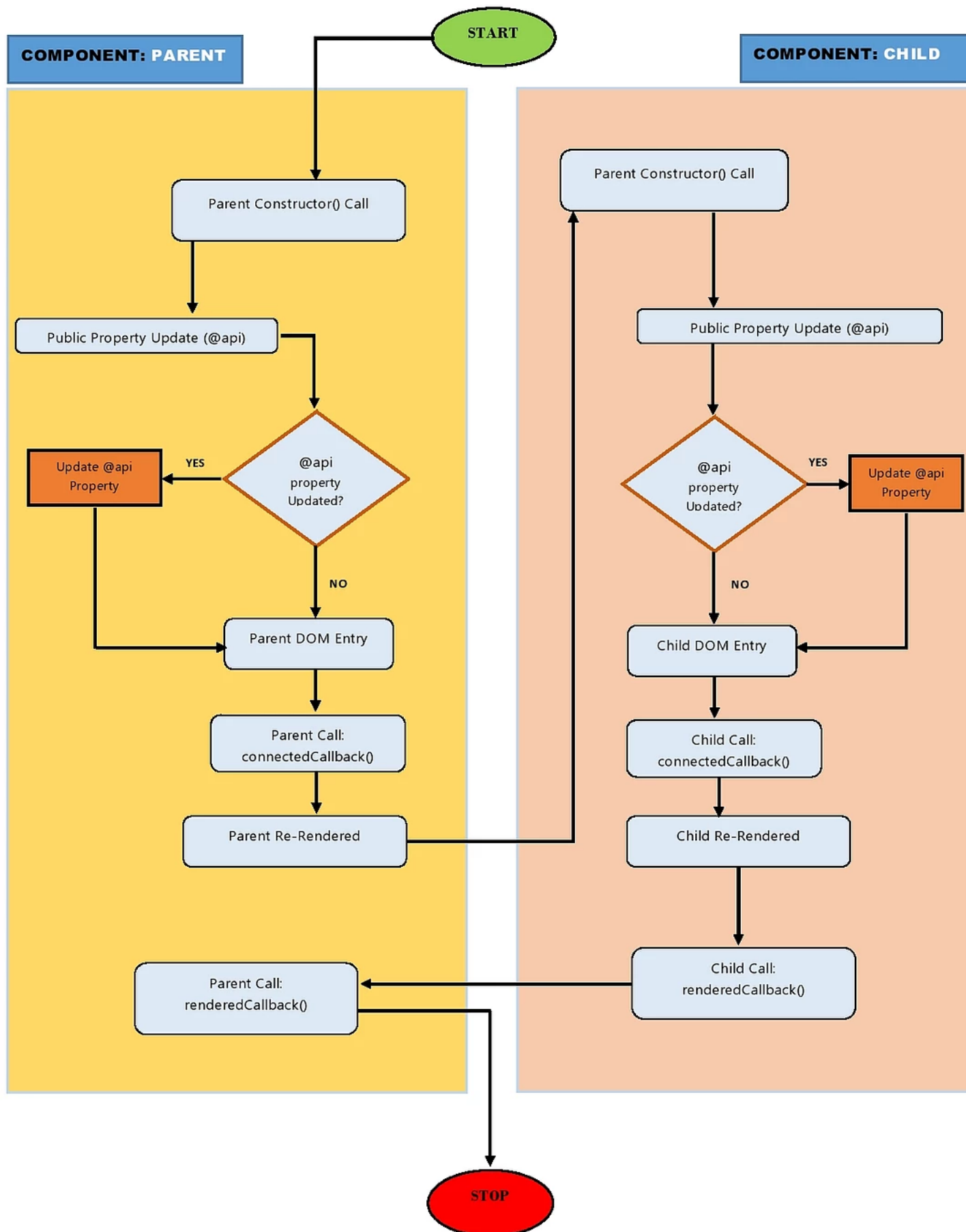


LWC Lifecycle flow from Component Creation To Render :



