

Introducción a la librería React



Universidad
Internacional
de Valencia

MasterClass
06/02/2024

Paco Gómez

- Presentación
- Historia de un proyecto
- Preparando el entorno
- Qué vamos a hacer
- Comenzamos con React
 - Estructura de proyecto
 - Módulos y componentes
 - JSX
 - Nuestro primer componente
 - Props
- Comenzamos con React
 - Eventos
 - useState
 - Renderizado condicional
 - Comunicación eventos componentes
 - useEffect

Ingeniero en Telecomunicaciones

Desarrollador de software empresas consultoría y comunicaciones

Consultoría informática, comunicaciones, infraestructura y redes

Consultoría ERP y BI
Consultoría Salud

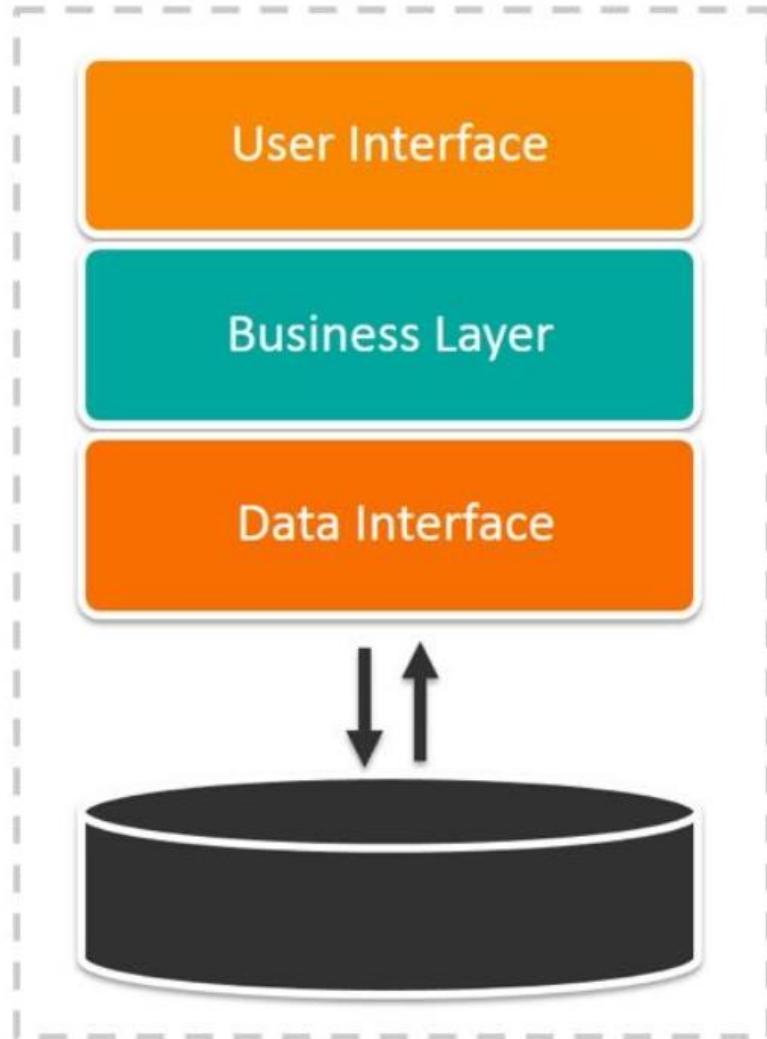
Asesoría emprendedurismo
Educación
Creación de contenidos



