

# Designing React Components

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Designing Better Components with React



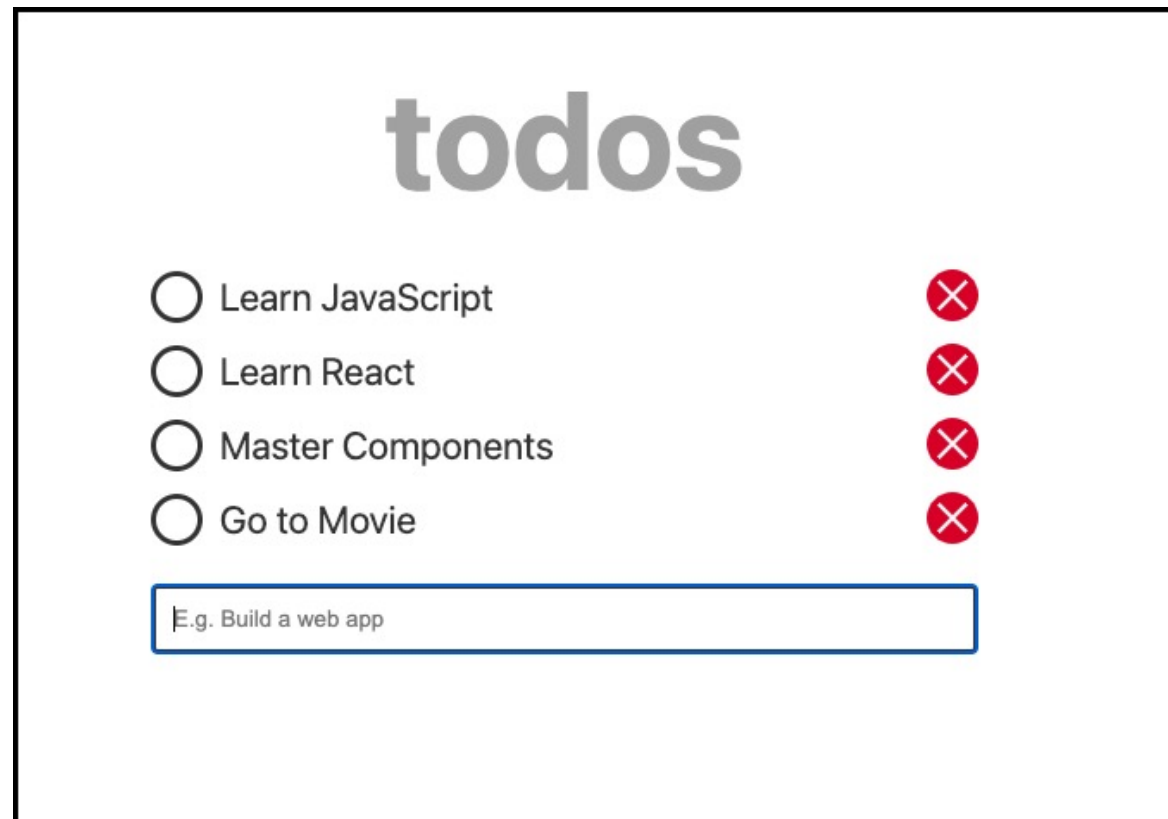
**Peter Kellner**

Developer, Consultant and Author

