

# What is Vue?



- Vue.js is a progressive JavaScript framework for building user interfaces.
- It is reactive, component-based, and very beginner-friendly.
- It helps you build both small widgets and large applications.



# Template Syntax (`{{ }}`)



- Double curly braces `{{ }}` are used to output dynamic data in HTML.
- This is called interpolation.



# v-bind



- v-bind is used to bind attributes dynamically.
- Short form: (e.g., :href="url")



# v-model



- v-model creates two-way data binding between input and data.
- Updates data when user types.





**v-if / v-else / v-else-if**



- Used for conditional rendering.
- Show/hide elements based on conditions.



# v-for



- Used to loop through arrays and display lists.
- Syntax: `v-for="item in items"`.



# Methods



- Functions declared inside the methods object.
- Used to handle logic and events.



# Event Handling (v-on / @)



- v-on or @ is used to listen to events like click, input.
- Example: @click="doSomething".





# Components (Global vs Local)



- Components split UI into reusable parts.
- Global components are registered app-wide.
- Local components are registered in a specific file.



# Props



- Props are used to pass data from parent to child component.
- Read-only from child side.



# Emitting Events



- Child components use `$emit` to send events to parent.
- Allows communication from child to parent.



# Lifecycle Hooks



- Special functions triggered at different stages of component's life.
- Example: `mounted()`, `created()`.





# Reactive Data (ref, reactive)



- `ref()` is used for primitive values.
- `reactive()` is used for objects/arrays.
- Vue tracks and updates UI automatically.

