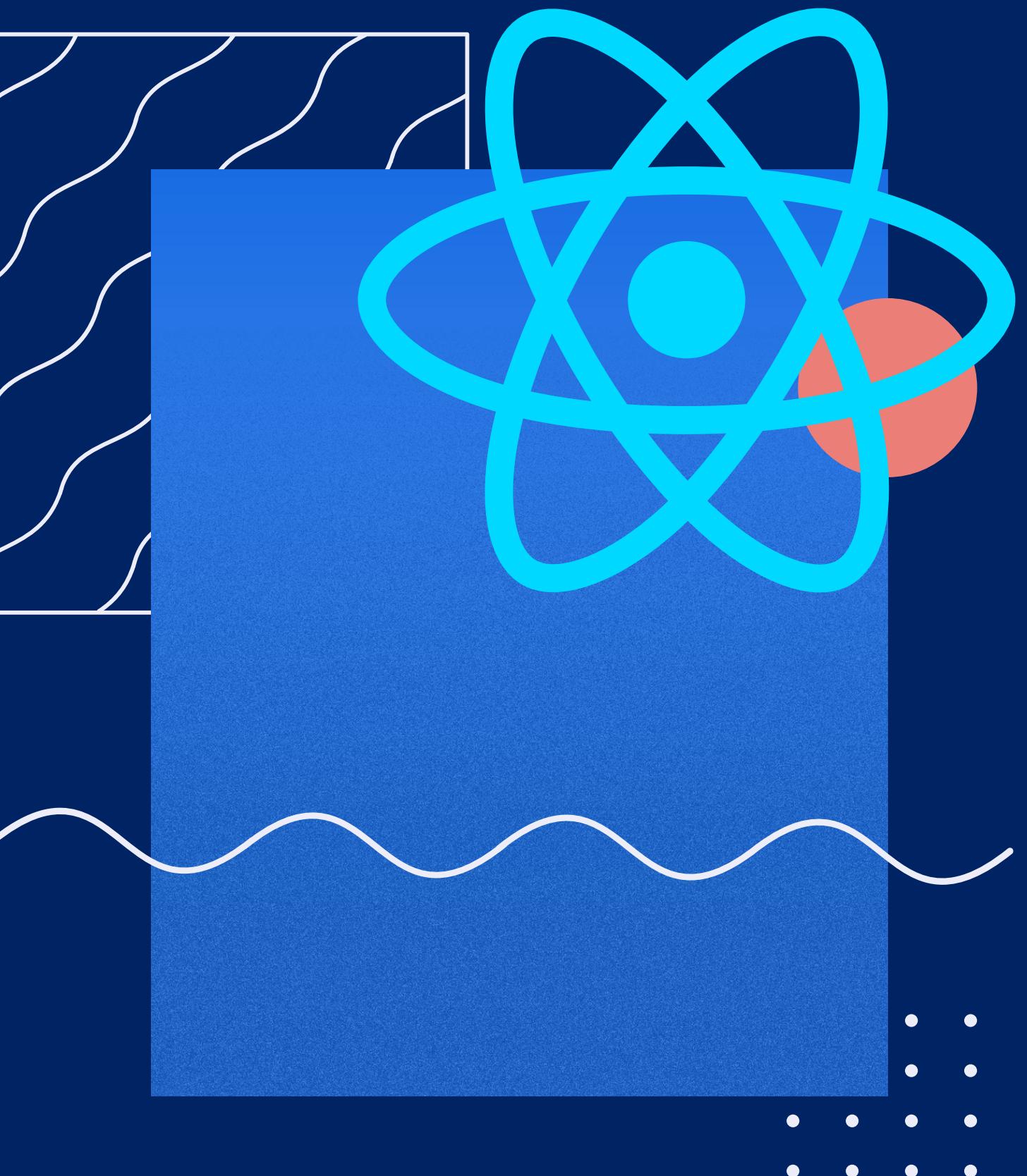
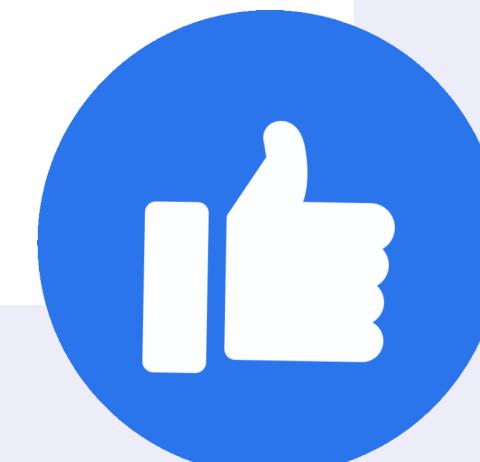
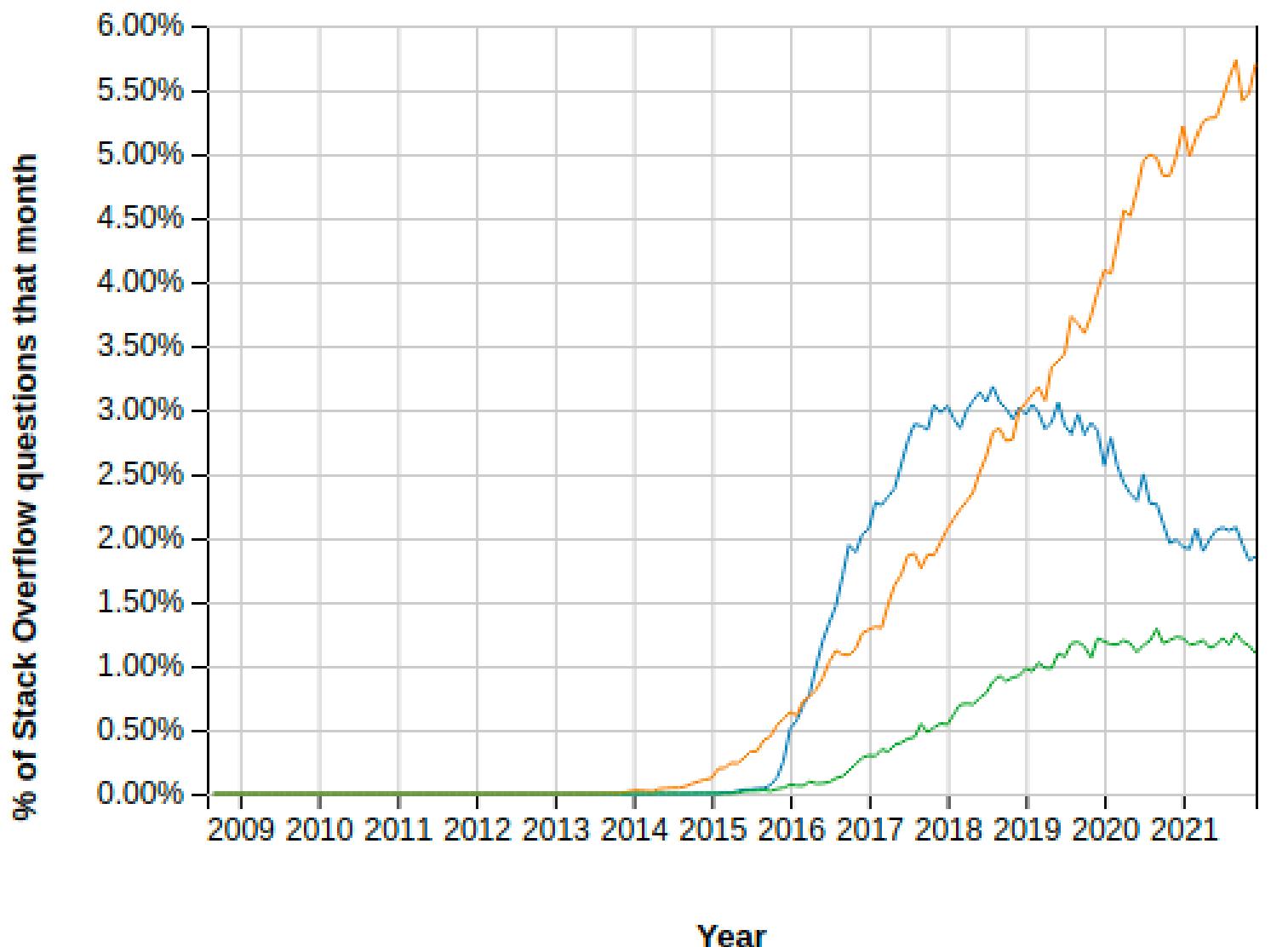


Intro to React

DOCKER + CREATE-REACT-APP



WHY REACT?