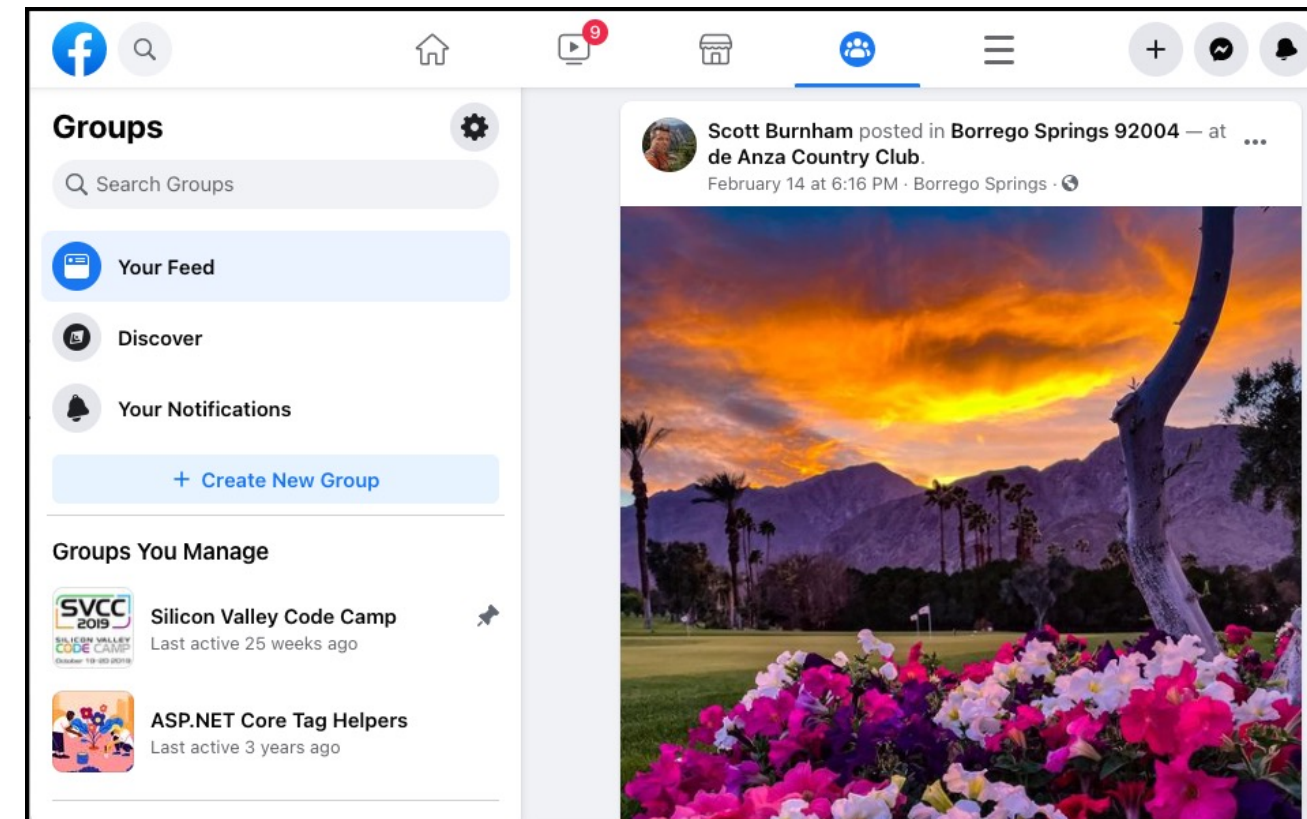
[ReactAtScale.com](http://ReactAtScale.com) [@pkellner](https://twitter.com/pkellner) [linkedin.com/in/peterkellner99](https://www.linkedin.com/in/peterkellner99)



