



*H. Dip. In Computer Science (Online)*

## **ICT Skills II**

### **Overview**

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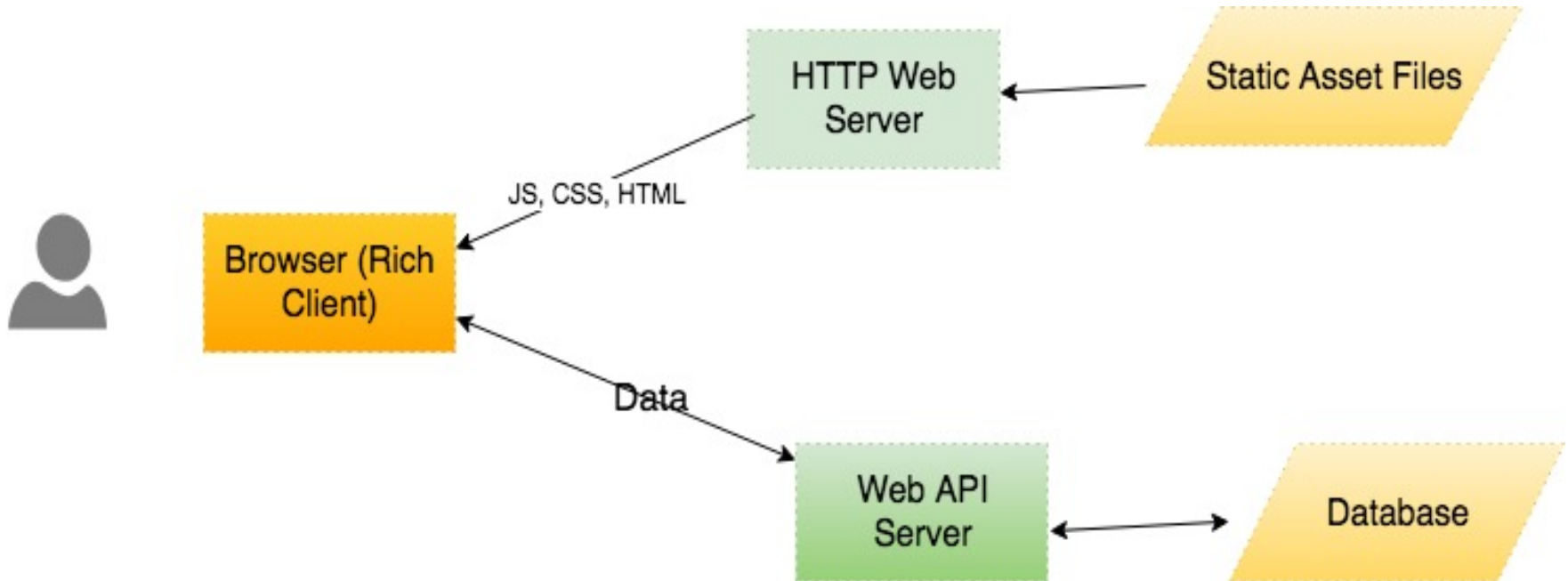
# Agenda.