- Most popular front-end Javascript framework, released by Facebook in May 2013.
- Modular, component-based UI.
- Single page applications. Render changes to the browser through the Virtual DOM.

Image Source: **Stack Overflow Trends**
(<https://insights.stackoverflow.com/trends?tags=angular%2Creactjs%2Cvue.js>)

Old School Facebook (2004)

[thefacebook]

home search global social net invite faq logout

Scranton

Scott Pearson's Profile (This is you)

Picture [edit]



Information [edit]

Account Info:

Name: Scott Pearson, BS
Member Since: January 12, 2005
Last Update: February 3, 2005

Basic Info:

Email: persons2@scranton.edu
Status: Alumnus/Alumna
Sex: Male
Year: 2004

Concentrations: Computing Sciences
Mathematics

Phone: 570.499.4818
High School: Dunmore HS '00

Extended Info:

Screenname: ScottiePP7
Looking For: Friendship
Dating
A Relationship
Random play
Whatever I can get

Interested In: Women
Relationship Status: Single
Political Views: Liberal
Interests: Drinking, Football, Basketball, Tennis, saying you'll have that

quick search 00

My Profile [edit]
My Groups
My Friends
My Messages
My Away Message
My Mobile Info
My Account
My Privacy

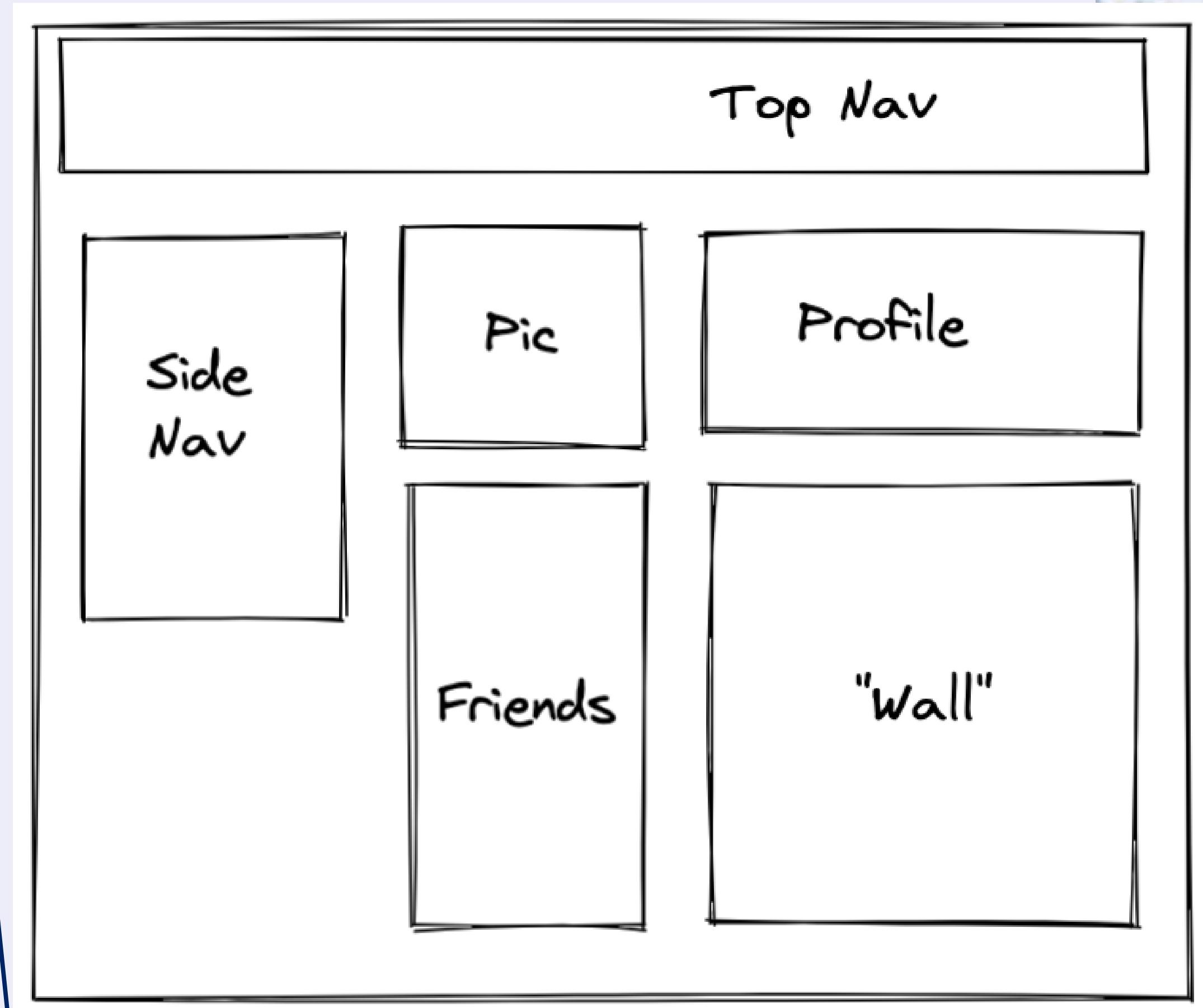
Visualize My Friends
Edit My Profile
My Account Preferences
My Privacy Preferences

Connection
This is you.

Access
Scott is currently logged in from a non-residential location.

Other Scranton [edit]

Old School Facebook



Mini-Feed (née 2006)

facebook Profile edit Friends Networks Inbox (8) home account privacy logout

Search Applications edit

- facehack
- Photos
- Groups
- Events
- Marketplace
- My Questions
- Top Friends
- + more

View Photos of You What are you doing this wee... Edit My Profile You are online now.

Gina Bianchini Profile Update your status...

Networks: Stanford Alum

Mini-Feed edit See All

Displaying 10 stories.

Today

Gina added the Handbell Podcast Player application. 8:40pm

June 19 Gina and Paul Weller are now friends. 12:02pm

June 18 Gina and Jay Tannerbaum are now friends. 4:53pm

June 17 Gina added the Ning Network Creator's Video application. 7:52pm

Gina and Sam Jadalah are now friends. 7:51pm

Gina and Ian McCarthy are now friends. 7:51pm

Gina added the House of Kyle Latest Photos application. 7:50pm

Gina added the Top Friends application. 7:49pm

Gina added the My Questions application. 7:48pm

Gina and Brooke Hammerling are now friends. 7:47pm

Stanford Friends edit See All

13 friends at Stanford.