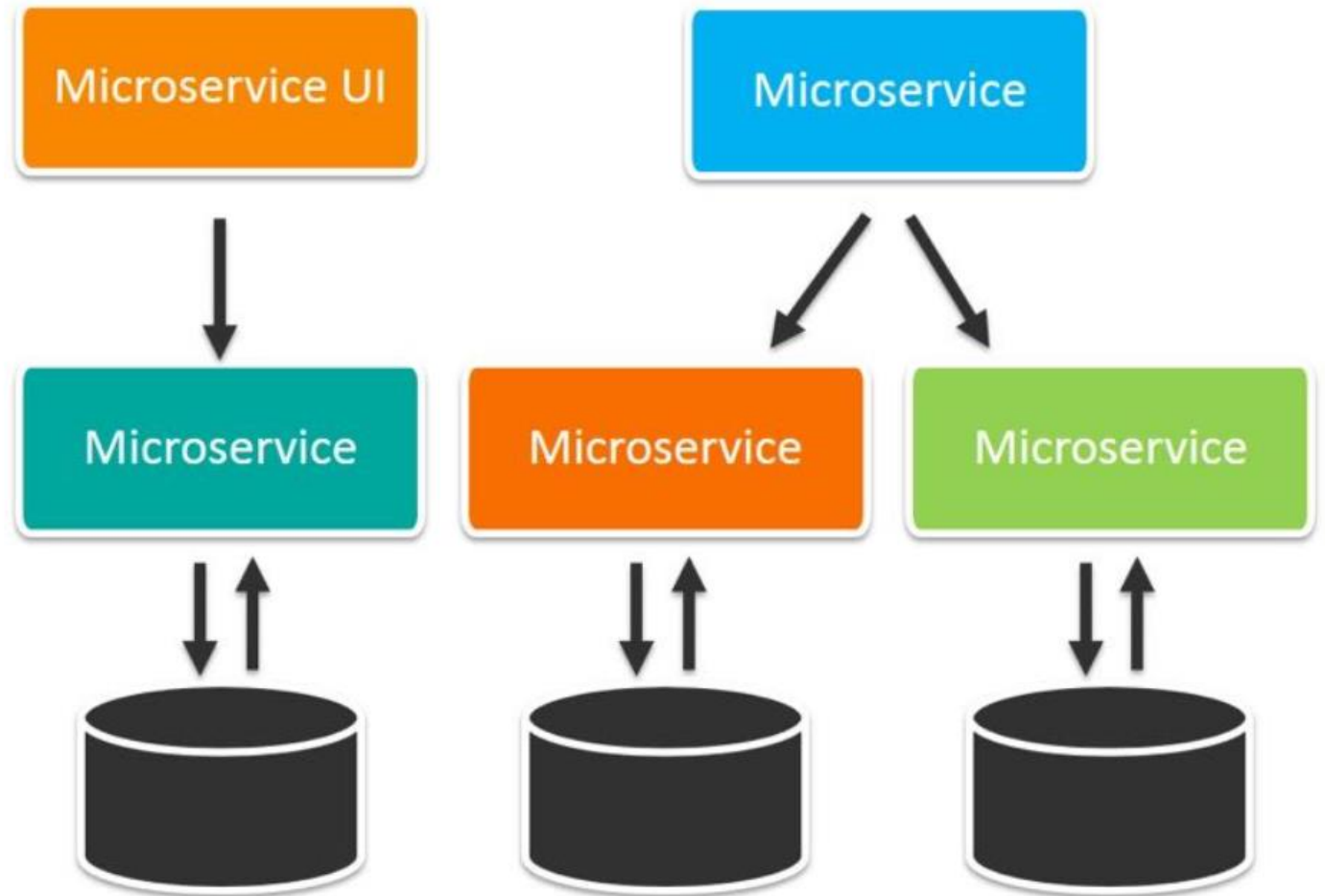
Profesor: Paco Gómez

pgomeza@professor.universidadviu.com

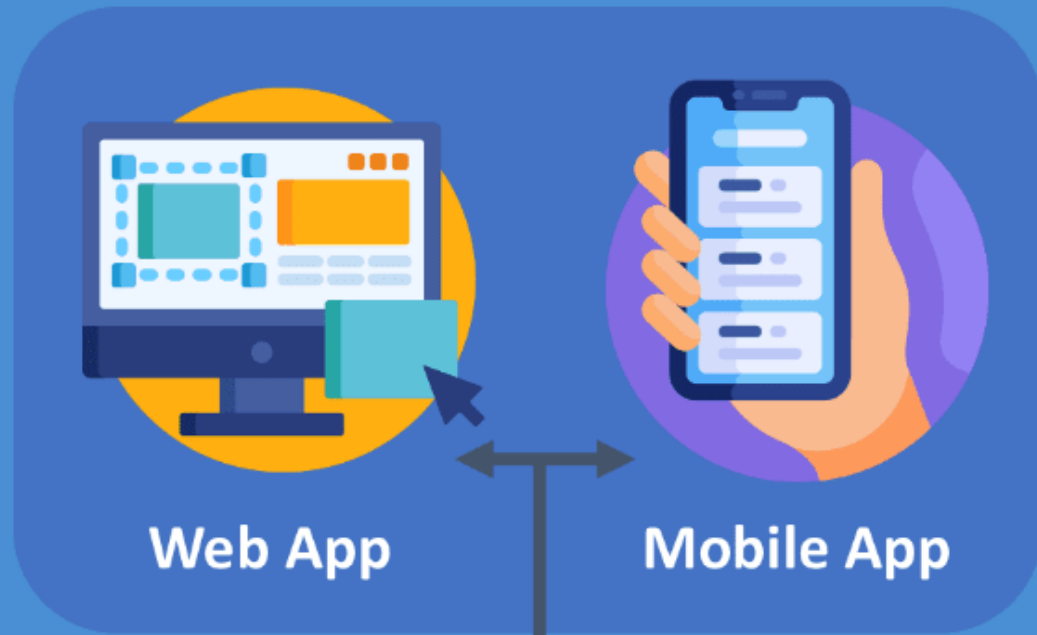
Monolithic Architecture



Microservices Architecture



FRONT-END



Web App

Mobile App

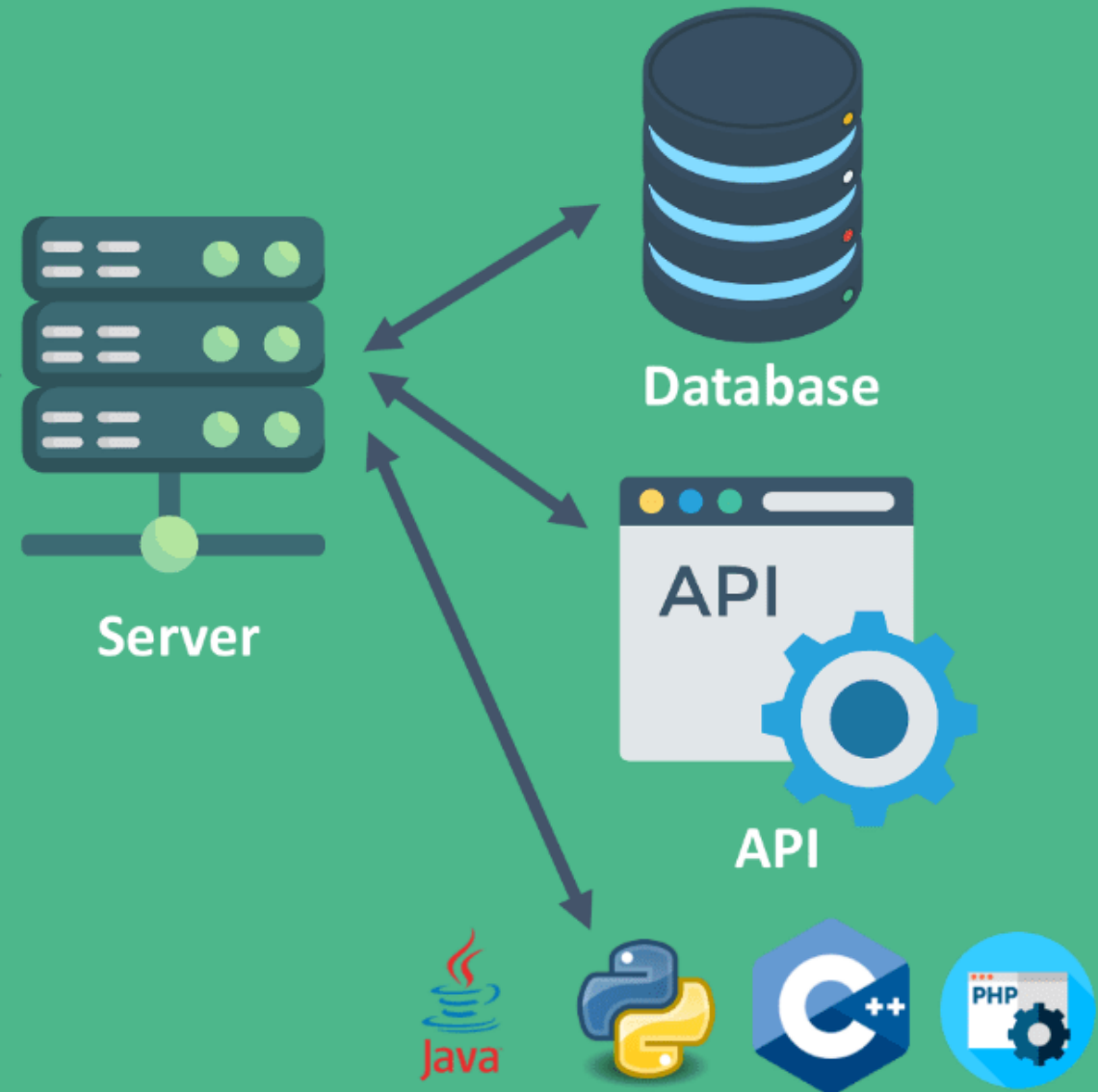
HTML

CSS

JS

JS

BACK-END



Server

Database

API

API

Java

Python

C++

PHP

Preparando el entorno



Visual Studio Code

<https://code.visualstudio.com/>



<https://nodejs.org/en>

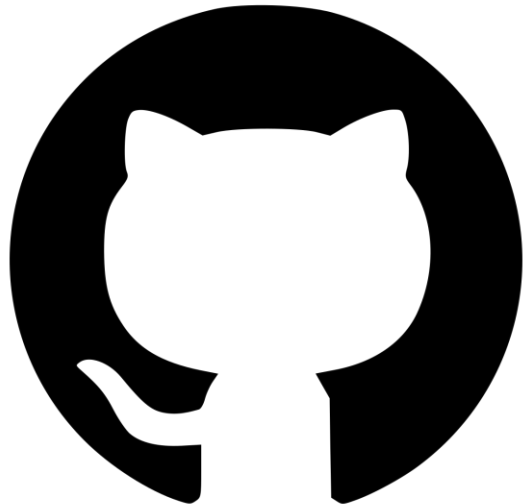
¿Qué vamos a hacer?