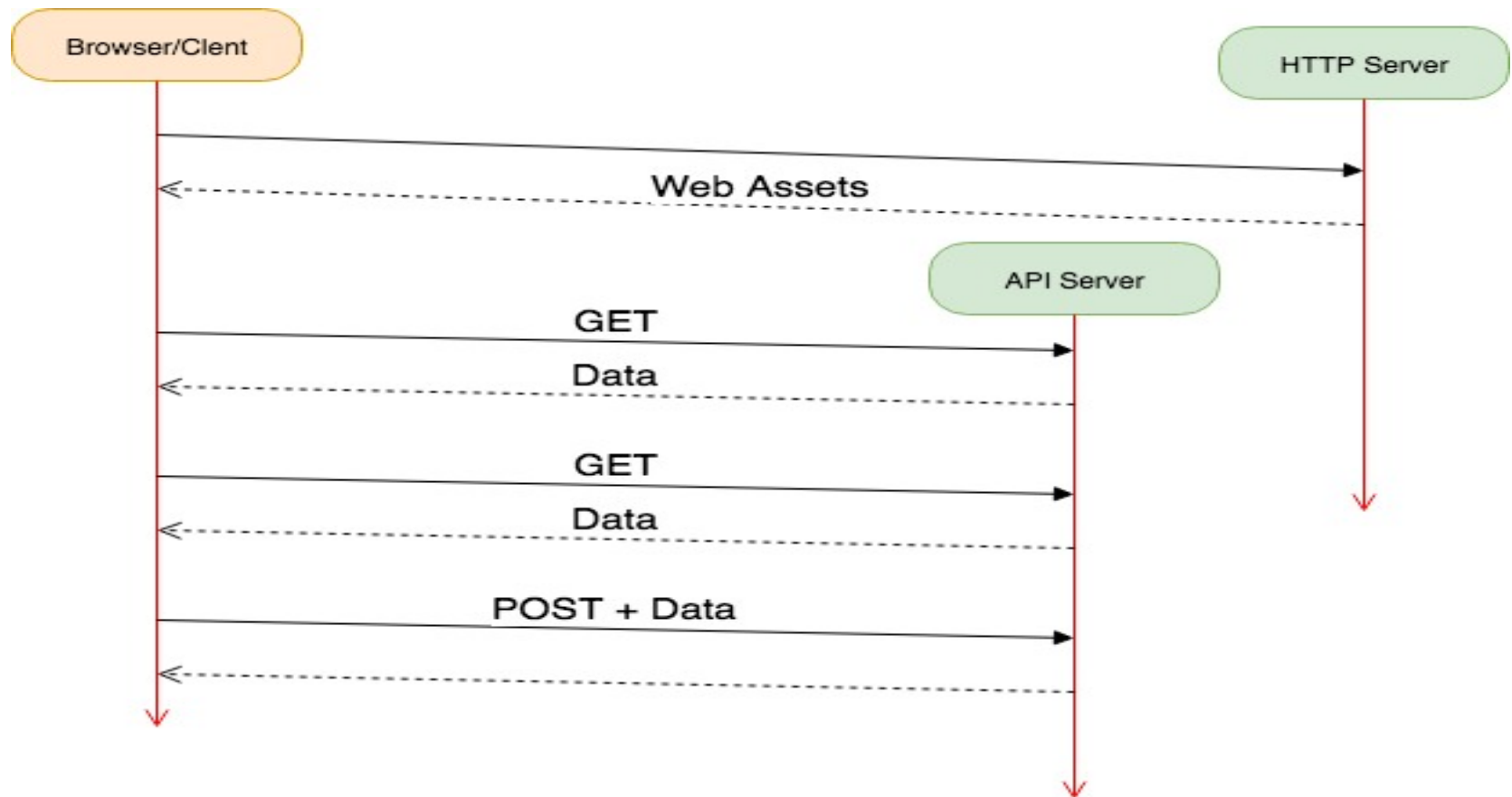
- Context

- This module's focus

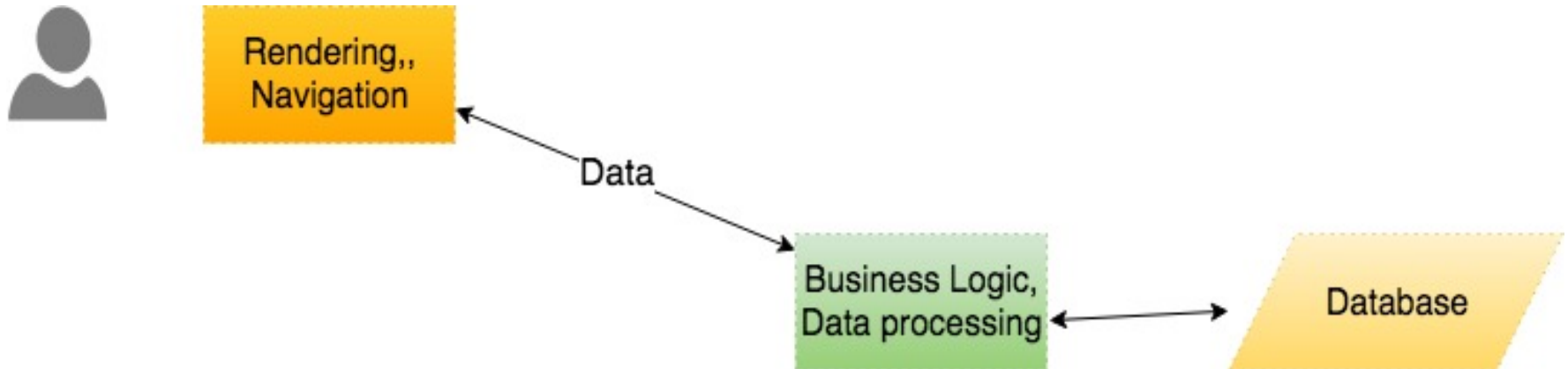