Valerie Rozycki Reid Hoffman David Sze

Steve Vassallo Ian McCarthy Hollie Moore

Handbell Podcast Player edit X

Handbell Podcast 0711fs - Listener F 00:37 00:00 Handbell Community

Share [create | see all]

To fill out the rest of your profile, click here.

Information edit

Contact Info [edit]

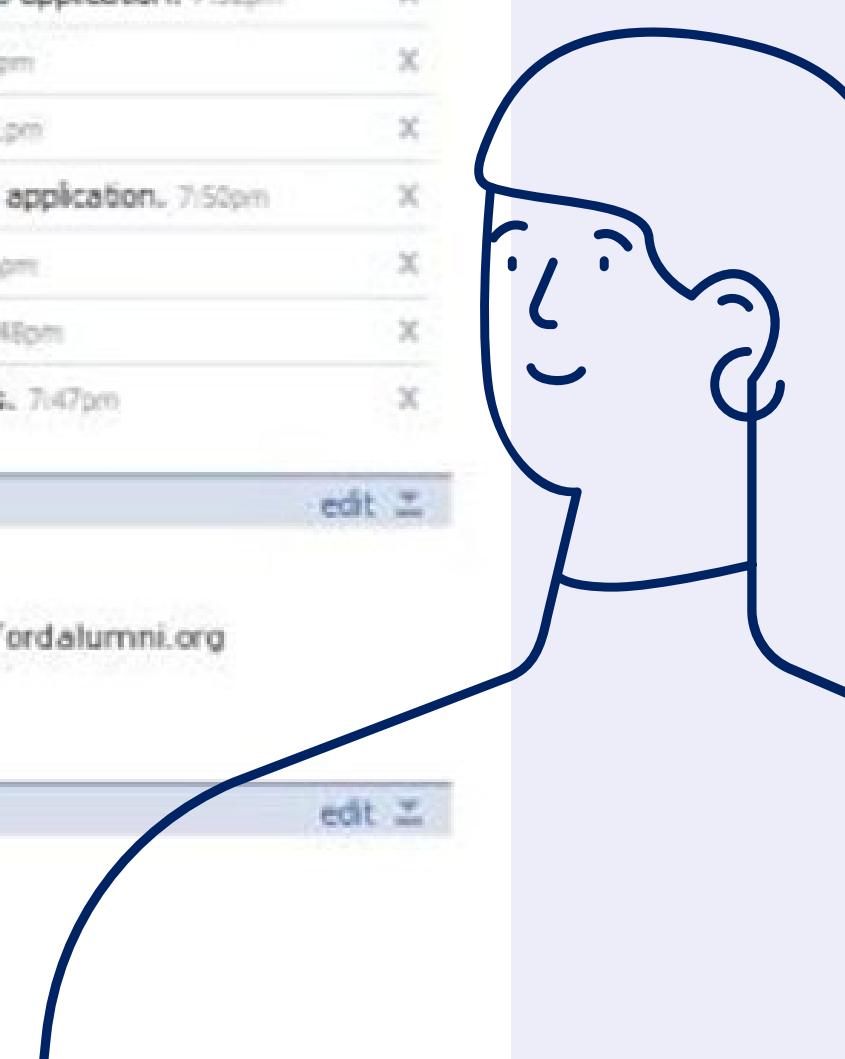
Email: gina_bianchini@stanfordalumni.org

Education and Work edit

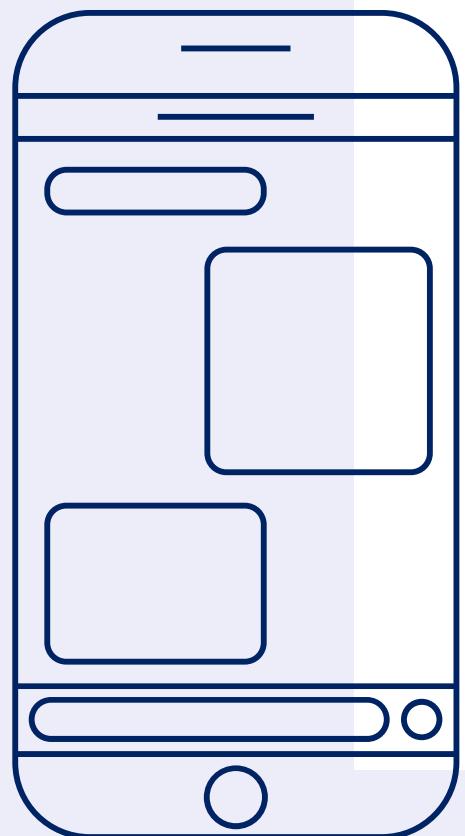
Education Info [edit]

College: Stanford Political Science

High School: Lynbrook High



The News Feed



facebook Welcome Matt!

home search browse share invite help logout

News Feed

Sponsored: iTunes

Athalie [Lapierre](#) and Meredith [Browne](#) commented on the note tab energy: an anomoly in my life. 3:59pm

Carrie [Hanson](#) joined the group Marvel: Ultimate Alliance – The World's Largest Army of Super Heroes. 3:39pm

Payam Imani added new photos. 3:30pm [Share](#) [Save](#)

Gotham City: Chicago – 58 photos by Payam [Imani](#) Location: Chicago, IL In this album: Payam

Steve [Wilkerson](#) created a group. 2:59pm

Requests 1 group invitation

My Status [edit](#) Keep your friends updated on your current status.

Shared with You [see all](#)

ShowBizSpy - Movies From Eddie Lim

Microsoft launches the Zune! - Engadget From Soleio

Drew [Hanson](#) From Soleio

Birthdays [see all](#)

