

Build a Full-Stack App with React and Express

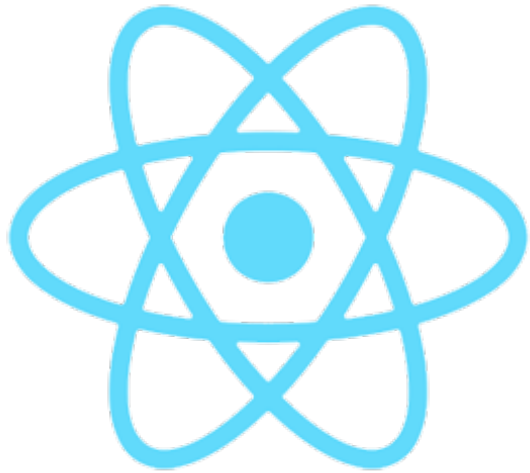
Introduction



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Why React and Express?



React provides fast
client-side **views**

Express provides a
powerful **backend**

React and Express
work together
to make
isomorphic apps

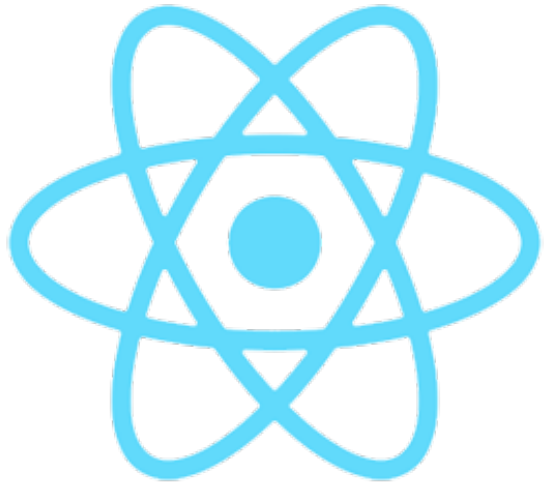
express

Introduction to React

Build a Full Stack App with React and Express

React is a JavaScript library in which components are defined and eventually become HTML.

Why React?



Renders views ultra-quickly

Easy to test

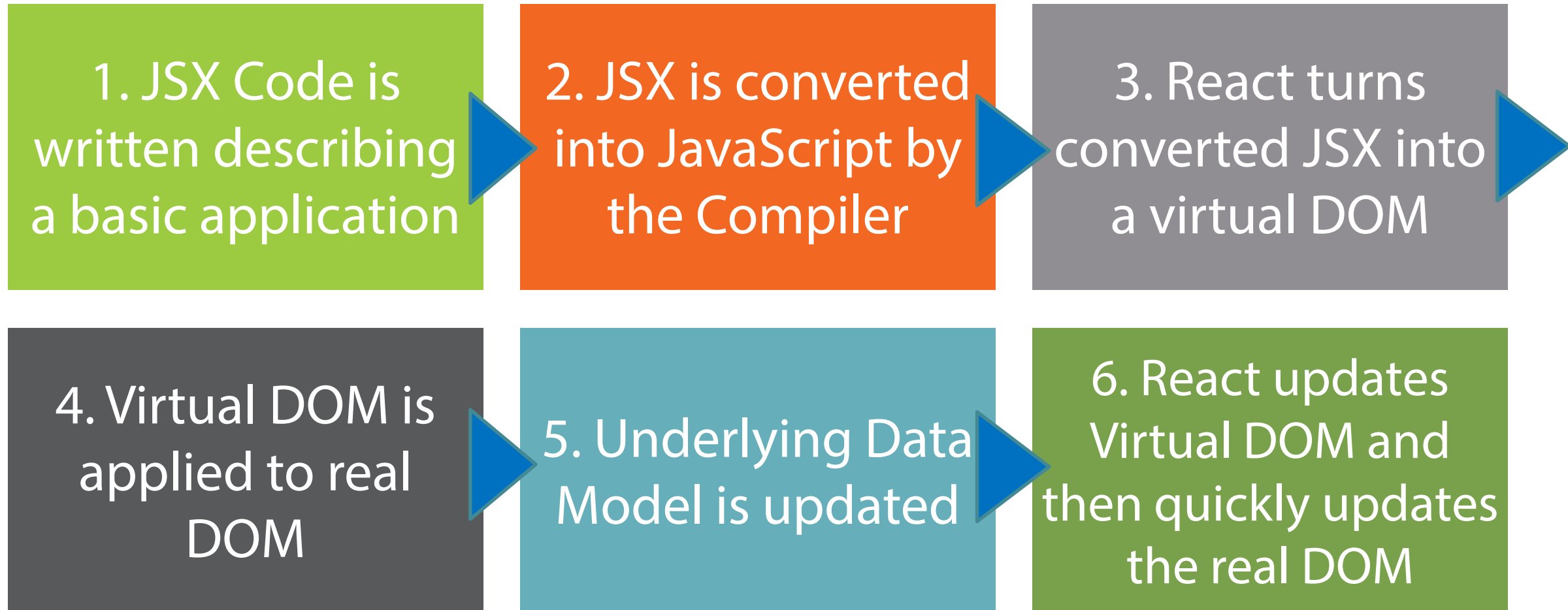
Enforces good coding practices

Supported and used by Facebook

“React abstracts away the DOM from you, giving a simpler programming model and better performance.”

- React 

How React Renders the View



Introduction to Express

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“[Express is] a fast,
unopinionated, minimalist web
framework for Node.js”

- Express

What is Express?

WWW

World-wide web is
made up of
Network requests.

:7777

All devices
communicate over
Network ports.

express

Express listens
for network
communications.

JS

Express responds
with data decided
by JavaScript logic

Why Express Makes Sense For React Applications (and almost all other web apps)

PHP / Ruby / Java

- Developers need to learn a separate languages to write server code
- Developers must learn yet another language when communicating with SQL database
- Developers are not able to share code between server and frontend

Node.js running Express

- Developers write both backend code and frontend in code in JavaScript, encouraging mastery
- Most Express apps use MongoDB, so this communication also happens in JavaScript
- Code sharing is easy and variegated

MongoDB Overview

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What is MongoDB?

- A non-relational database
- For all intents and purposes a giant text file
- Works in JSON – Good for JavaScript applications
- Fast and used in production in many apps



App Structure Overview

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How The Components Interrelate

MongoDB (database)
stores long term data.

Express + Node (server)
reads and writes from the
database; serves content

React requests data through
server APIs; Bootstraps
server-generated markup

A Look at the Finished Application

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