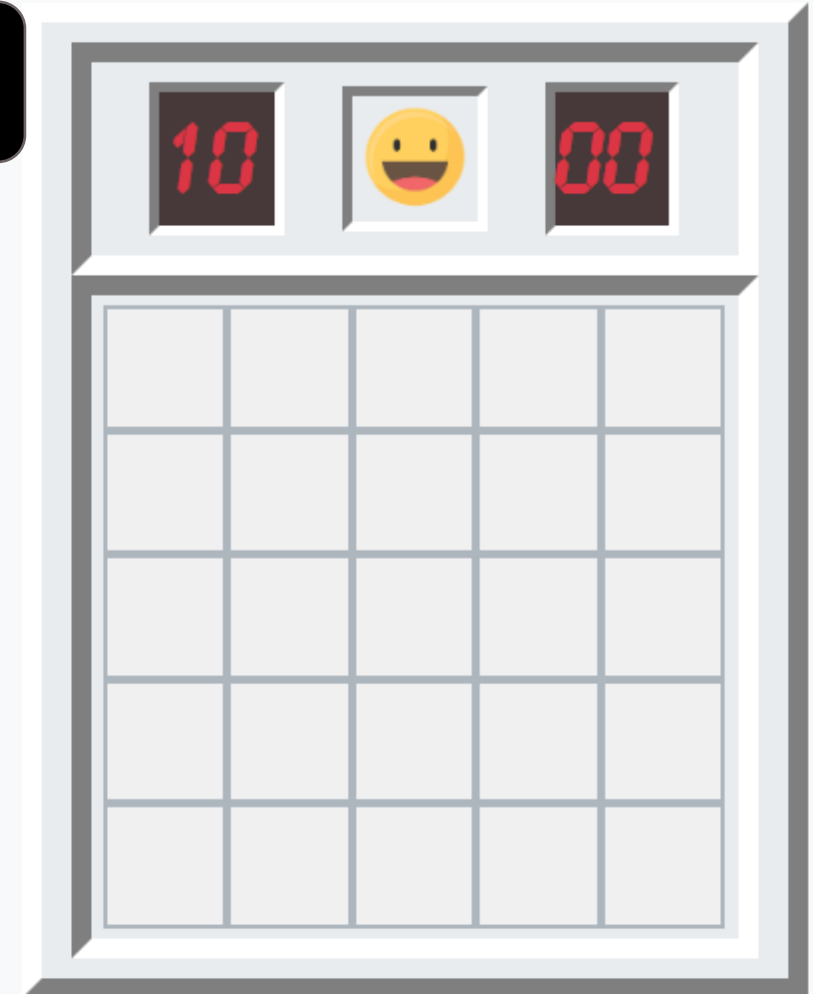
Buscaminas



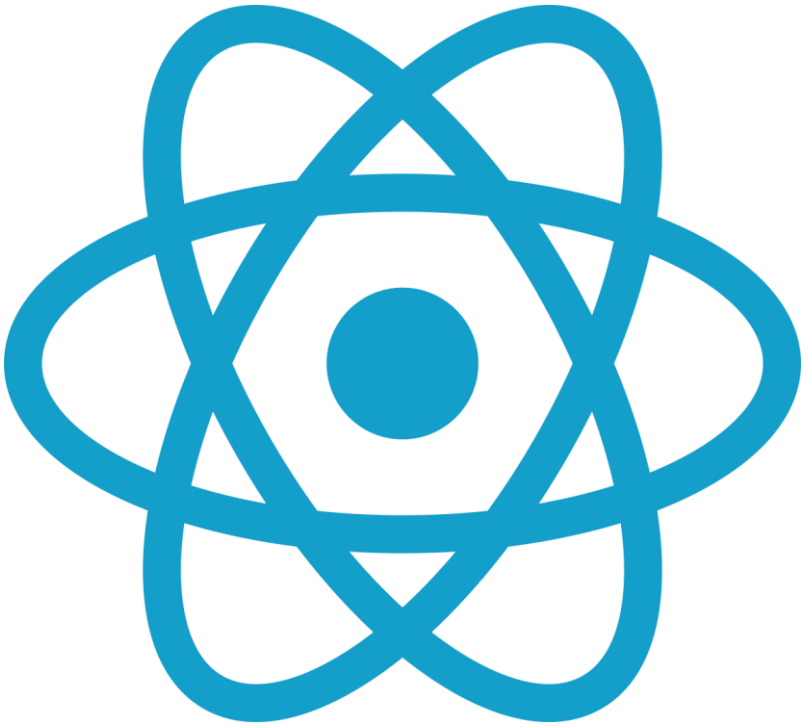
<https://getbootstrap.com/>



<https://github.com/pgomezarnaVIU/masterclassReact/tree/01-Mockup-BootStrap>



Comenzamos con React



<https://react.dev/>

<https://react.dev/learn>

<https://react.dev/learn/tutorial-tic-tac-toe>

<https://react.dev/learn/installation>

<https://create-react-app.dev/>

<https://create-react-app.dev/docs/getting-started>

```
>>> npm install -g npx
```

```
>>> npx create-react-app my-app
```


Estructura de proyecto

```
✓ MASTERCLASSREACT
  ✓ buscaminas
    > node_modules
  ✓ public
    ★ favicon.ico
    <> index.html
    🖼 logo192.png
    🖼 logo512.png
    {} manifest.json
    ≡ robots.txt
  ✓ src
    # App.css
    JS App.js
    JS App.test.js
    # index.css
    JS index.js
    🖼 logo.svg
    JS reportWebVitals.js
    JS setupTests.js
    💎 .gitignore
    {} package-lock.json
    {} package.json
    ⓘ README.md
```