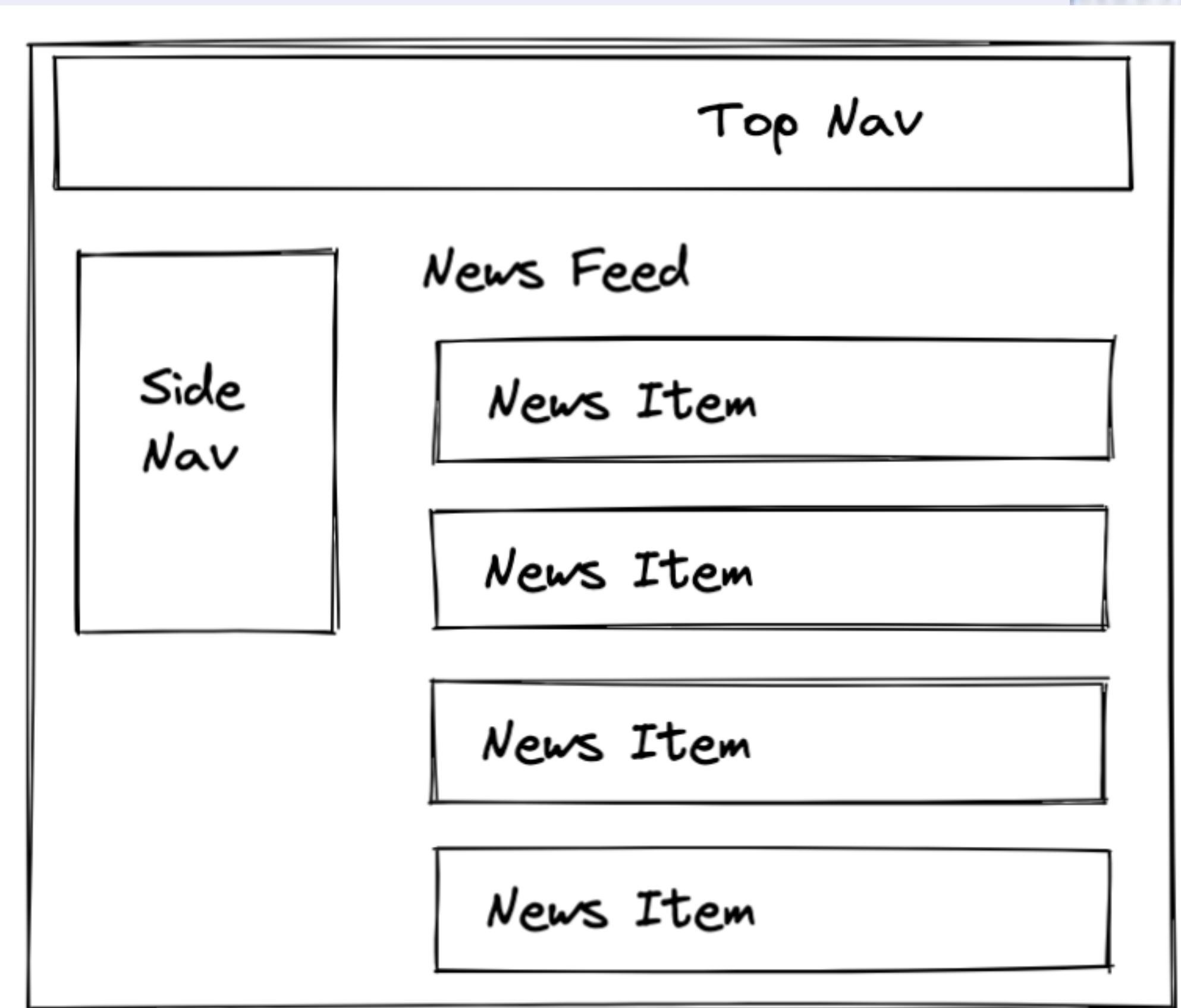
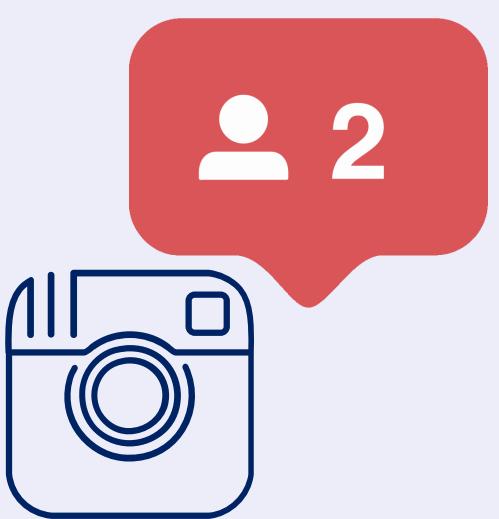
Today's Birthdays Kyle [Hanson](#)

October 7th Birthdays Joe [Wilkerson](#) Alisha [Kroder](#) Nick [Hanson](#)

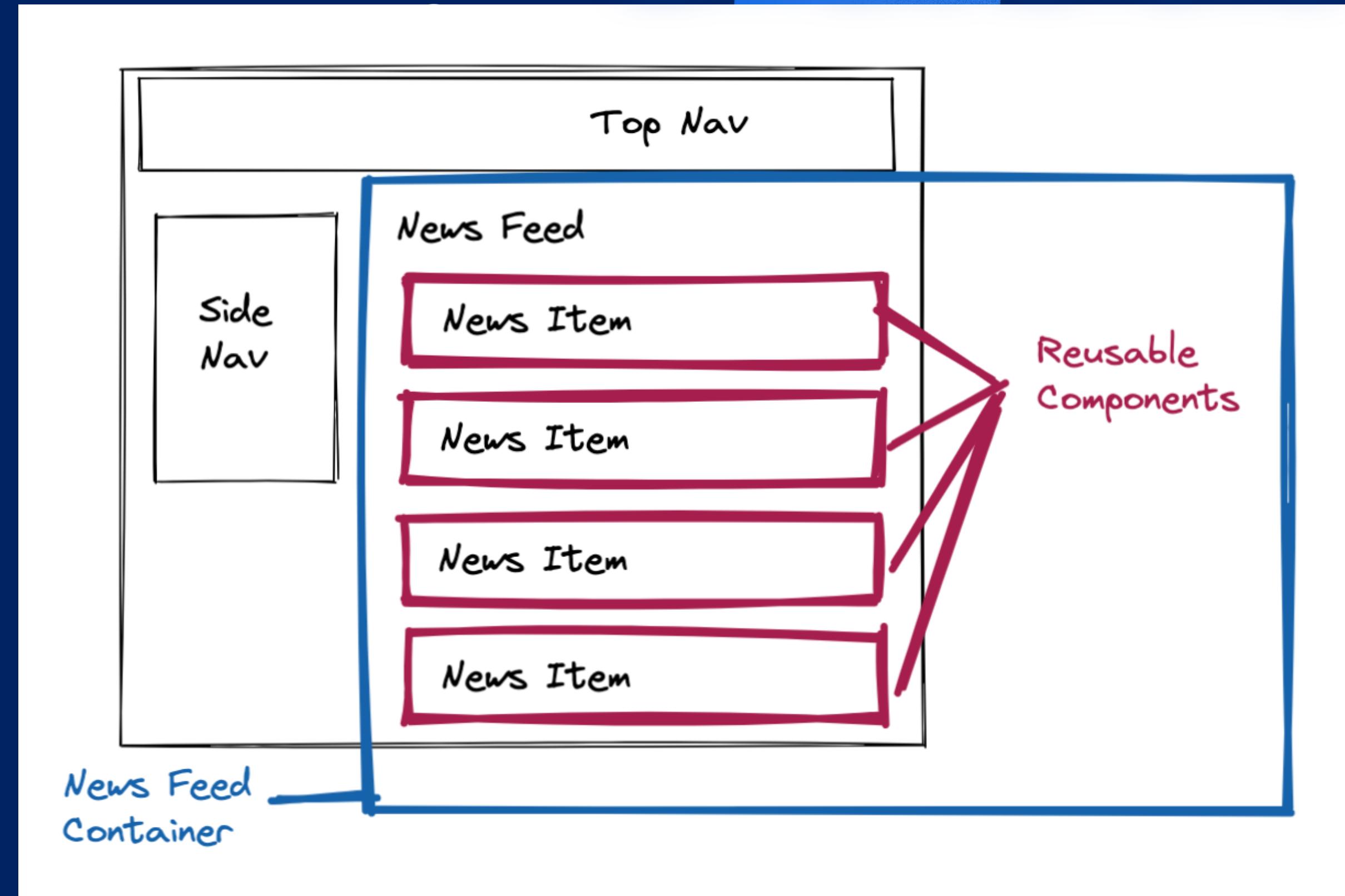
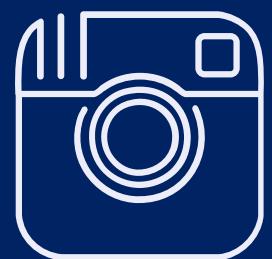
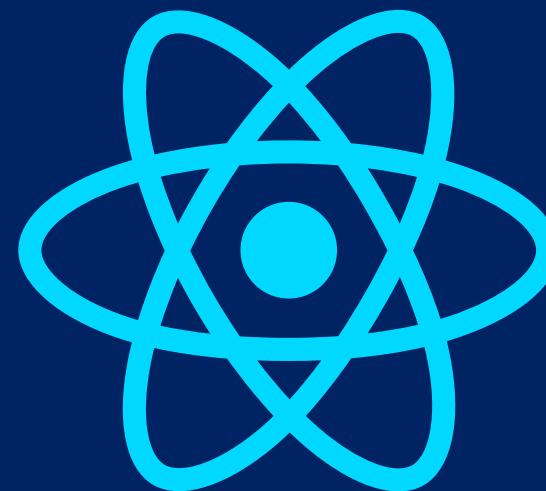
October 8th Birthdays