# Modern Web Apps - Architecture



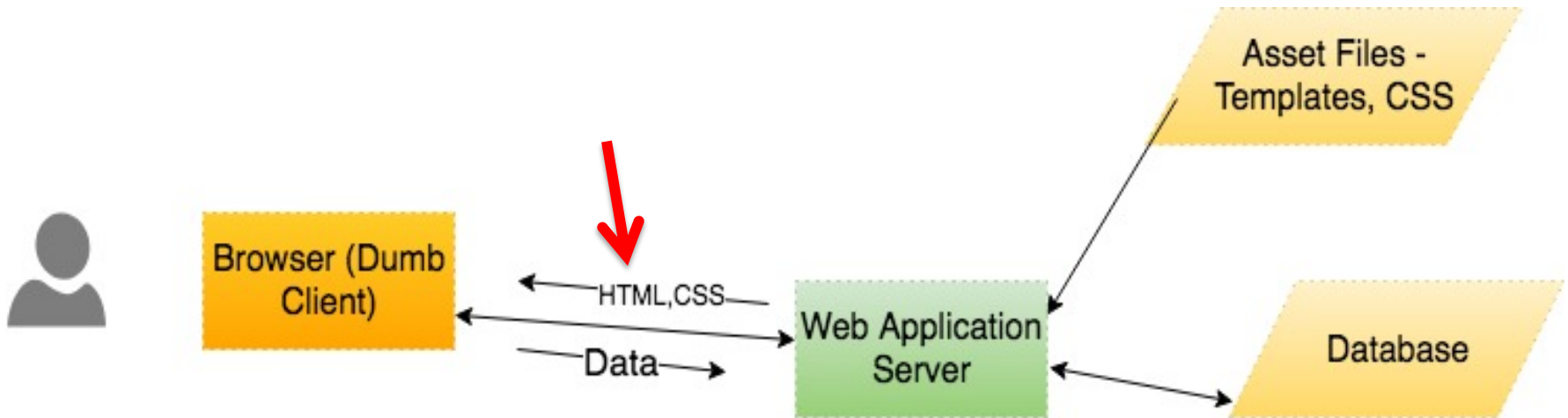
# Modern Web Apps – HTTP Communications flow