# Good Component Design



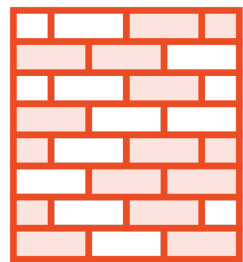
Basic “To Do” app



Full Facebook app



# What is a React Component?



**Building blocks that when combined together create a UI**



**Independent, reusable parts of an app**



**Allow for easy building combined with a great browser experience**



# React Component Types



# React Component Types

## React Class Component

```
class Welcome extends React.Component {  
  render() {  
    return (  
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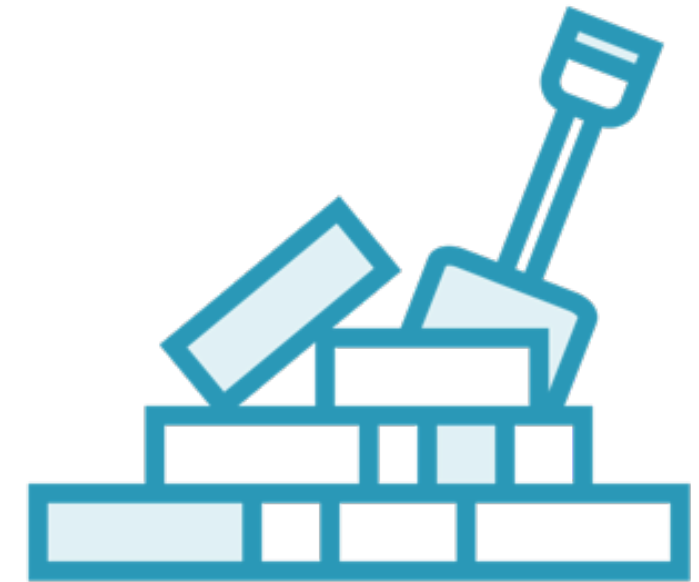
# Course Goals for Building React Apps



**Ability to build apps  
more easily**



**Build apps that are  
more scalable**



**Apps created are  
easier to maintain**



# Demo

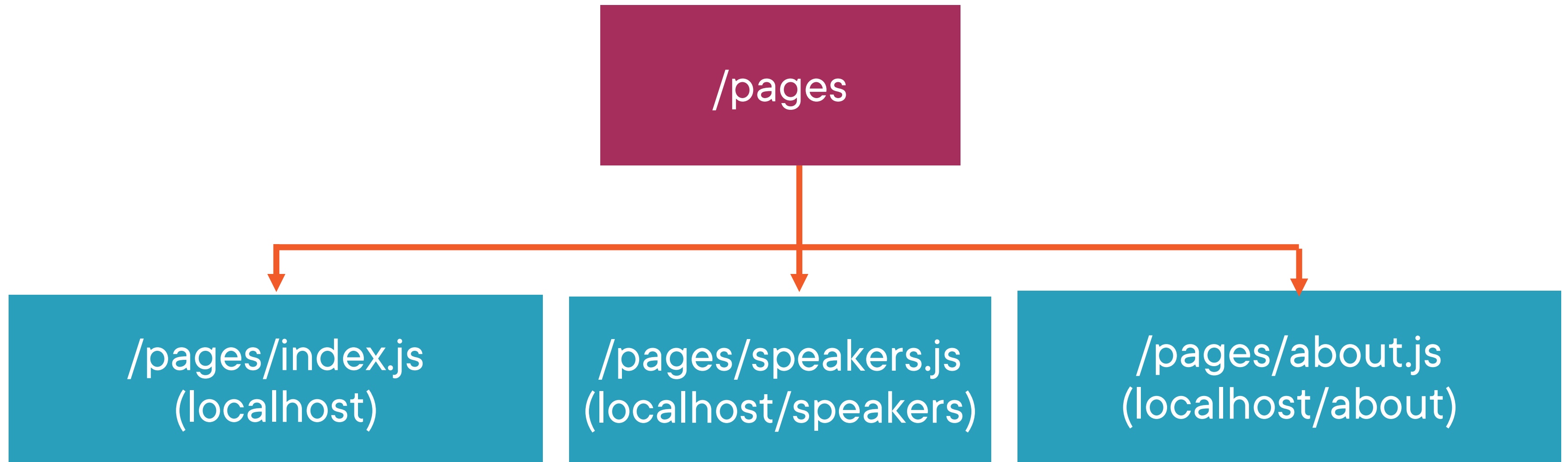