Infinite Scroll

React.js created by
Facebook engineer
Jordan Walke (2011)



React Components



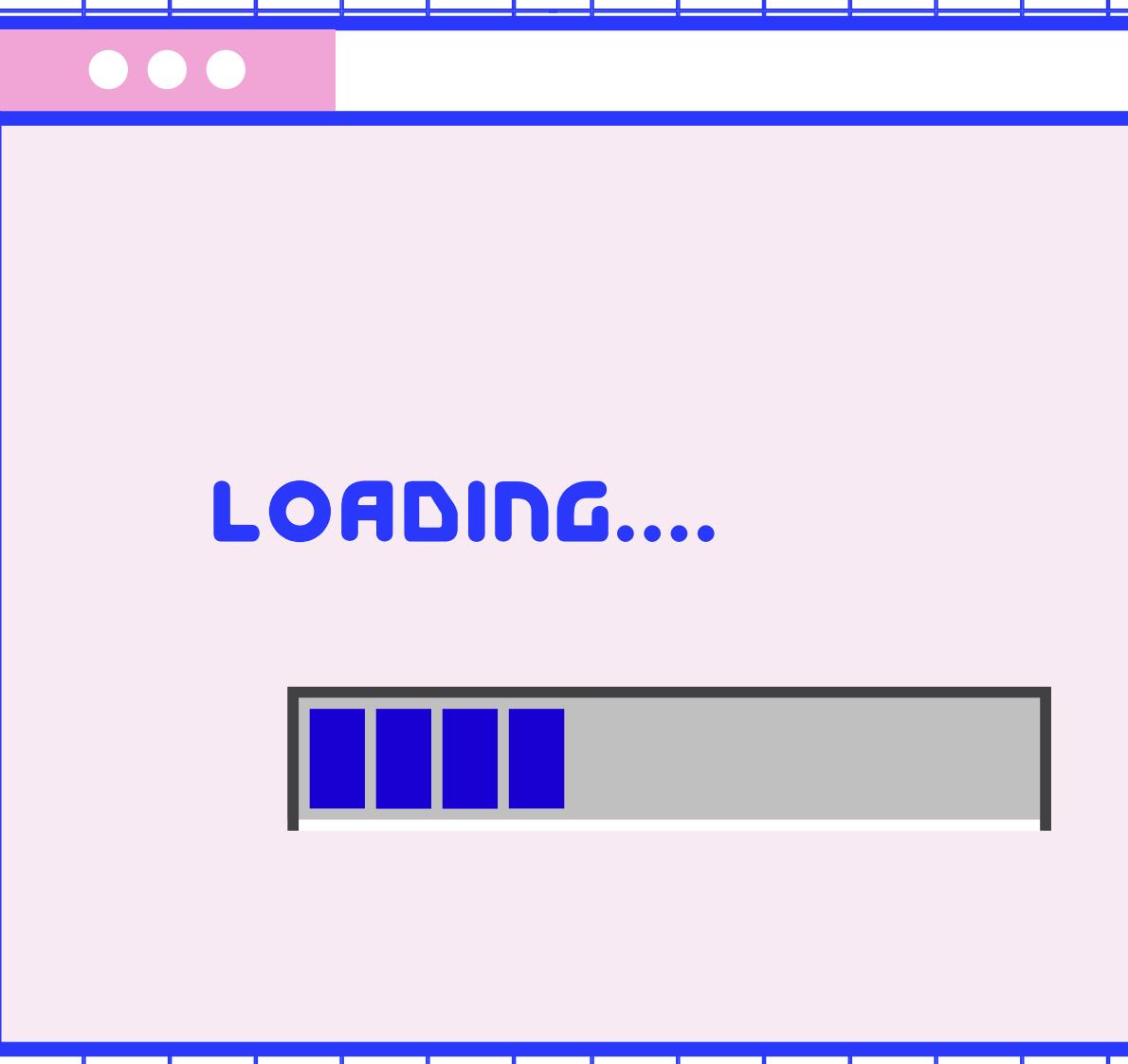


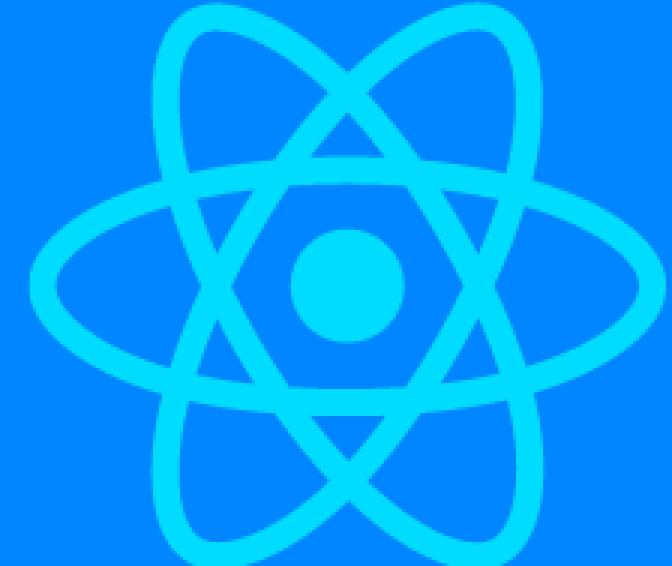
OK COMPUTER!

