



_nology

TALENT IN **TECH**NICOLOUR

React Introduction

Learning Objectives

- Why are we Learning React?
- What is a Component?
- What is a ComponentTree?
- Mindset shift of coding in components vs before.
- Different ways of writing React (functional vs OO)
- Different types of components (container vs presentational)
- Look at different website examples and highlight different components

React?

- React is a Javascript library for building User Interfaces.
- React uses JSX to makes it easier to write and add HTML (Javascript XML)
- Can be written in Functional and Object oriented.
- It is efficient, it only re-renders components whenever it needs to.
- React is maintained by Facebook.

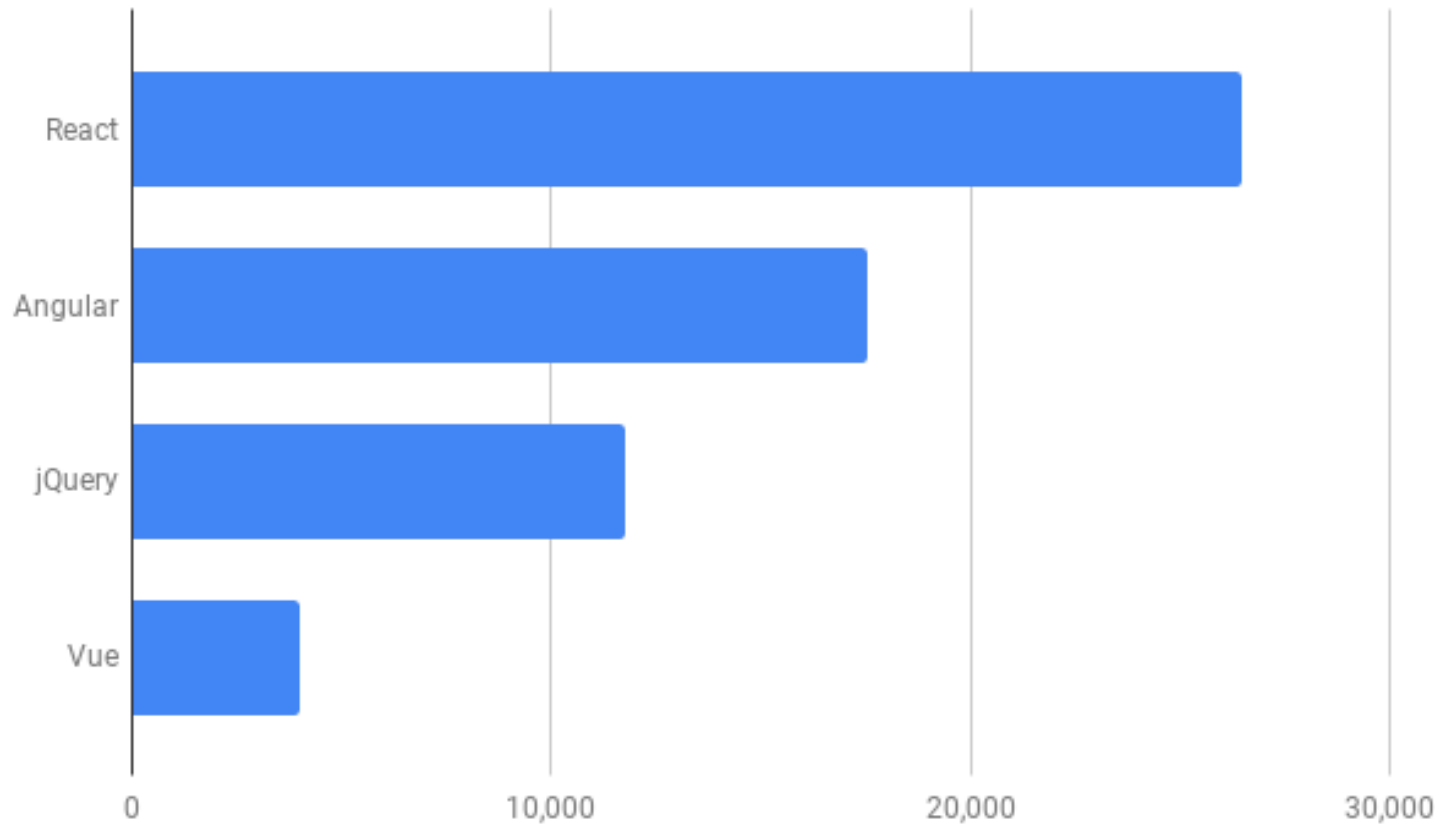
React hall of fame:

- Facebook
- Instagram
- Airbnb
- Netflix
- BBC
- Uber



Why React?





