**Props Fundamentals**

* Purpose: Props (short for properties) allow data to be passed from parent to child components, enabling communication and customization.
* Analogy: Similar to arguments passed to JavaScript functions, props can accept various types of values, including objects, arrays, functions, and even other components.

**Props vs. State**

* Props: Data passed from parent components, immutable within the child component.
* State: Internal data managed and updated by the component itself.

**Immutability of Props**

* Reason: Prevents unintended side effects and maintains component purity, which helps React optimize applications and avoid bugs.
* Rule: Props should never be mutated; they are read-only.

**One-Way Data Flow in React**

* Definition: Data flows from parent to child components only, ensuring a top-to-bottom flow in the component tree.
* Benefits: Improves application predictability, ease of understanding, and debugging efficiency. More performant than two-way data binding used in frameworks like Angular.