DEMO

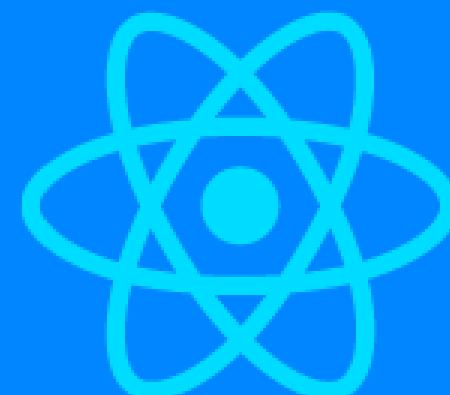
Building a Dockerfile for using React

CREATE-REACT-APP

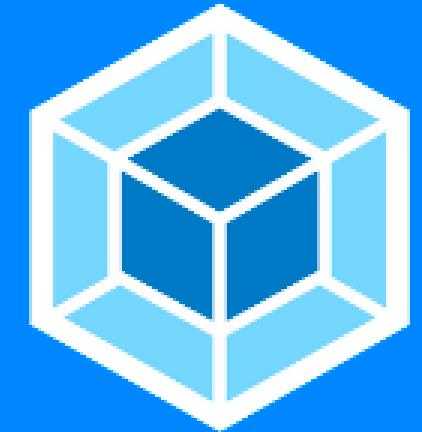




Create React App



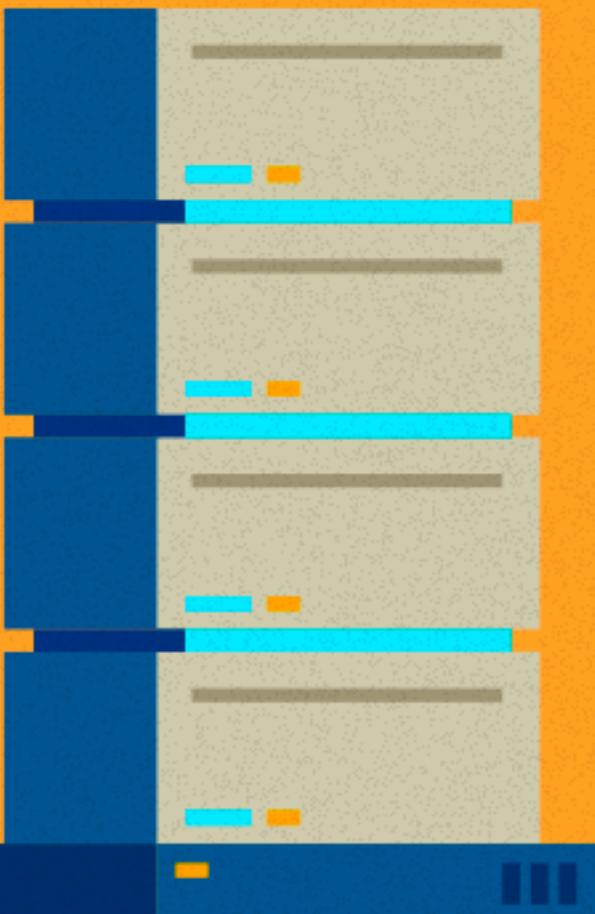
BABEL



webpack

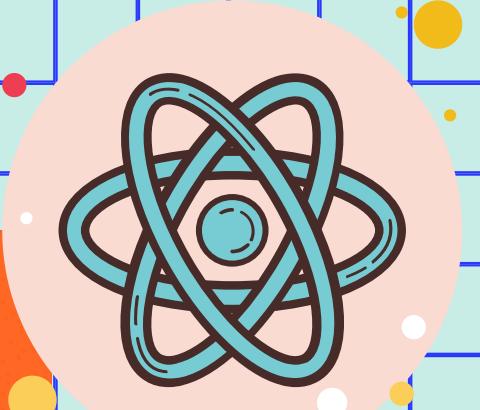
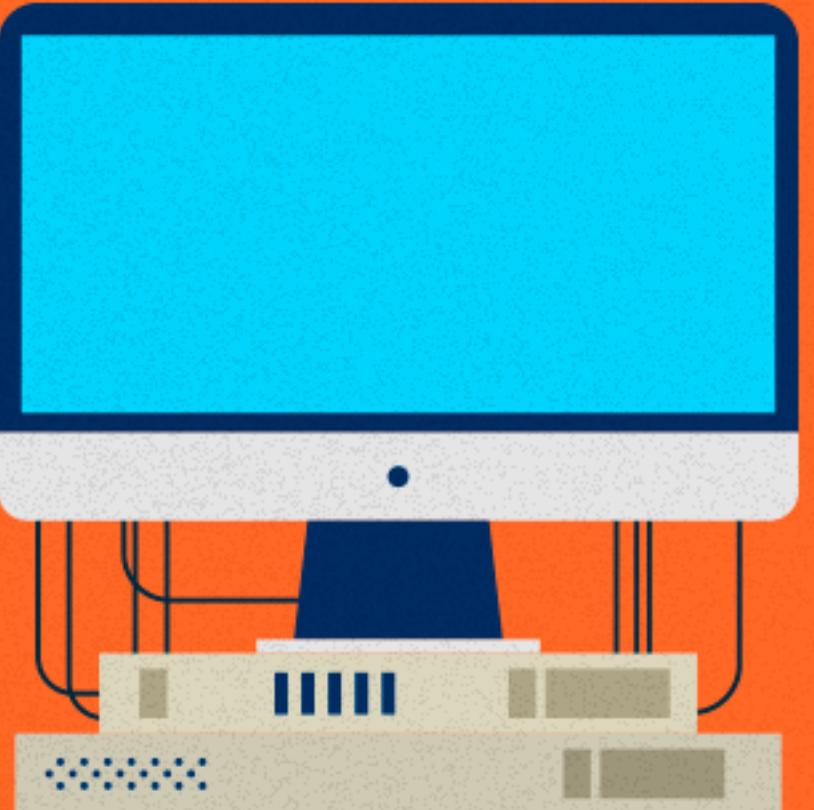
dj