Dec 2020 Job Board Listings by UI Framework

What is a component?



Components

'A component is an identifiable part of a larger program or construction. Usually, a component provides a particular function or group of related functions' ...

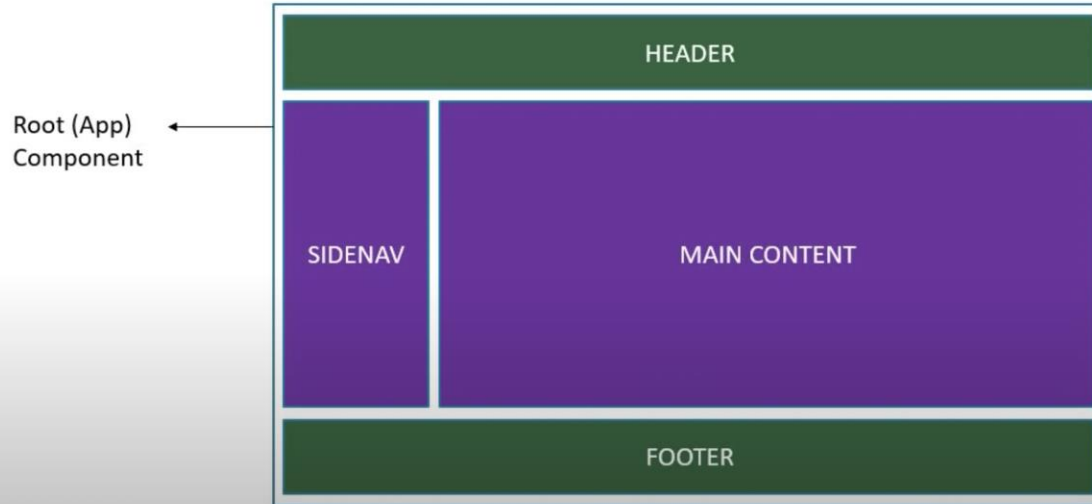
- Reusable
- Small
- A building block



Component Based Architecture

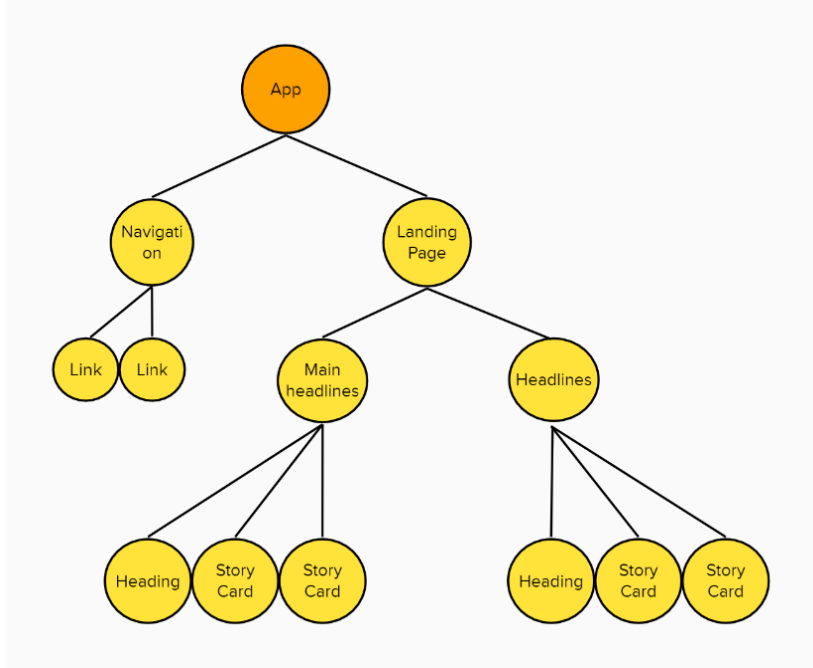
This webpage is being split into 5 components.

Components



Component Tree

- Visual representation of the collection of components that build your application.
- A hierarchy - shows relationship between parent and children components.
- A way of managing a large application.