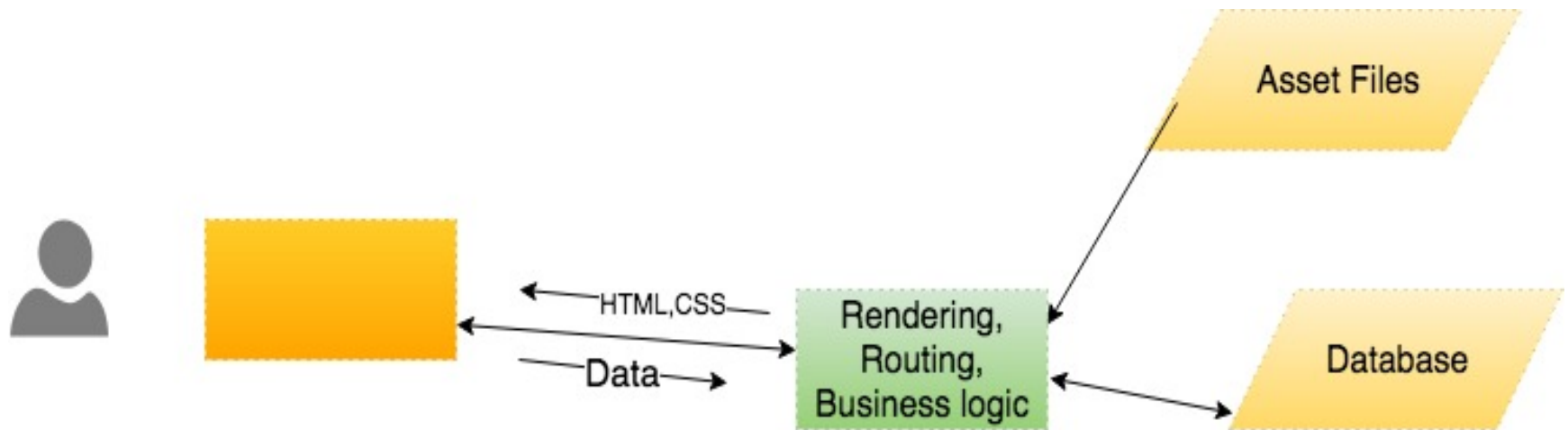
# Modern Web Apps – Sub-system roles



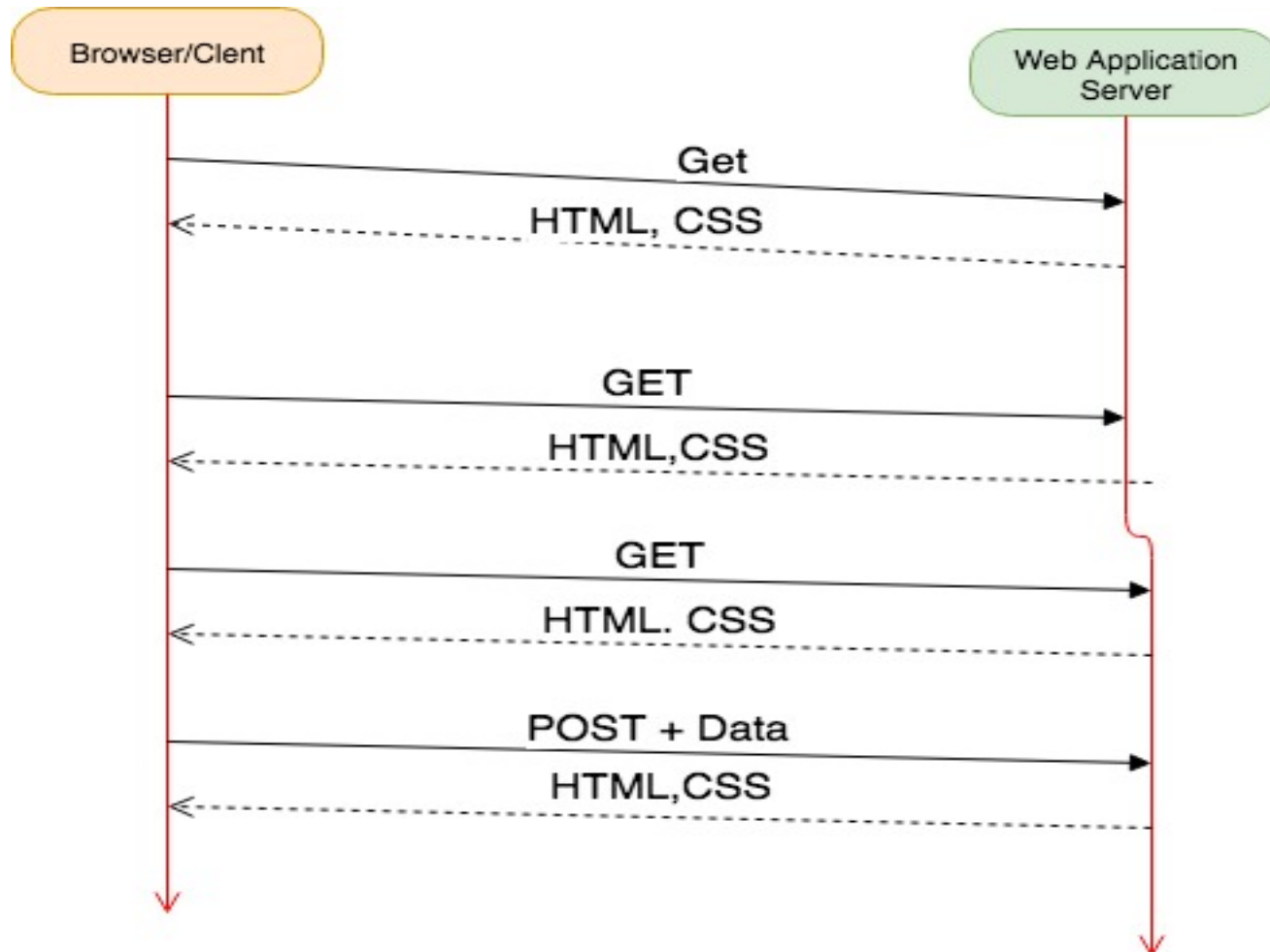
# Traditional Web Apps – Architecture



