

## Namaste React

### Homework Day - 2

Q1. What is JSX?

Ans - JSX is html like syntax that is used to create react elements and react components. It looks like html tags but JSX is totally different from html. You can write JavaScript code in it in curly bracket {} it accepts any valid JavaScript expression.

Q2. Superpower of JSX?

Ans -

1. As it looks like html tags so it is easy to understand although jsx have some extra attribute that understand by react only.
2. Component Composition: we can use one component in another component.
3. Re-usability: JSX used to create components that are highly reusable. we can create some component and can use in another component using Component Composition.
4. It help react Dom to create Dom manipulation and updating fast, as JS component have keys attribute using that react Dom decide which component to mount and unmounts.
5. XSS Safe: cross site script is not possible as react Dom escapes and sanitize the code that passed to react component.

Q3. Roll of type attribute in script tag? what options can I use there?

Ans - Type attribute in script is used to specify the mime type of the script and identify the content of the tag.

Script tag in html page is used to specify which type of script will be used in the page. so that browser interprets accordingly.

below can be use in type attribute

-module - This value specify that code must be treated as JavaScript module and the processing of the script content is differed.

in module script we can use import and export, to import function from another file and export to another file.

-importmap - the import map below defines a "module specifier map" JSON object where the property names can be used as module specifiers, and the corresponding values will be substituted when the browser resolves the module URL. The values must be absolute or relative URLs.

```
<script type="importmap">
```

```

{
  "imports": {
    "shapes": "./shapes/square.js",
    "shapes/square": "./modules/shapes/square.js",
    "https://example.com/shapes/": "/shapes/square/",
    "https://example.com/shapes/square.js": "./shapes/square.js",
    "../shapes/square": "./shapes/square.js",
  }
}
</script>

```

It specifies that the script in an import map means it contains a JSON object having key value pair. where key is used as module name to import methods from value which specify a file.

Q4. {TitleComponent} vs {<TitleComponent/>} vs {<TitleComponent></TitleComponent>}?

Ans - {TitleComponent} signifies TitleComponent will treat as JavaScript variable inside a JSX. and if

TitleComponent is a component it will give an error saying Function is not a valid react child.

or you can call it as {TitleComponent ()} this will work as normal JSX.

{<TitleComponent/>} signifies TitleComponent is a function that return a JSX that will render on dom.

{<TitleComponent> </TitleComponent>} signifies TitleComponent is a function that return a JSX that will render on dom.