**constructor()** : Execute When a Component Is instantiated.

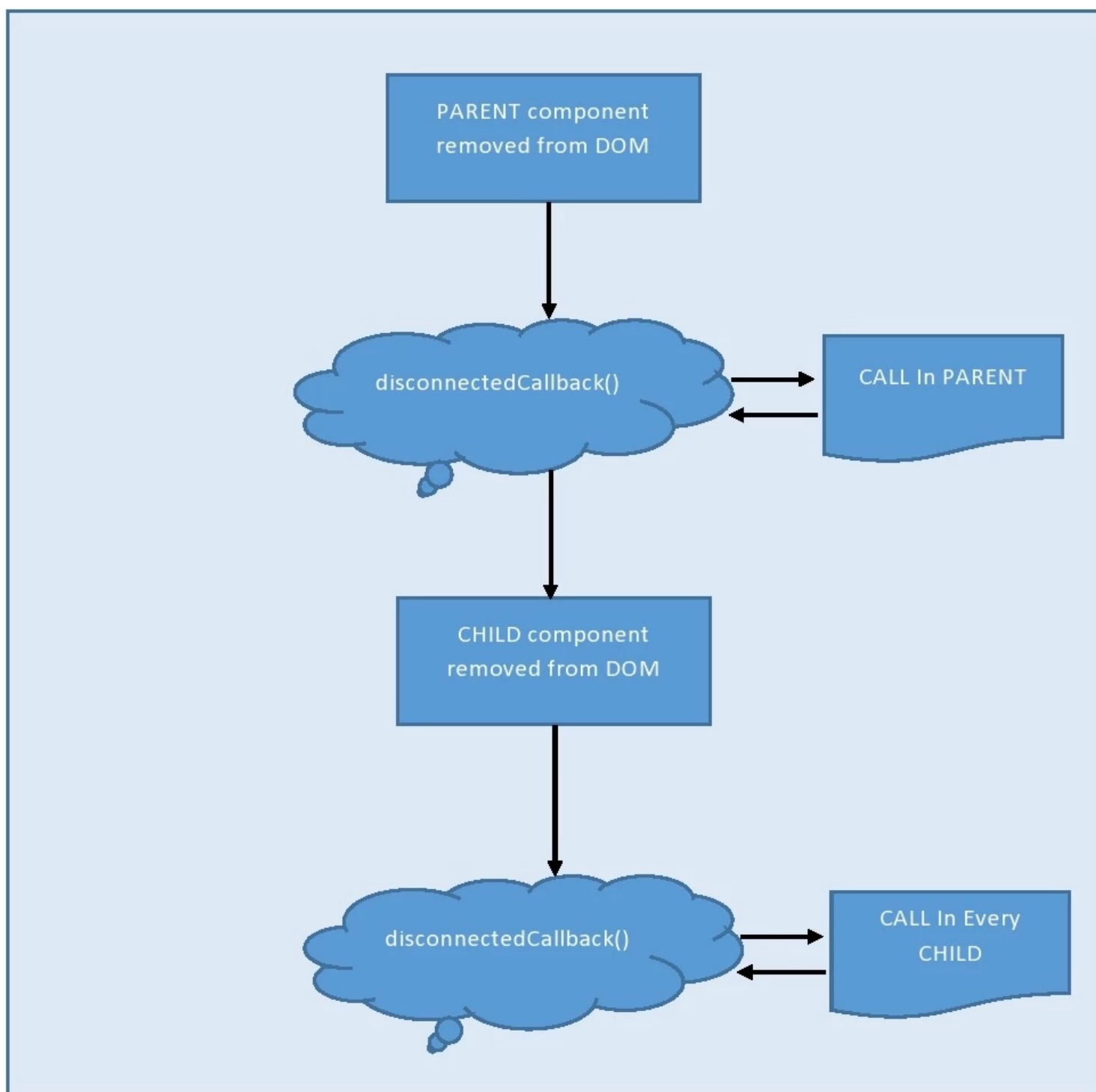
This hook is fired when a component instance is created. Child elements in the component body do not exist now. Properties are not passed yet. Properties (**@api** for Public property / **@track** for Private property) are assigned to the component after this step or before the `connectedCallback()` hook. Don't add attributes to the host element during construction. This hook flows from parent(P) towards child (C), (P -> C) and Host element can be accessed by *this.template*.

**connectedCallback()** : Execute When a Component Is Injected in the DOM.

Fired when the element is injected into the DOM (subscribe). In this phase, child elements in the component body still do not exist. This hook flows from Parent to Child (P -> C). To access Host element use *this.template*.

**disconnectedCallback()** : Execute When a Component Is Removed from the DOM.

Fired when the element is removed from a DOM (unsubscribe). This hook flows from parent to child. This hook flows from Parent to Child (P -> C).



**NOTE: Browser always do garbage collects DOM events, so keep in mind not to unregister them. Otherwise its influence the flow of garbage collection process that lead to memory leaks.**

**render()** : Execute When we need explicit call to override existing rendering functionality.

This hook explicitly use to override standard rendering functionality, like conditionally rendering a template or importing any custom template. render() gets invoked after connectedCallback() and must return a valid HTML template.

**renderedCallback()** : Execute after component Render.

This hook in fire after every render of the component. This is unique functionality that present only in LWC. Such type of hook is not present in Conventional HTML custom elements specification. This hook flow from Child to Parent (C -> P). When a component re-renders, all the expressions used in the template are reevaluated.

If you use renderedCallback() to perform a one-time operation, you must track it manually like `initialRender` private property. Any activity that changes to reactive attributes, need to guard them otherwise they can trigger wasteful re-renders that may cause an infinite rendering loop.

**errorCallback()** : Handle Errors in descendant Component.

This hook Event is not present in Conventional HTML custom elements specification. It's a component lifecycle guard. Here this hook call when a descendant component throws an error in any of its lifecycle hooks. The `error` argument is a JavaScript native error object, and the `stack` argument is a string.

By implementing this hook one can create an error boundary component that captures errors in all the descendant components in its tree. The error boundary component can log stack information and provide an alternative view of information to the users about the error details and what to do next. It's similar to `catch{} block`.

**NOTE: Note that an error boundary component catches errors only from its children, not from itself.**