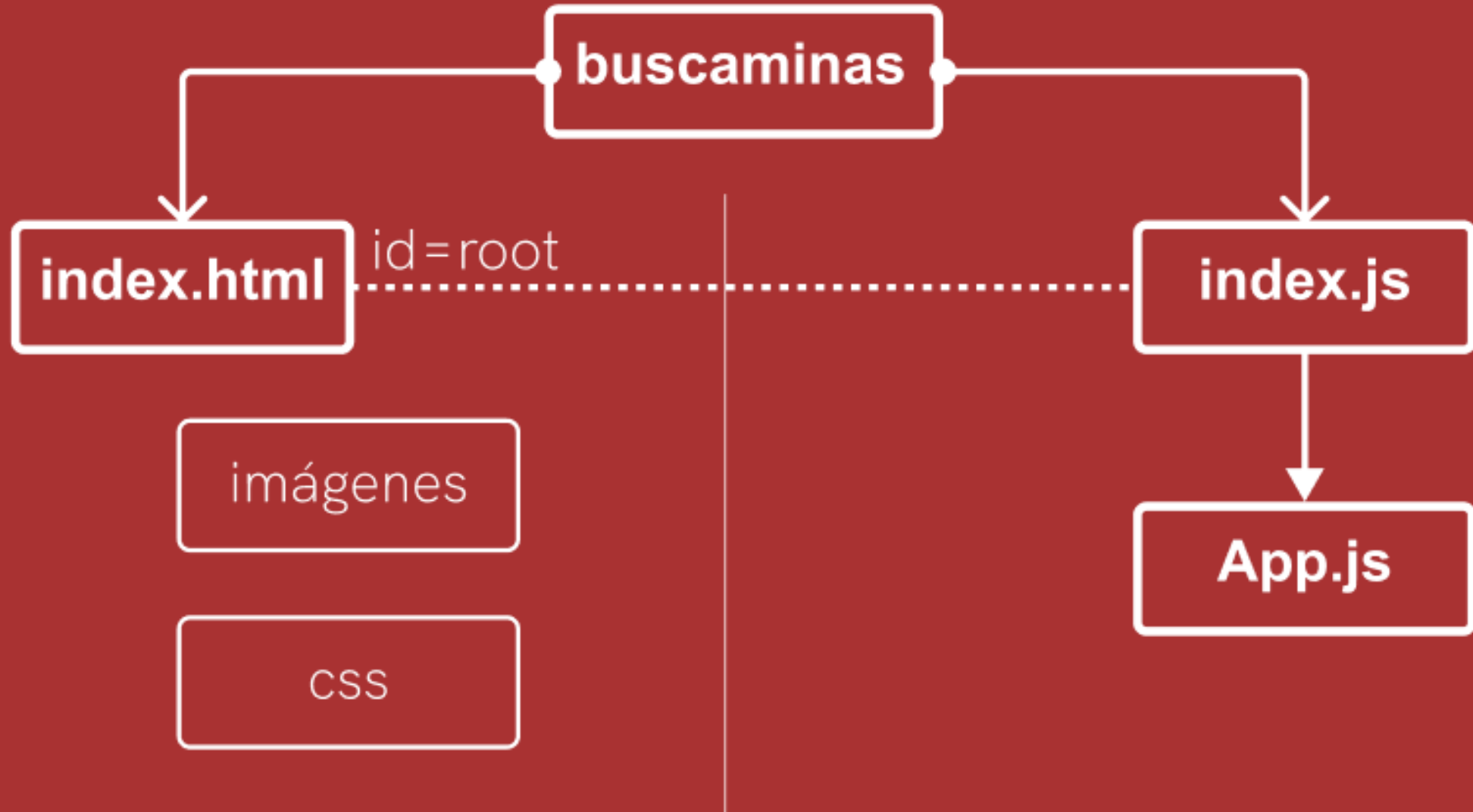
<https://create-react-app.dev/docs/folder-structure>

<https://create-react-app.dev/docs/available-scripts>

```
"scripts": {
  "start": "react-scripts start",
  "build": "react-scripts build",
  "test": "react-scripts test",
  "eject": "react-scripts eject"
```

<https://github.com/pgomezarnalVIU/masterclassReact/releases/tag/02-Inicio-Proyecto>

Estructura de proyecto



Nav en proyecto



Buscaminas

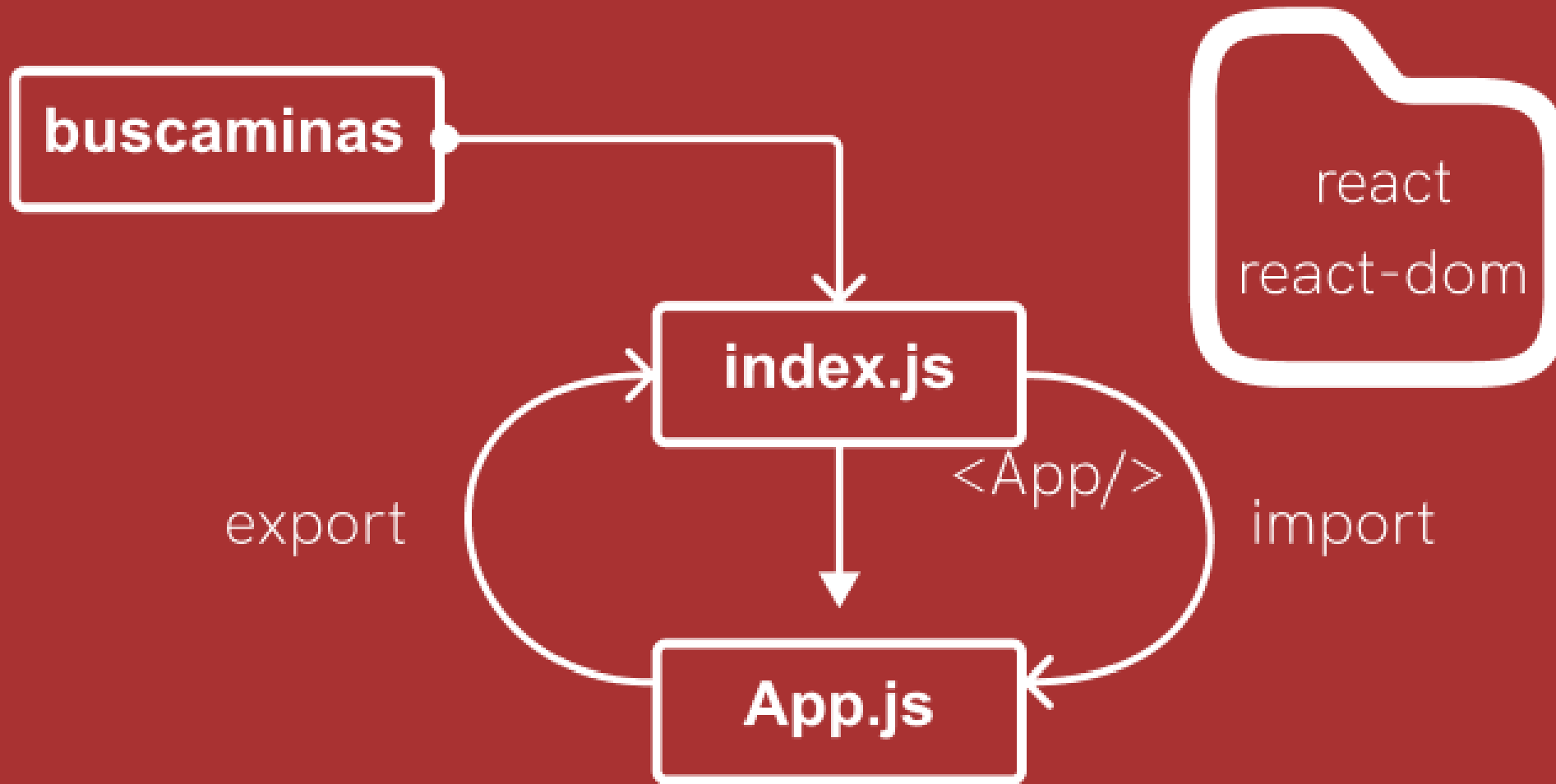
<https://github.com/pgomezarnalVIU/masterclassReact/tree/03-Nav>

```

  10  <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
  11  <link href="https://fonts.googleapis.com/css2?family=VT323&display=swap" rel="stylesheet">
  12  <link rel="stylesheet" href="estilos.css">
  13  </head>
  14  <body class="bg-light">
  15    <!--BARRA DE NAVEGACIÓN-->
  16    <nav class="navbar text-bg-danger">
  17      <div class="container justify-content-center">
  18        <a class="navbar-brand vintageFont" href="#">
  19          
  20          Buscaminas
  21        </a>
  22      </div>
  23    </nav>

```

Importancia de módulos y componentes



Anatomía de un componente



Las 3 reglas del JSX

<https://react.dev/learn/writing-markup-with-jsx#the-rules-of-jsx>

1. Return a single root element

2. Close all the tags

3. camelCase all most of the things!