**Build our conference speaker page with  
Visual Studio Code and Nextjs**

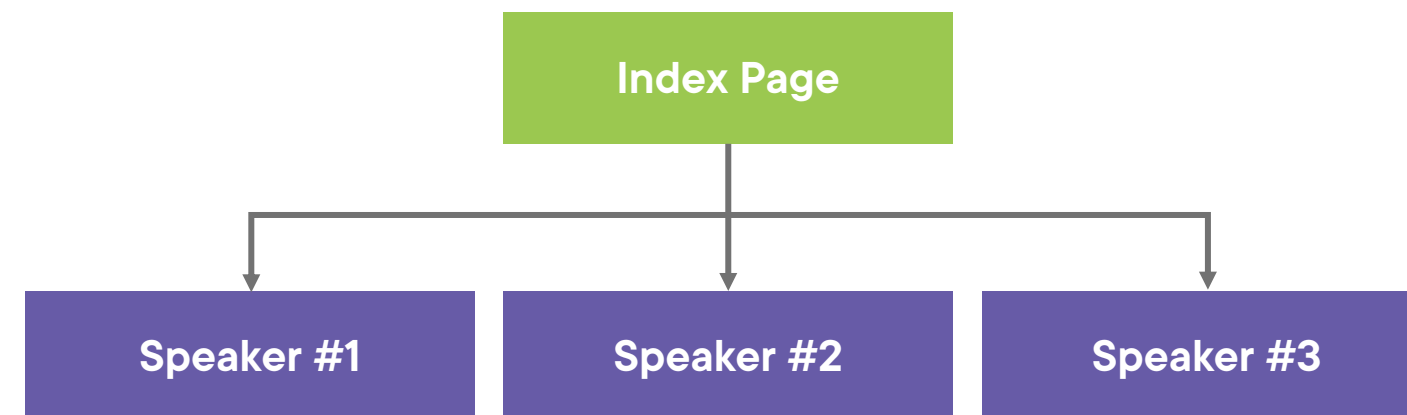
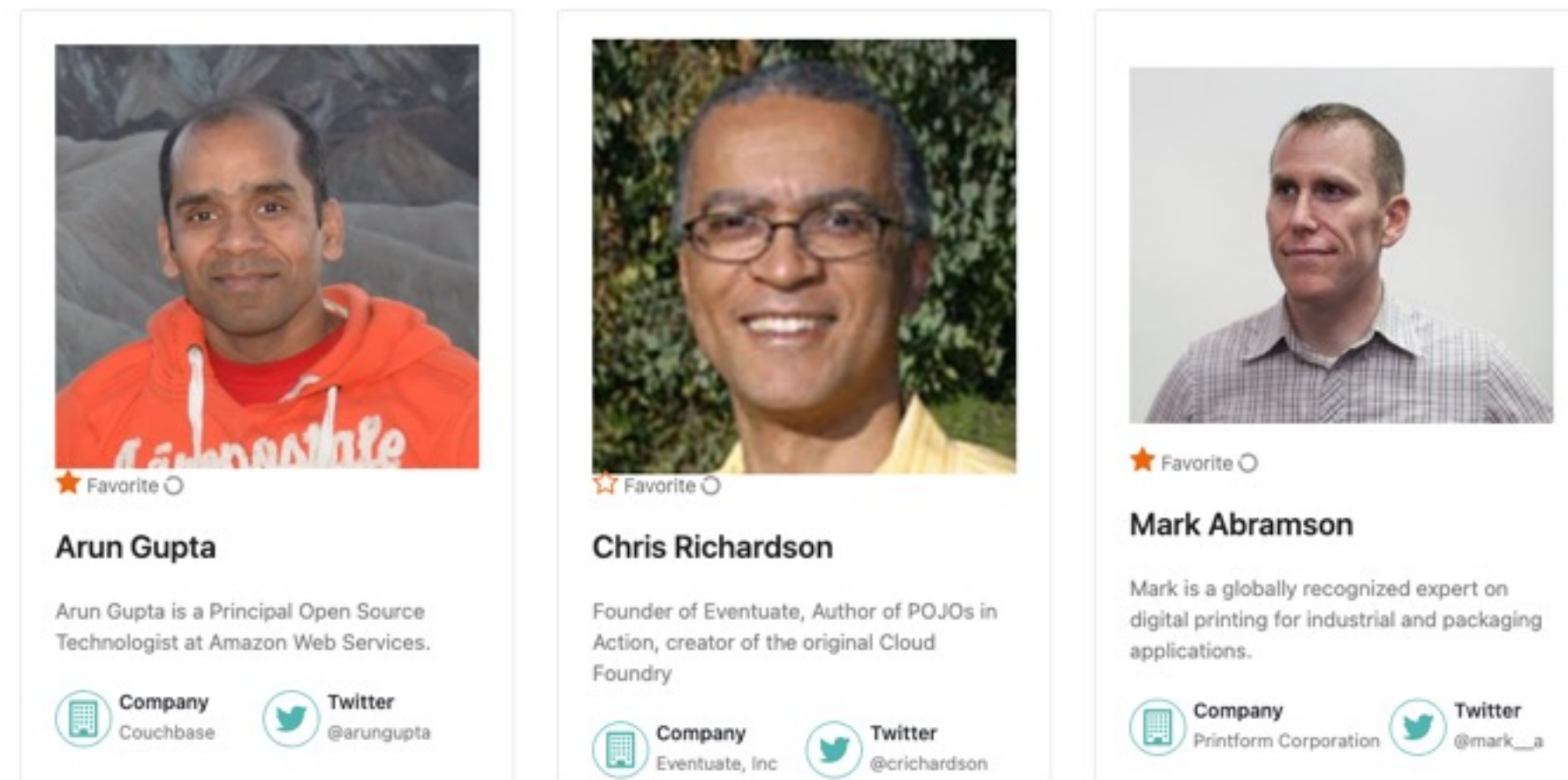





# Nextjs File Based Routing



# Component Dive into the Speaker Component





# Component Dive into the Speaker Component



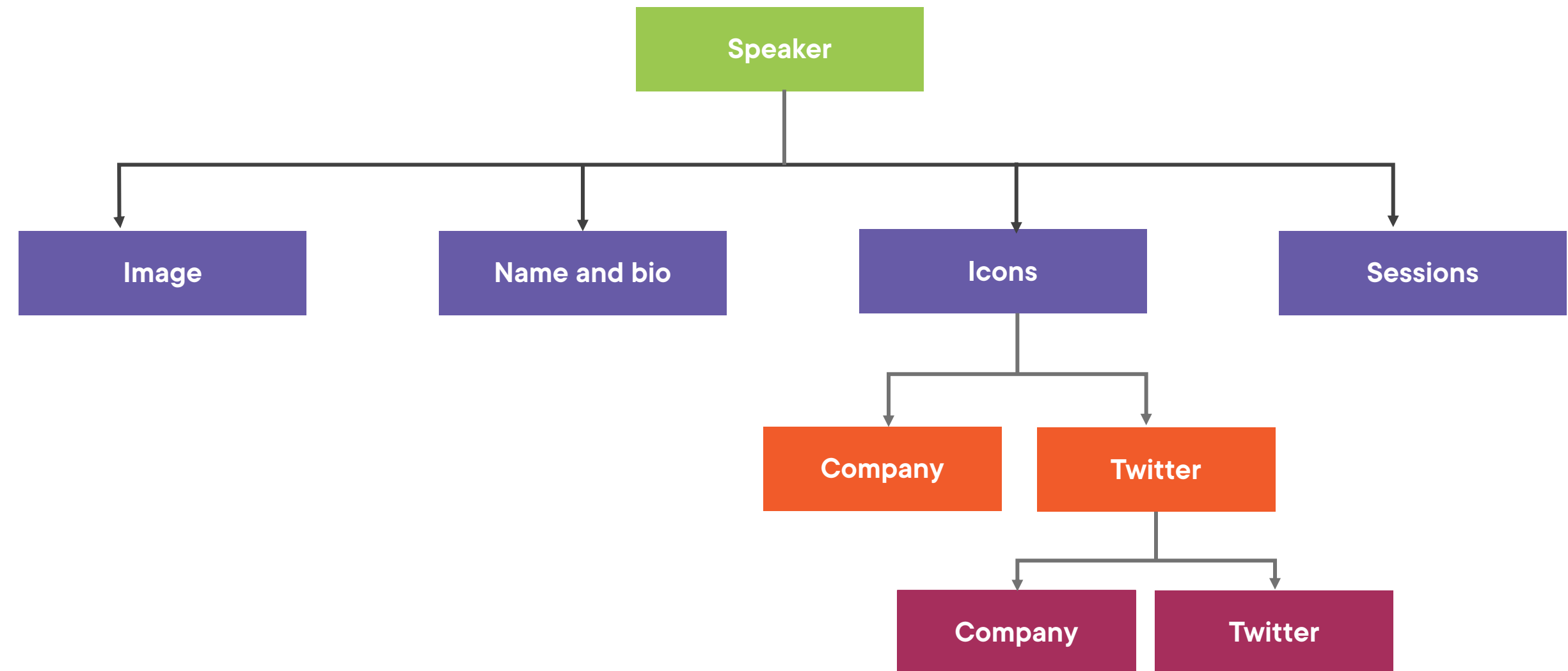
**Arun Gupta**  
★ Favorite

Arun Gupta is a Principal Open Source Technologist at Amazon Web Services.

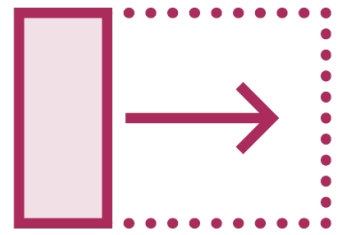
 **Company**  
Couchbase

 **Twitter**  
@arungupta

Using Kubernetes for Machine Learning Frameworks **Room: Town Square A**



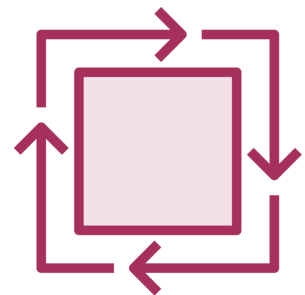
# Design Principles for Designing Components



**DRY : Don't repeat yourself**



**Be concise and keep each bullet to 2 lines or fewer**



**Add relevant icons on the left for each text item on the right**



**An alternative to bullets**



# Refactor to Multiple Components

## Single component

```
function IndexPage() {  
  return (  
    SpeakersList() {  
      Speakers() {  
        Speaker() {  
          Sessions() {  
          }  
        }  
      }  
    }  
  )  
}
```

## Multiple components

```
function IndexPage() {  
  return (function SpeakersList() {}))  
  
function SpeakersList() {  
  return (function Speaker() { }))  
  
function Speaker() {  
  return (function Sessions() { }))  
  
function Sessions() {  
  return (function Session() { }))  
}
```

# Module Takeaways



- **React Functional Components are just JavaScript functions**
- **Building React Components are just best practices JavaScript coding**
- **Coming up ... state and bringing our React app to life**