SERVER
SIDE
RENDERING



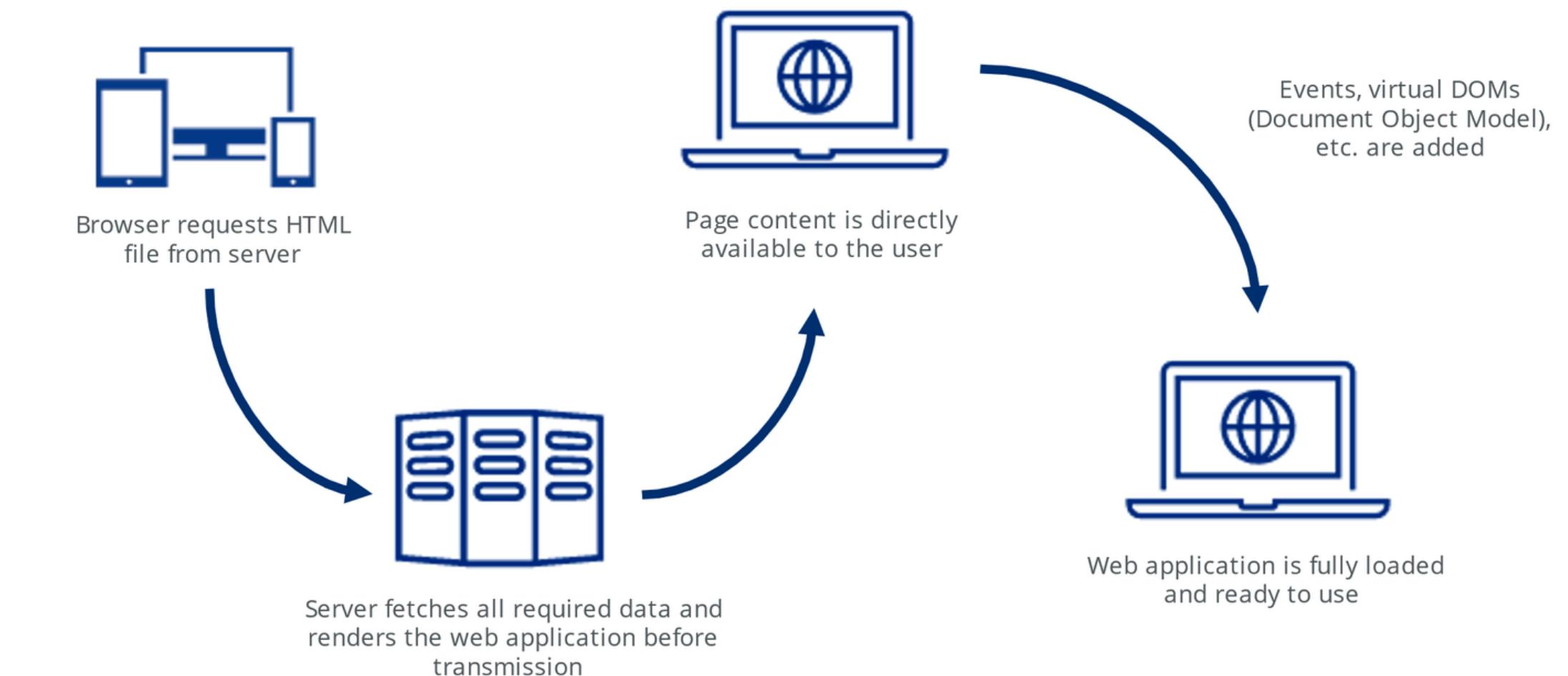
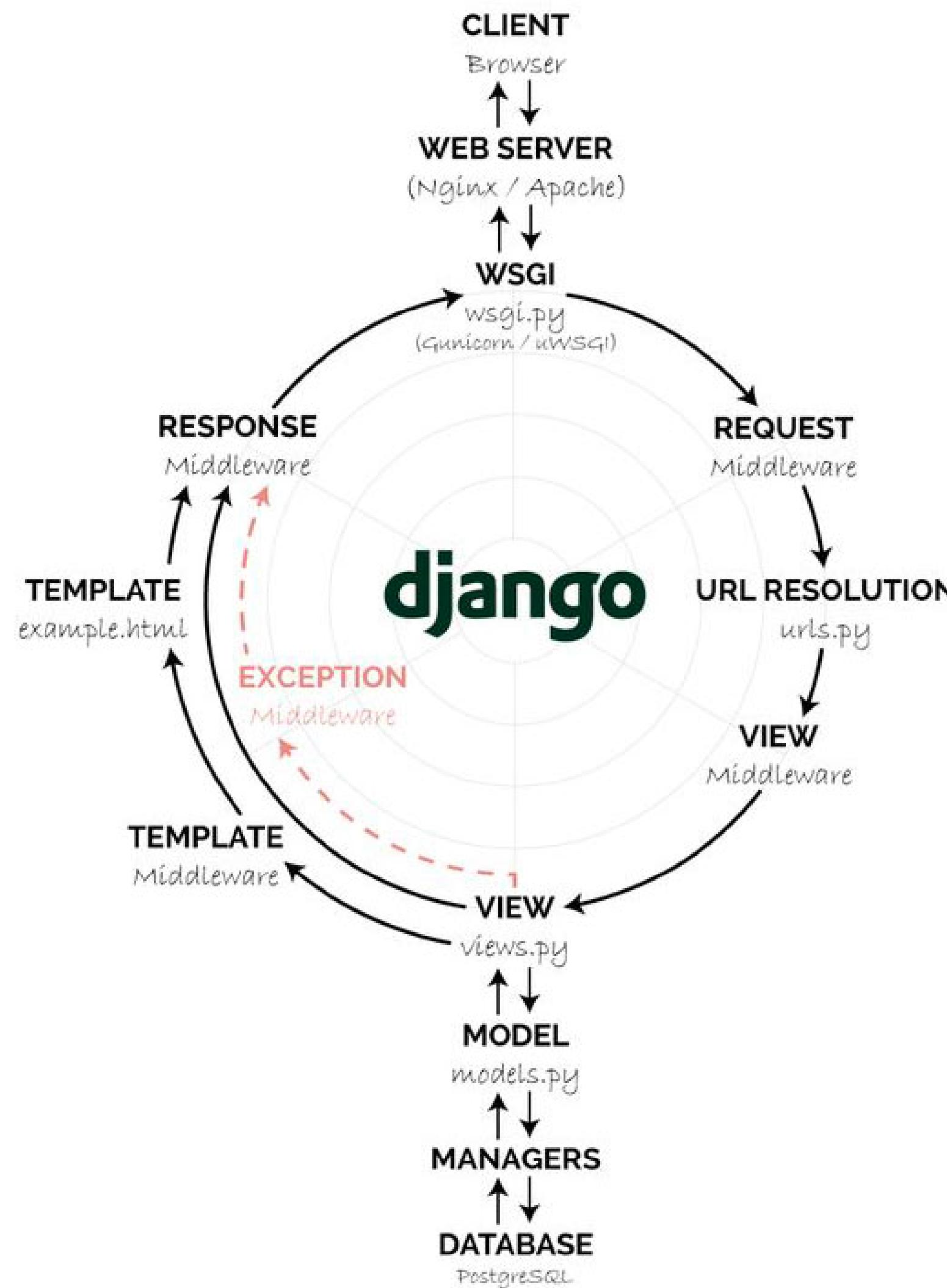
VS

CLIENT
SIDE
RENDERING

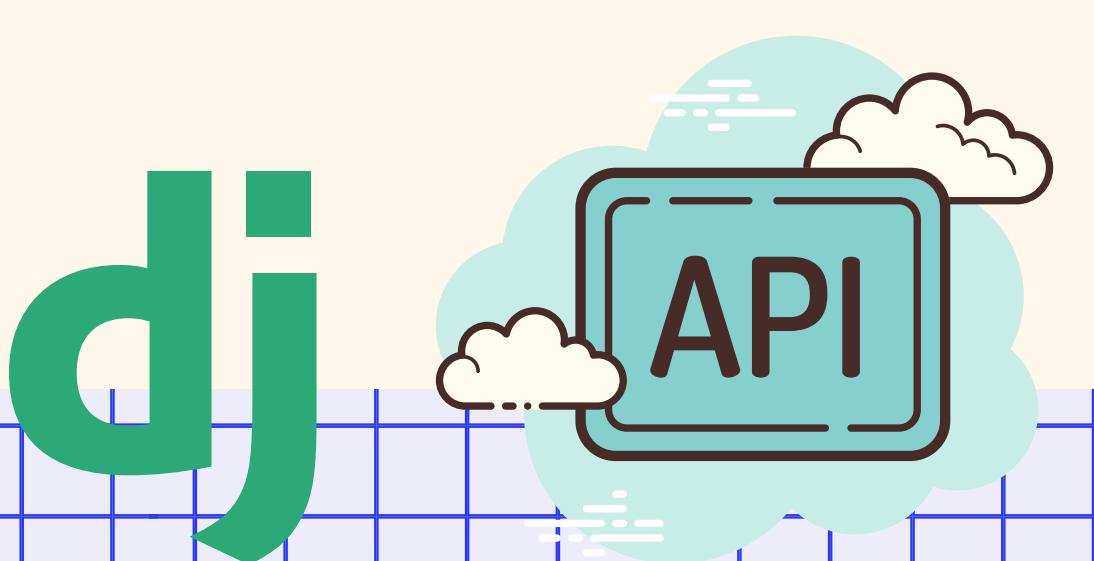
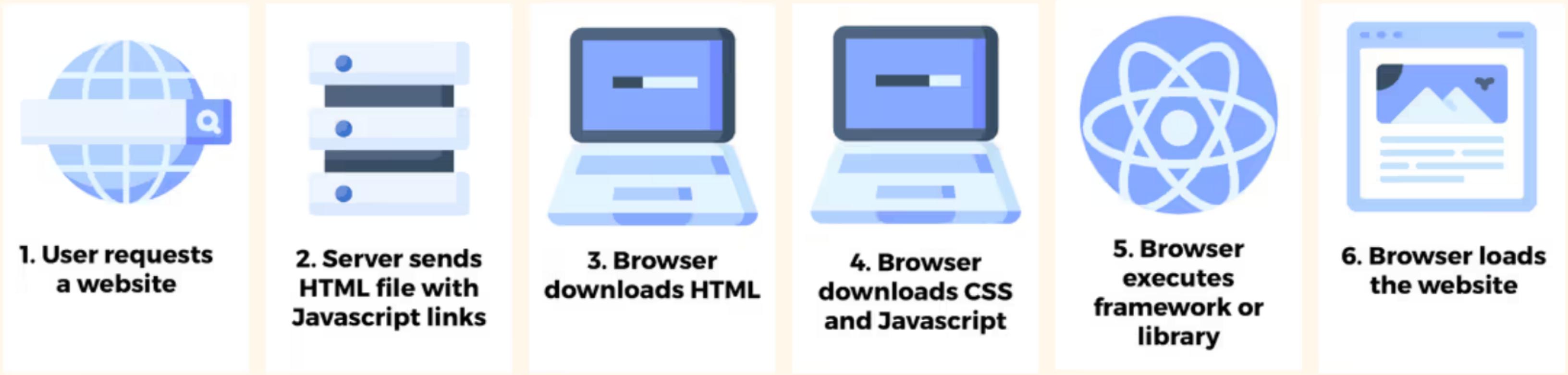
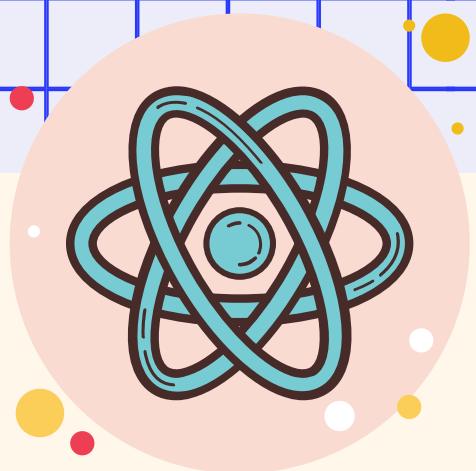