index.html

```
<main class="mt-5">  
  <div id="root">    </div>  
</main>
```

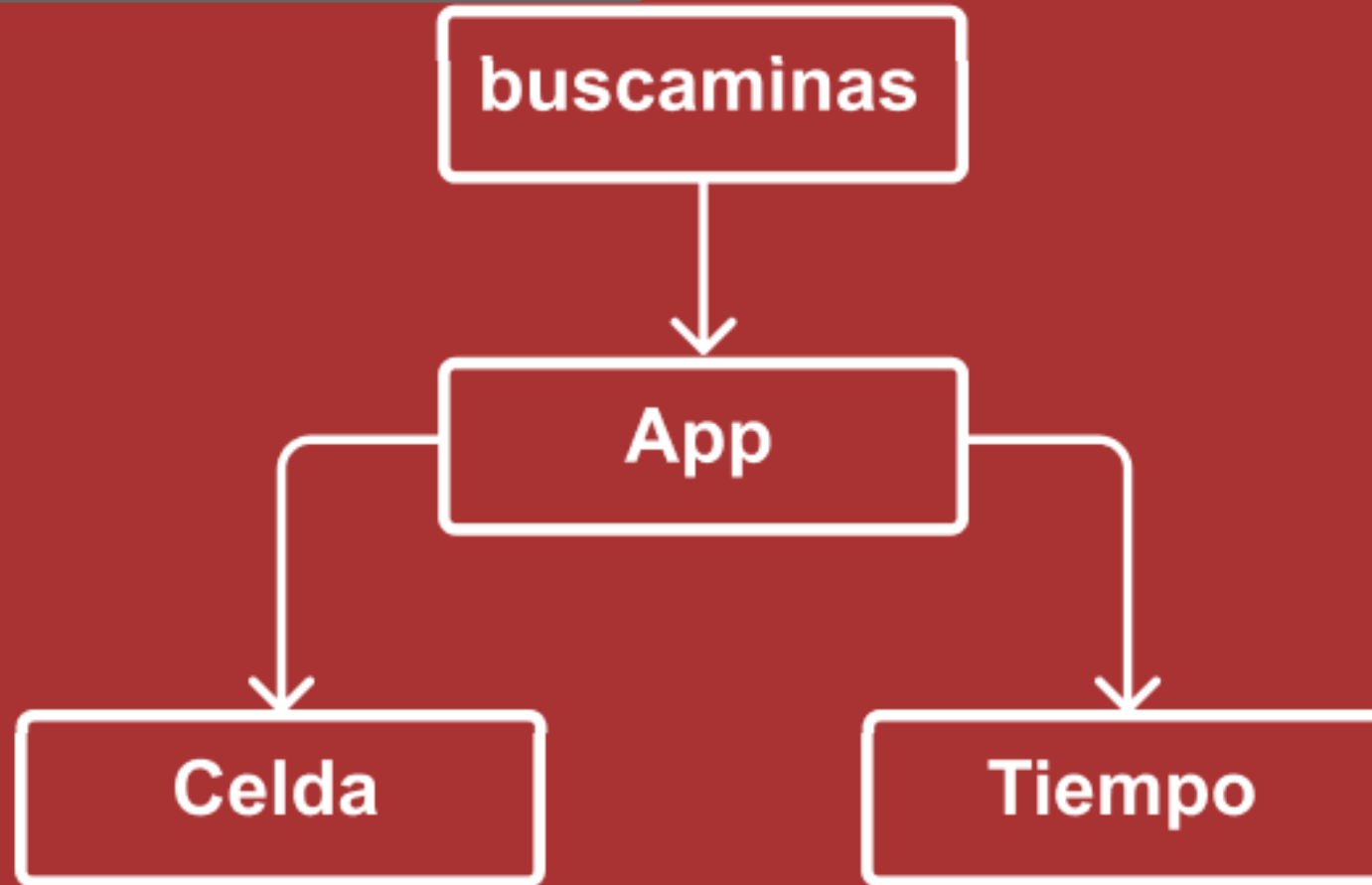
App.js

<https://transform.tools/html-to-jsx>

<https://github.com/pgomezarna/VIU-masterclassReact/tree/04-JSX>

Nuestro primer componente

<https://github.com/pgomezarnalVIU/masterclassReact/tree/05-Celda-component>



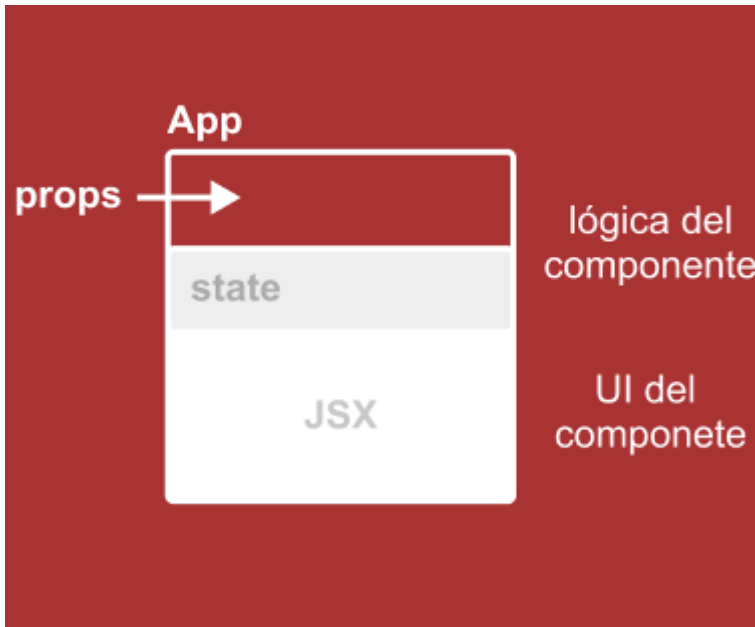
Props de un componente

<https://react.dev/learn/passing-props-to-a-component>

Step 1: Pass props to the child component

Step 2: Read props inside the child component

Specifying a default value for a prop



<https://github.com/pgomezarnalVIU/masterclassReact/tree/06-Props-celda>

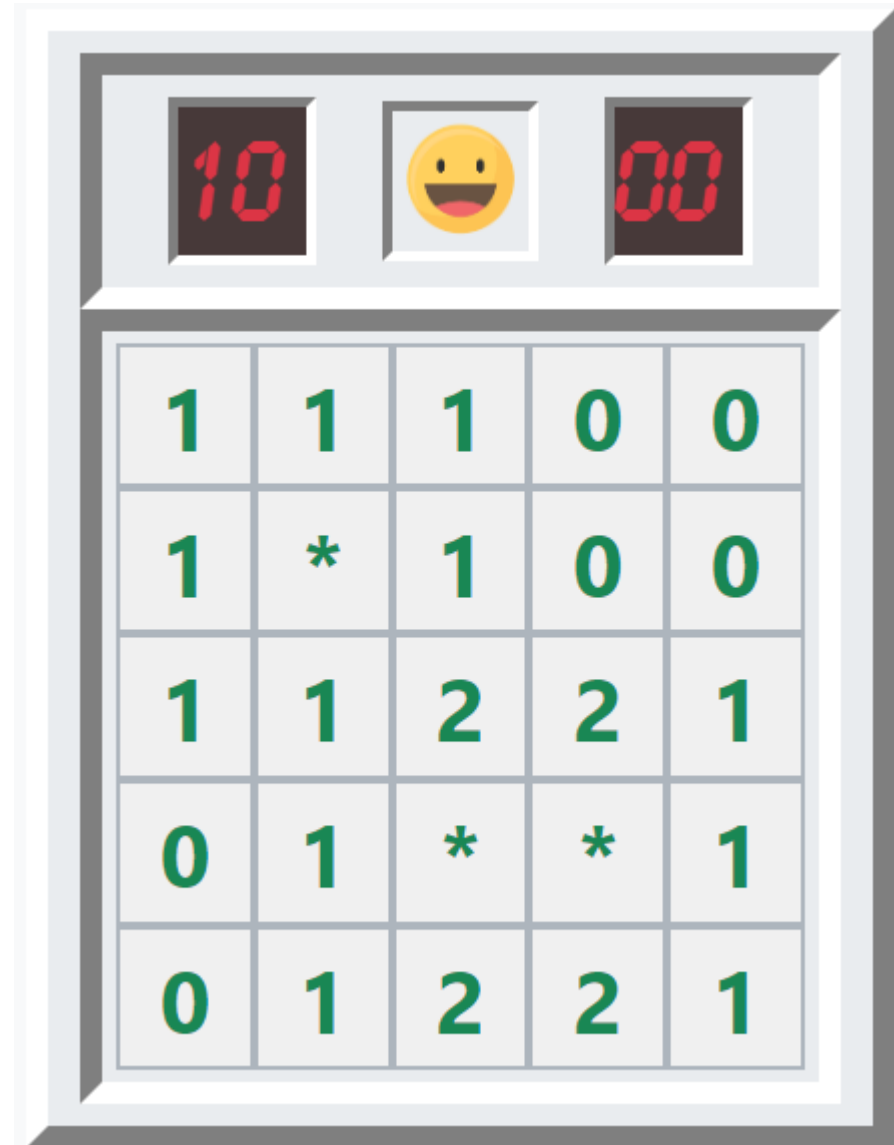
Renderizando listas

<https://react.dev/learn/rendering-lists>

Step 1: Move the data into an array

Step 2: Map the data members into a new array of JSX nodes