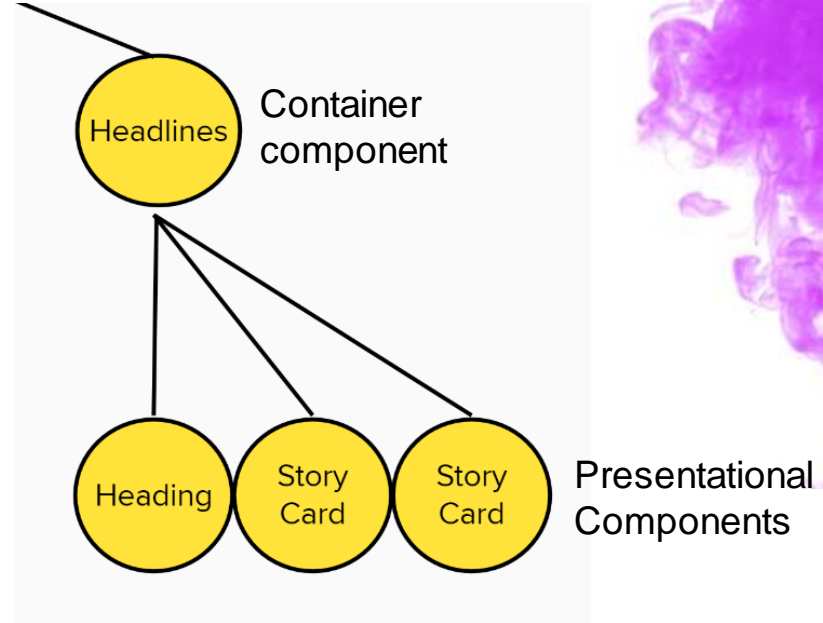
Types of component

Presentational Component

- How things look.
- Receive data from container.
- Rarely have their own state.
- Are written as functional components.
- The building blocks of an application.

Container Component

- How things work.
- Will get data and give it to components.
- Have their own state.
- Can be written as functional or classes.
- The foundations to build upon.



Challenge

1. Mural
2. Break into groups and see if you can break the BBC screen grabs down into its components.
3. Use the square to draw around each component.



Code along - Mealworm

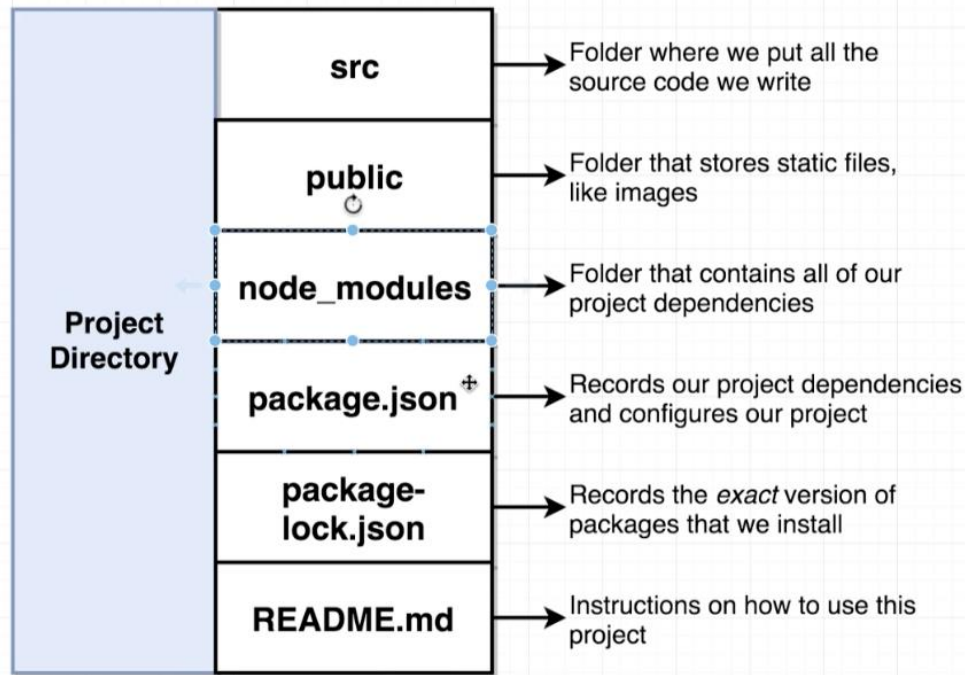
We are building Mealworm.

Lets clone the repo.

Create a static CardFront component

- Clear out all of the beginning React App materials (jsx, logos etc.)
- Create a components/CardFront directory containing .jsx, index.js and .module.scss
- Create the markup in the .jsx file
- Import & export from the index.js
- Import and use the CardFront in the App.jsx
- Style the CardFront

File Structure



Additional Reading

- [Npm Charts - add React, @angular/core and vue](#)
- [Sites built with React](#)
- [React Rocks!!!](#)
- [React docs](#)