**Rendering Patterns**

**1) Client Side Rendering (CSR)** No Pre-Rendering

**2) Server Side Rendering (SSR)** Pre-Rendering

**3) Static Site Generation (SSG)**

**No Pre-Rendering** - Simple React Application (CSR)

1) The Server Sends HTML Files to the browser

2) Broswer Receives a HTML Files with

<div id="root">

//empty

</div>

3) After the Client is hydrated with JS, our react code runs then it fills that empty space with components

**Pre-Rendering** - Next.JS Application (SSR)

1) The Server sends the HTML files to the browser

2) Browser receives a complete HTML file to display on screen.

3) After the Client is hydrated with JS, our App become inter-active

Pre-Rendering(SSR) is SEO friendly because it renders the data at the server & Gives HTML as output which is final output

**Static Site Generation (SSG)**

1) Building the whole HTML once and deploy it on server

2) When user makes request server can directly provide HTML file, which reduces the processing power of server

3) SSG is a tool user in web development to generate static website

**How static site works with data?**

1) If there is need to pull data from API, DB, etc. SSG Pulls data from various Sources such as JSON Files, DB, API & etc. THe data can include content, metadata, or any other information needed for the website.