Step 3: Return listItems from your component wrapped in a `` for example



<https://github.com/pgomezarnaVIU/masterclassReact/tree/07-List-Celdas>

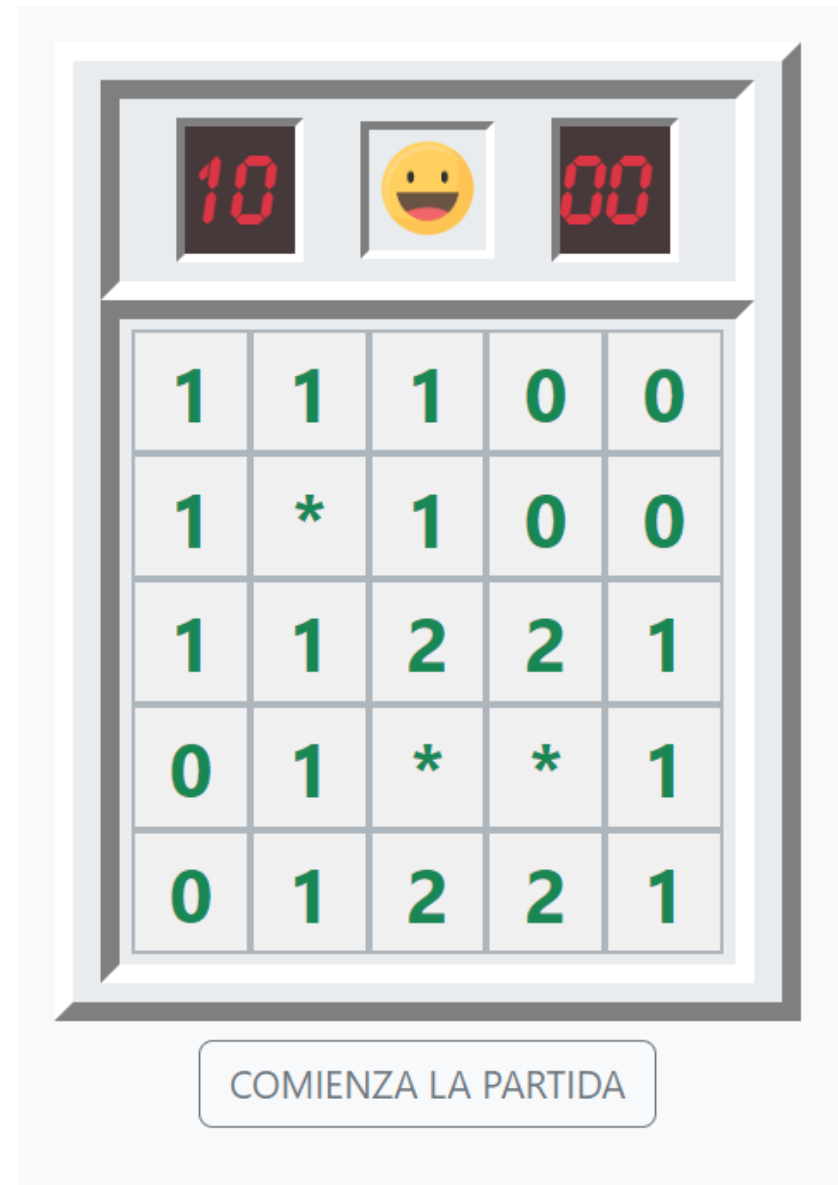
Respondiendo a eventos

<https://react.dev/learn/responding-to-events>

Step 1: Declare a function called for event

Step 2: Implement the logic inside that function

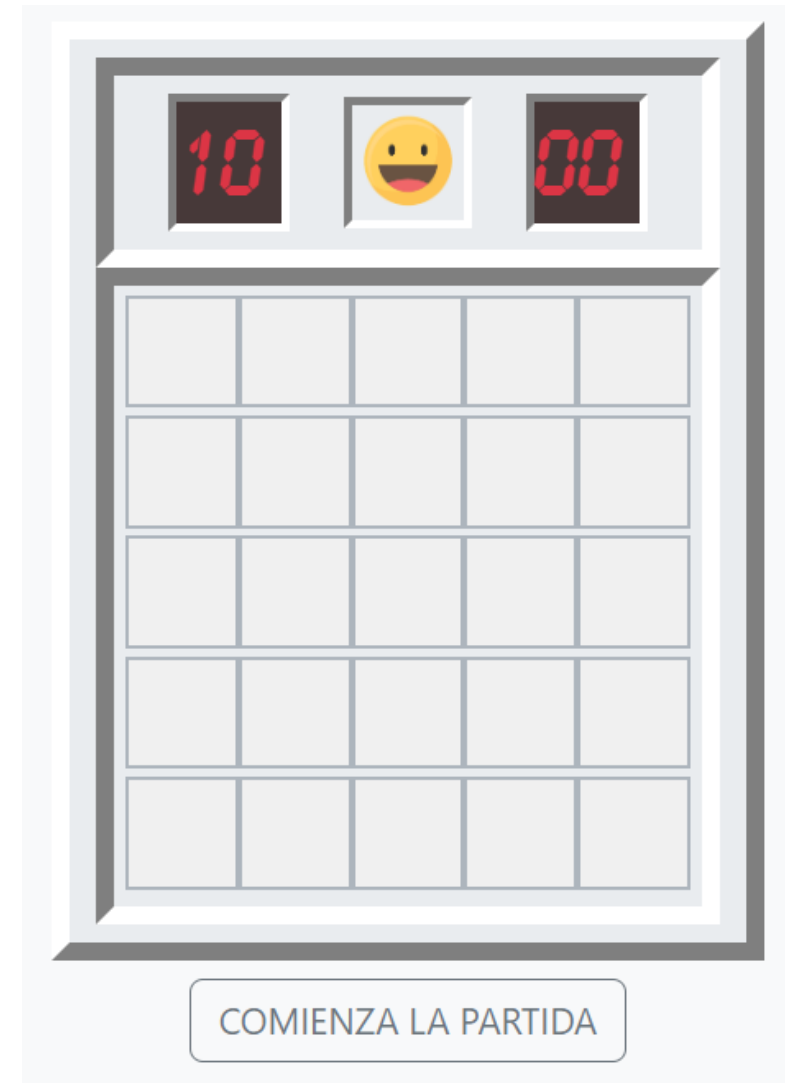
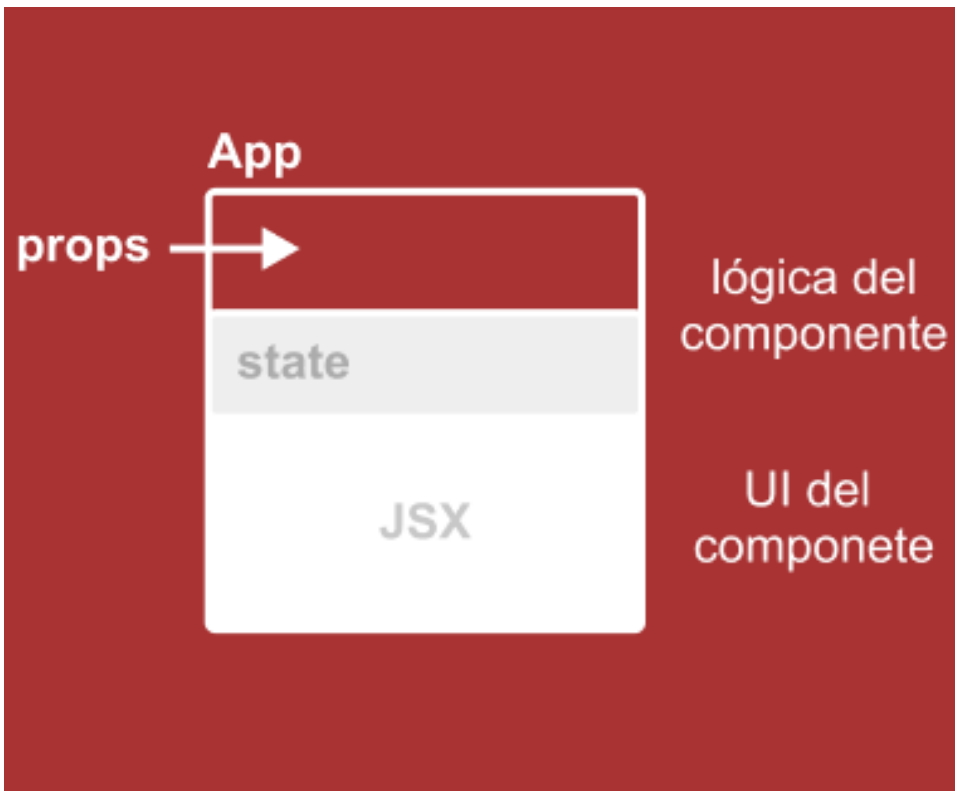
Step 3: Add `onClick={function}` to the `<button>`



<https://github.com/pgomezarna/VIU/master/classReact/tree/08-Respondiendo-Eventos>

UseState

<https://react.dev/learn/state-a-components-memory>



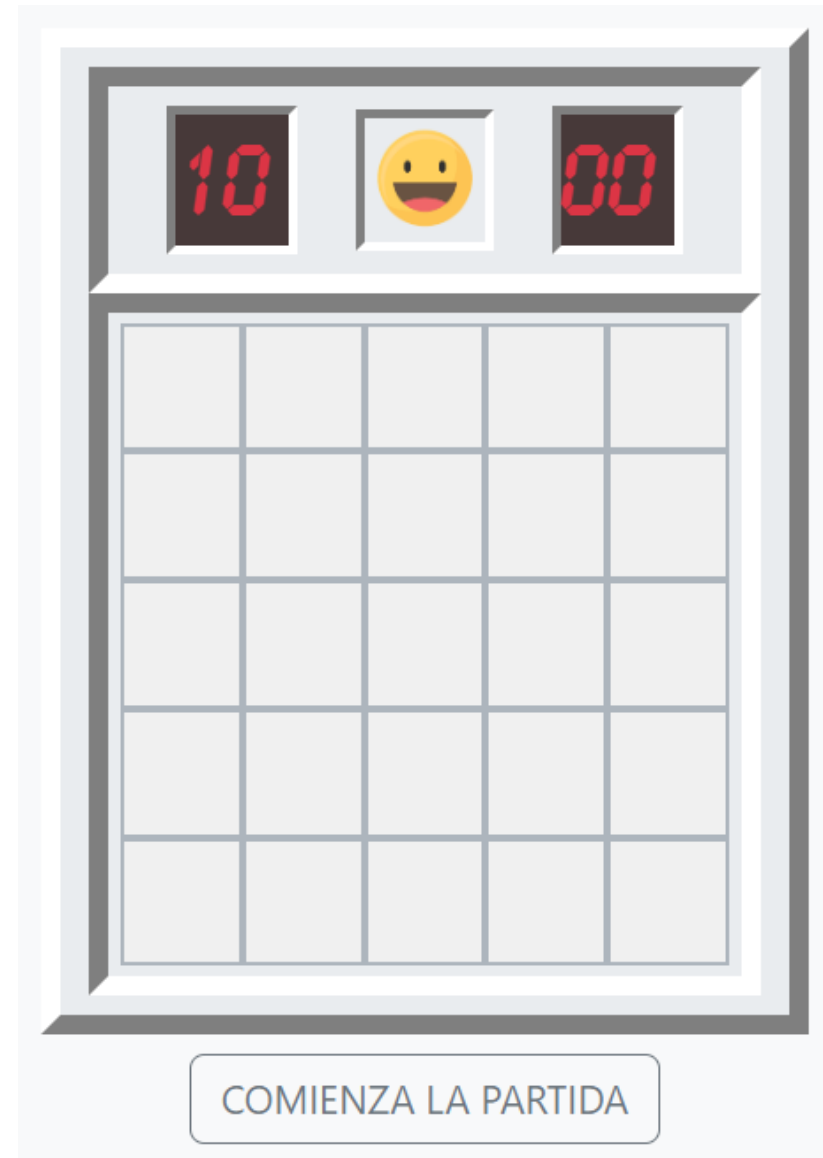
<https://github.com/pgomezarnaVIU/masterclassReact/tree/09-useState>

Renderizado condicional

<https://react.dev/learn/conditional-rendering>

```
if (isPacked) {  
  return <li className="item">{name}  
    ✓</li>;  
}  
return <li  
  className="item">{name}</li>;
```

<https://react.dev/learn/conditional-rendering#conditional-ternary-operator-->



<https://github.com/pgomezarnaVIU/maste rclassReact/tree/10-conditional-render>

React Developer Tools

<https://chromewebstore.google.com/detail/react-developer-tools/fmkadmapgofadopljbjfkapdkoienihi>

The image shows a web application titled "Buscaminas" with a red header and a black bomb icon. Below the header is a game interface with a 5x5 grid and a score of 10. A red arrow points from a cell in the grid to the React Developer Tools component inspector. The inspector shows a list of components, each labeled "Celda" with a unique key. The component "Celda" with key "7" is selected. The right pane shows the props and source code for this component.