Server side rendering



Client Side Rendering



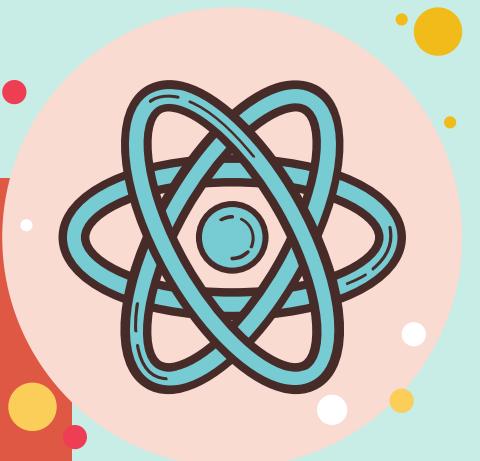


SSR

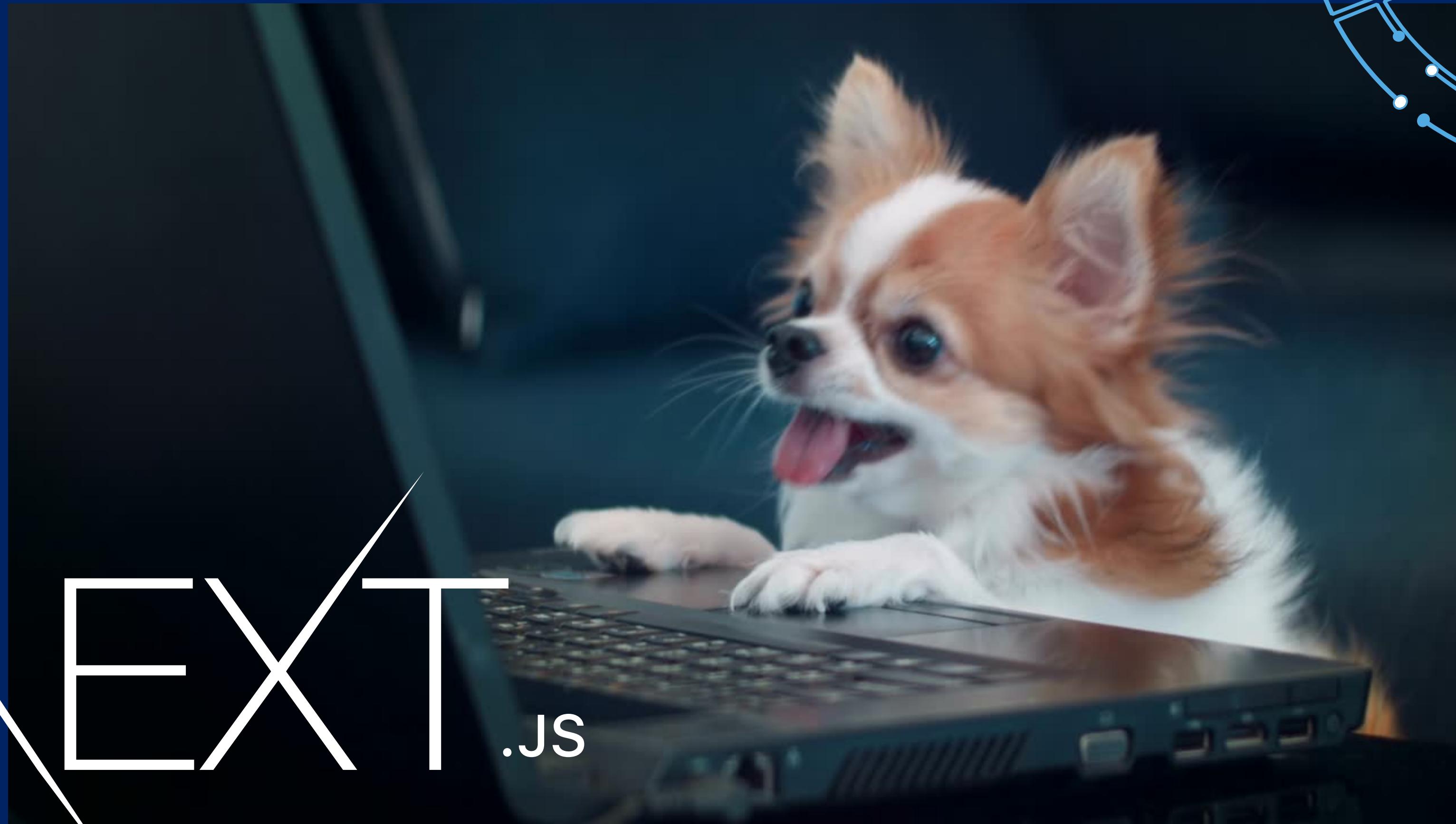
- + Ideal for static sites
- + Quick initial page access
- + No JS dependency
- + Easy-to-crawl site for better SEO
- Multiple server requests
- Full page reloads
- Non-rich site interactions
- Higher latency, prone to vulnerability

CSR

- + Ideal for web apps
- + Fast site rendering after initial load
- + Rich site interactions
- + Robust JS library selection
- Negative SEO for incorrect rendering & API response delays
- Slow initial load time
- Requires external library
- Higher memory consumption



~~NEXT~~.JS





OK COMPUTER!

FUNCTIONAL COMPONENTS

Build a newsfeed.

CREATE-REACT-APP

FUNCTIONAL

```
src > components > example.jsx > ...
1 import React from 'react'
2
3 export default function example() {
4     return (
5         <div>
6             <h1>Hello World</h1>
7         </div>
8     )
9 }
10
```



CLASS-BASED

```
src > components > ⚙ example.jsx > 🐣 example > 🏷 render  
1 import React, { Component } from 'react'  
2  
3 export default class example extends Component {  
4   render() {  
5     return (  
6       <div>  
7         <h1>Hello World</h1>  
8       </div>  
9     )  
10  }  
11}  
12
```

