler and it comes in handy when you need to pack multiple assets (images, fonts, etc.) together into a dependency graph. So how can Gulp vs Grunt vs Webpack be compared? Gulp and Webpack are commonly used together, but currently, there is a rising tendency to use the latter instead of gulp build tool, in particular among the Reactjs community. This is done for several reasons: this powerful tool can fulfil nearly all tasks that you'd perform through a task runner; it comes with minification options and bundle source maps; it can serve as middleware via the custom server, namely webpack-dev-server, which supports both hot and live reloading.



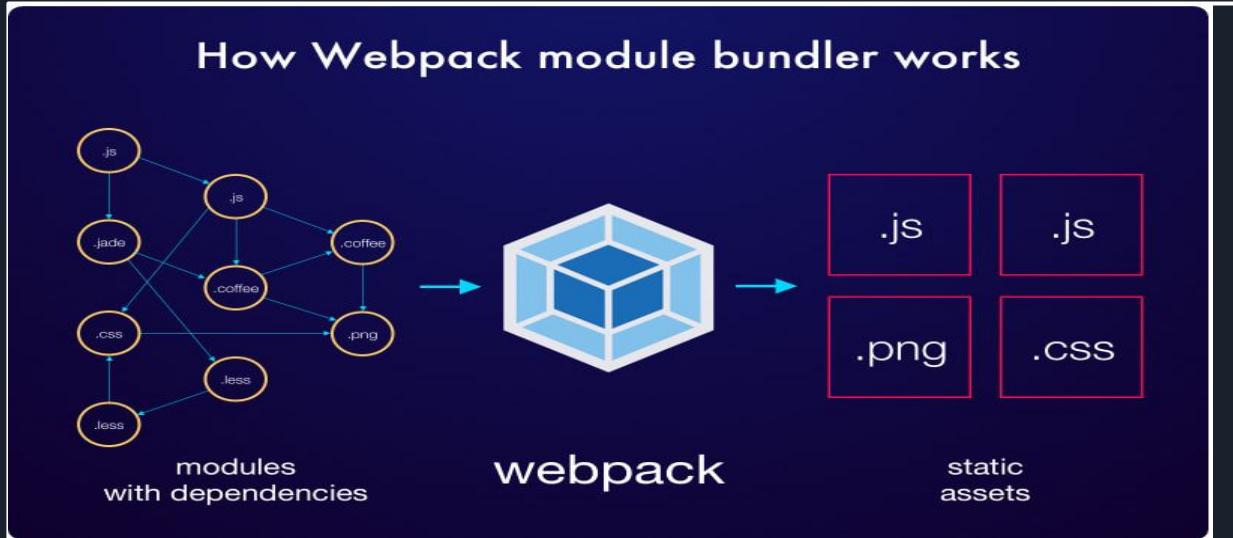


## JavaScript task runners: Grunt vs Gulp major differences

	Grunt	Gulp
Concept	Configuration over coding	Coding over configuration
Process execution	Temporary files on a local disk	Memory
Format of source data	JSON	JavaScript
Number of simultaneous tasks	One	Multiple
Requires to be proficient in Node.js	No	Yes
Able to set up task dependencies	No	Yes



# Webpack



Identifying the code that is not used in order to exclude it during uniting your project files.

Code serialization.

Tracking changes to the file.

Task relaunching..



# Topics

- 
1. Basic react app with create-react app cli tool.
  2. React app without create-react-app cli tool
  3. Functional Components
  4. Stateful Components
  5. Stateless Components
  6. Higher Order Functions
  7. Higher Order Components
  8. Descriptive Webpack and Package Json configuration
  9. Render props

Thank you!

In case of any query or doubt mail me at  
[amit098@webkul.com](mailto:amit098@webkul.com)

I will be glad to help you