Buscaminas

10 [Smiley Face] 00

COMIENZA LA PARTIDA

React Developer Tools Component Inspector

- App
 - Celda key="0"
 - Celda key="1"
 - Celda key="2"
 - Celda key="3"
 - Celda key="4"
 - Celda key="5"
 - Celda key="6"
 - Celda key="7"**
 - Celda key="8"
 - Celda key="9"
 - Celda key="10"
 - Celda key="11"
 - Celda key="12"
 - Celda key="13"
 - Celda key="14"
 - Celda key="15"
 - Celda key="16"
 - Celda key="17"
 - Celda key="18"
 - Celda key="19"
 - Celda key="20"
 - Celda key="21"
 - Celda key="22"
 - Celda key="23"
 - Celda key="24"

Props:

- valor: ""
- new entry: ""

rendered by:

- App
- createRoot()
- react-dom@18.2.0

source:

- App.js:11

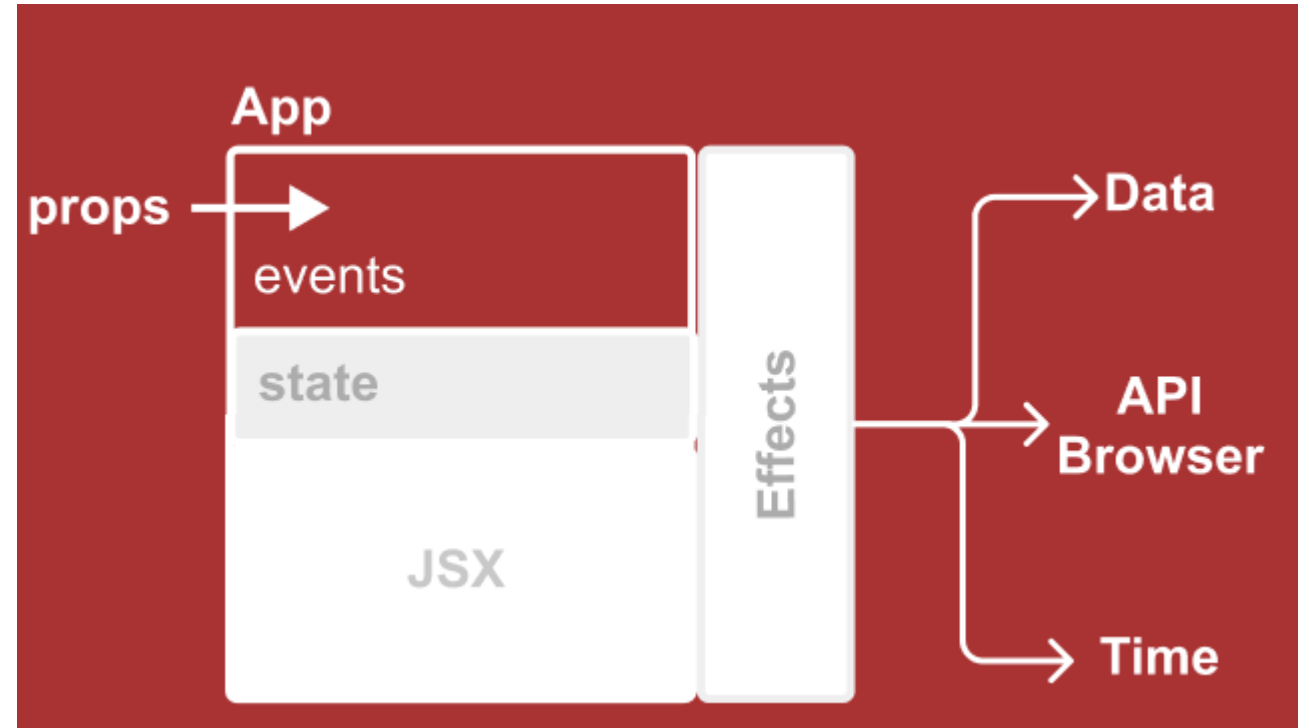
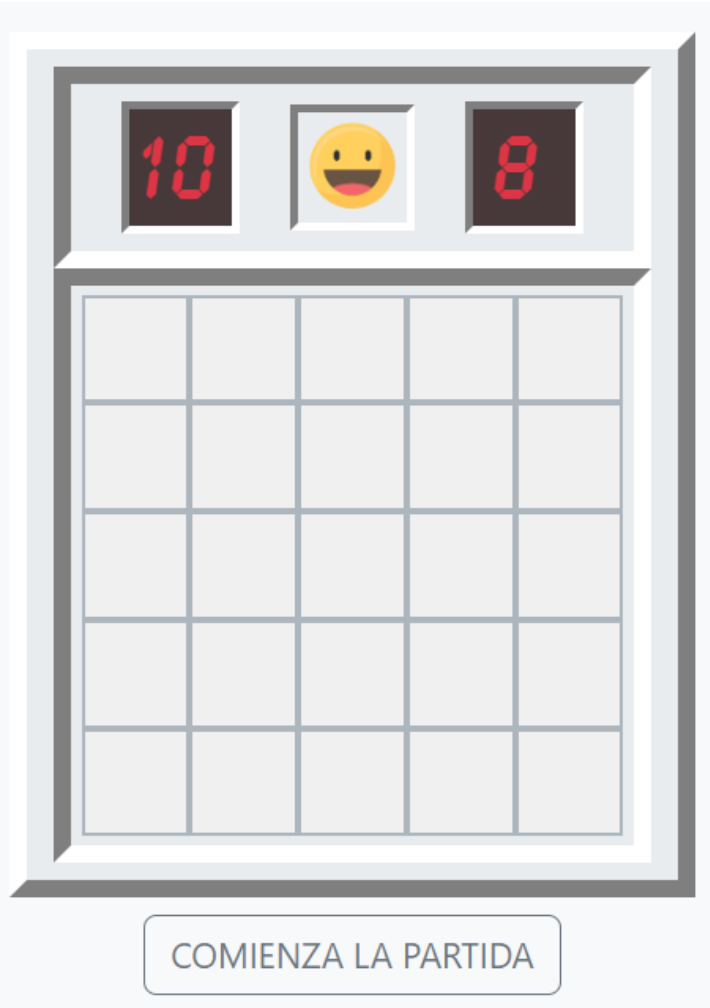
Console: What's new x

Highlights from the Chrome 121 update

@font-palette-values in Elements

useEffect

<https://react.dev/learn/responding-to-events>



<https://github.com/pgomezarnaIVIU/masterclassReact/tree/12-useEffect>



Universidad
Internacional
de Valencia

De:
 Planeta Formación y Universidades