# Traditional Web Apps – Sub-system roles.



# Traditional Web Apps – HTTP Communication flow.





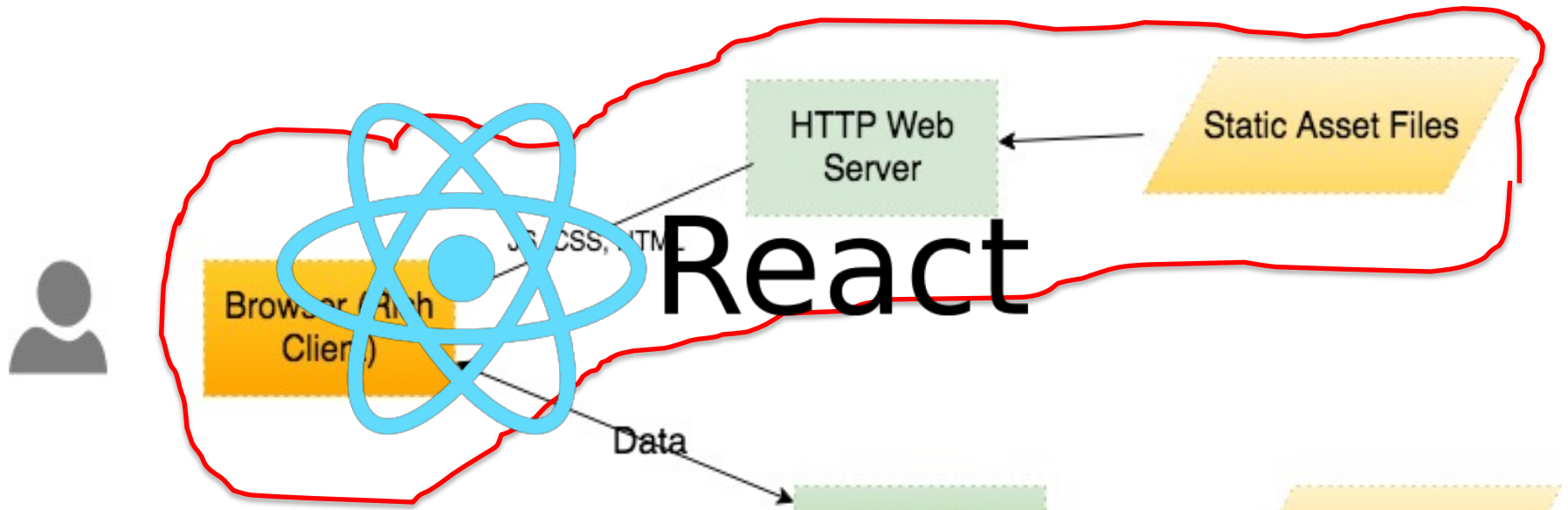
# Agenda

- Context.



