

# Chapter 03 - Laying the Foundation

## Topics

- JSX
- React.createElement vs JSX
- Benefits of JSX
- Behind the Scenes of JSX
- Babel & parcel role in JSX
- Components
- Functional Components
  - Composing Components

## Assignment

- What is JSX?
- Superpowers of JSX
- Role of `type` attribute in script tag? What options can I use there?
- `{TitleComponent}` vs `{<TitleComponent/>}` vs `{<TitleComponent></TitleComponent>}` in JSX

### Coding Assignment:

- Create a Nested header Element using `React.createElement(h1,h2,h3 inside a div with class "title")`
  - Create the same element using JSX
  - Create a functional component of the same with JSX
  - Pass attributes into the tag in JSX
  - Composition of Component(Add a component inside another)
  - `{TitleComponent}` vs `{<TitleComponent/>}` vs `{<TitleComponent></TitleComponent>}` in JSX
- Create a Header Component from scratch using Functional Components with JSX
  - Add a Logo on left
  - Add a search bar in middle
  - Add User icon on right
  - Add CSS to make it look nice

## References

- Babel: <https://babeljs.io/>
- Attribute Type:  
<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/script#attr-type>

- JS Modules: <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Modules>
- Babel Playground: <https://babeljs.io/repl#>
- React without JSX: <https://reactjs.org/docs/react-without-jsx.html>