

Day 30

★ Principles of components

* Props (properties)

```
import React from 'react';
```

```
export function App(props) {
```

```
  return (
```

```
    <h1> { props.title } </h1>
```

```
  );
```

```
};
```

React props :

- Allows pass data between components
- It can accept many data types ranging from simple types such as strings and integer to more complex types such as function arrays and objects.
- Allow developers to have greater flexibility when creating and working with components.

Pure function - Always returns the same output for the argument values.

e.g Nav Component

```
function Nav() {
```

```
  return
```

```
    <nav className = "main-nav">
```

```
      <ul>
```

```
        <li> Home </li>
```

```

        <li>Articles </li>
        <li> About </li>
        <li> Contact </li>
      </ul>
    </nav>
  );
}
export default Nav;

```

* Attributes

```

import React from 'react';
import ReactDOM from 'react-dom/client';

```

```

import App from './App.js'

```

```

ReactDOM.createRoot(
  document.querySelector('#root')
).render(<App title = "Welcome"/>)

```

* JSX :-

- Allows developer to write HTML directly inside the javascript code

eg

```

function Nav() {
  return (
    <nav className = "main-nav">

      </nav>
    );
};
export default Nav;

```

JSX return statement - The area of expressive syntax that allows us to write regular HTML code as we like to have it in our rendered app.

- But if we need to return HTML code over multiple lines, it must be placed inside parenthesis

e.g

```
function Header() {
  return (
    <h1> Welcome </h1>
    <h2> This is component </h2>
  );
}
export default Header;
```

- We can't use the keyword class to work with CSS classes in HTML elements. This is because class is a reserved keyword in javascript, we must use a slightly different keyword called className instead.
- className should be written in camel case which depicts the separation of words by using single capitalized letter.

HTML - class = " "

JSX - className = " "

* Embedded Expression - Allows javascript values to be inserted into HTML of React element.