- This module's focus

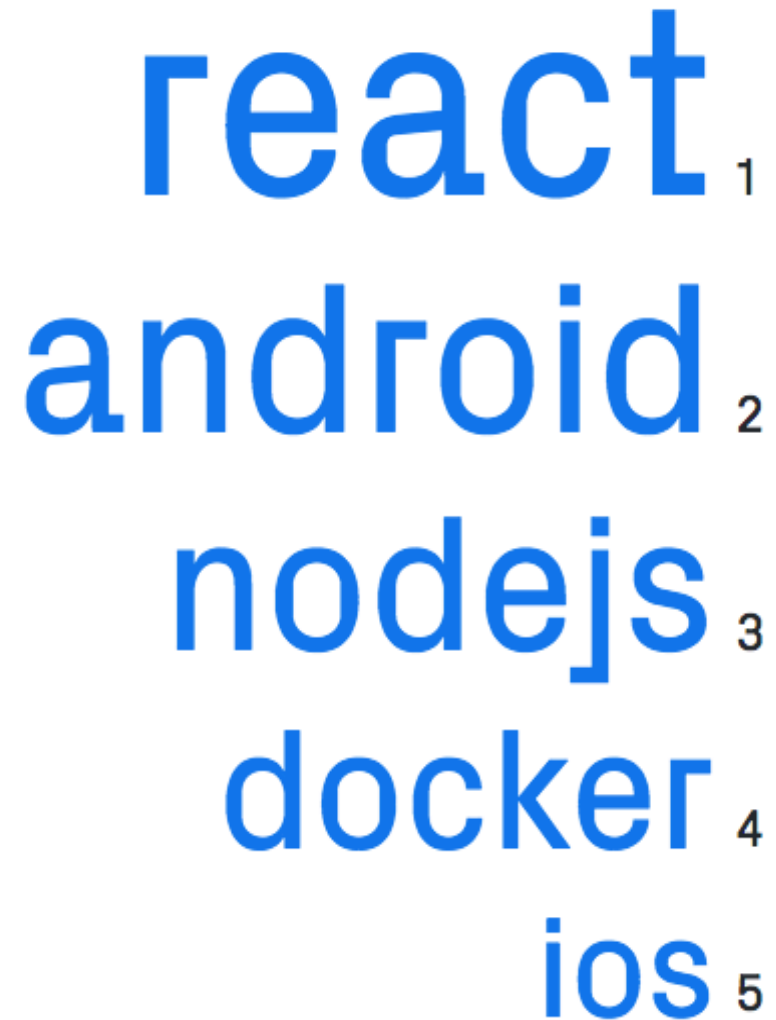
# Modern Web Apps



A JavaScript library for building user interfaces

## Top topics tagged

The millions of projects you contributed to this year span thousands of topics. JavaScript (both front and backend), machine learning, mobile app development, and containerization are among the topics you contributed to the most. \*



