**Java script week 3**

Event Handlers:

In JavaScript, event handlers are functions that are bound to specific events that occur in the browser, such as a mouse click, keypress, or page load. Event handlers are used to define the behaviour or action that should be taken when the corresponding event occurs. There are several ways to attach event handlers to HTML elements in JavaScript.

Static vs dynamic web page:

* **Static:**

1. **Definition:** Static web pages are pre-built HTML files that are stored on a web server. They display the same content to every user, without any modifications.
2. **Characteristics:**
   * The content remains fixed until manually updated by a developer.
   * They are simple and quick to create, as they involve only HTML, CSS, and possibly some JavaScript.
   * Since they are pre-generated, they are generally faster to load for users.
3. **Advantages:**
   * Simplicity: Static pages are straightforward to create and deploy.
   * Speed: Since they don't require server-side processing, they tend to load quickly.
   * Security: They are less prone to security vulnerabilities since there is no server-side processing involved.
4. **Use Cases:**
   * Brochure websites: Websites that provide information about a company, product, or service and don't require frequent updates.
   * Personal blogs: Blogs where content is updated infrequently.
   * Small-scale websites with relatively stable content.

* **Dynamic:**
* **Definition:** Dynamic web pages are generated on the server-side in real-time in response to user requests. They often pull content from databases or other sources and can display different content to different users or in different contexts.
* **Characteristics:**
  + Content is generated dynamically, allowing for customization based on user input or other variables.
  + They typically involve server-side scripting languages like PHP, Python, or Ruby, along with databases like MySQL or MongoDB.
  + They can provide more interactive and engaging experiences for users.
* **Advantages:**
  + Flexibility: Dynamic pages can adapt to user input, allowing for more personalized experiences.
  + Interactivity: They enable features like user authentication, content management systems, e-commerce functionalities, etc.
  + Scalability: Dynamic sites can handle a large amount of content or traffic more efficiently.
* **Use Cases:**
  + Social media platforms: Websites like Facebook or Twitter, where content is constantly changing based on user interactions.
  + E-commerce sites: Websites like Amazon or eBay, where product listings, prices, and user data are constantly updated.
  + Content management systems (CMS): Platforms like WordPress or Joomla, which allow users to create, manage, and publish content dynamically.

**Keyboard event:**

* We have an **<input>** element where users can type.
* We attach event listeners to this input element for **'keydown'**, **'keypress'**, and **'keyup'** events.
* Each event listener logs the key being pressed along with the event type.

You can modify this example to suit your needs, such as performing specific actions based on the keys pressed. Keep in mind that different browsers may behave slightly differently with keyboard events, so it's important to test your code across different browsers if compatibility is a concern.