react	1
android	2
nodejs	3
docker	4
ios	5

Ref : <https://octoverse.github.com/projects>

## Most Loved, Dreaded, and Wanted Frameworks, Libraries, and Tools

Loved

Dreaded

Wanted

React

21.3%

Node.js

20.9%

TensorFlow

15.5%

Angular

14.3%

.NET Core

9.3%

Django

6.7%

Ref : <https://insights.stackoverflow.com/survey/2018>

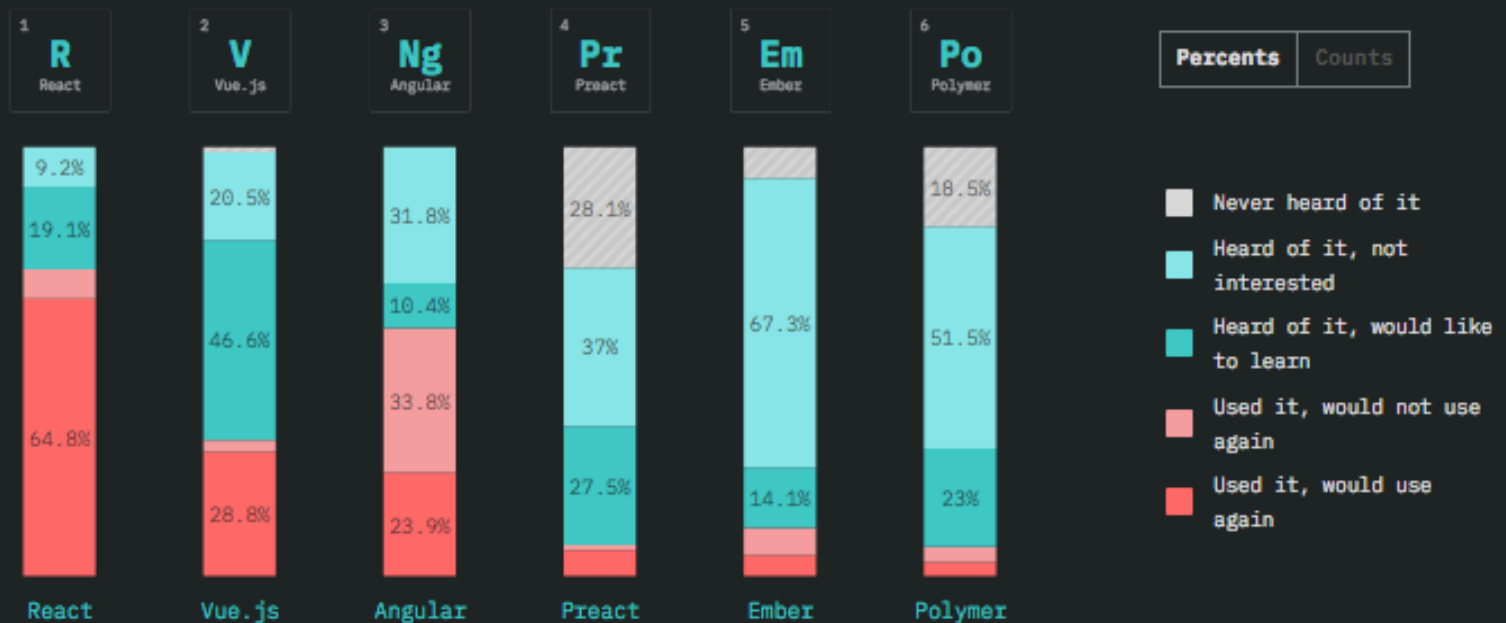
# Front-end Frameworks - Overview

The front-end remains the key battleground for JavaScript. But now that the dust has cleared, it's starting to look like only two combatants are left standing...

## Overall Results

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Overall Front-end Frameworks results.



Ref : <https://2018.stateofjs.com/front-end-frameworks/overview/>

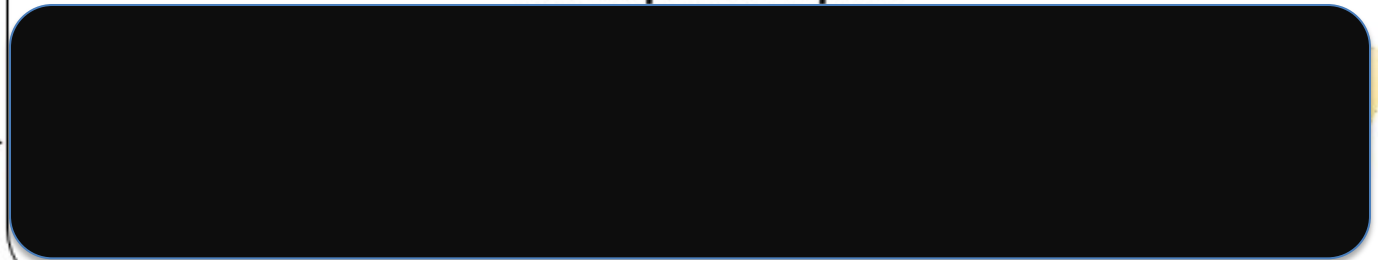
# Agenda

- Context.
- This module's focus:
  - Single Page App development, using React ☒

# End-to-End Testing



A 'black box' whose specification allows us state the expected output for a specific input.

The Cypress logo, featuring the word "cypress" in a bold, lowercase, sans-serif font. The "cy" is enclosed in a black circle.

# Agenda

- Context.
- This module's focus:
  - SPA development, using React ☒
  - End-to-End testing ☒



Questions?