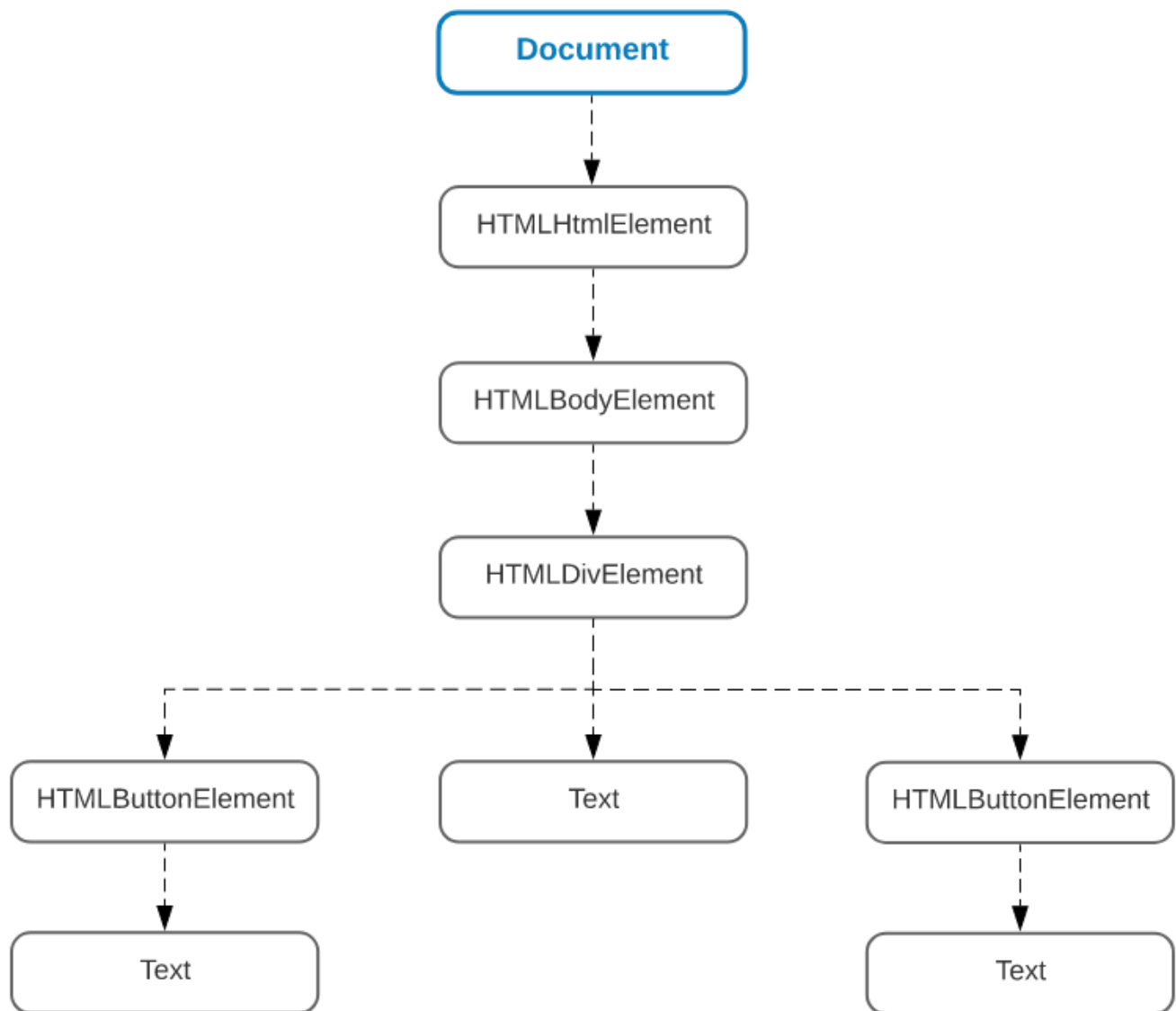


# DOM Tree

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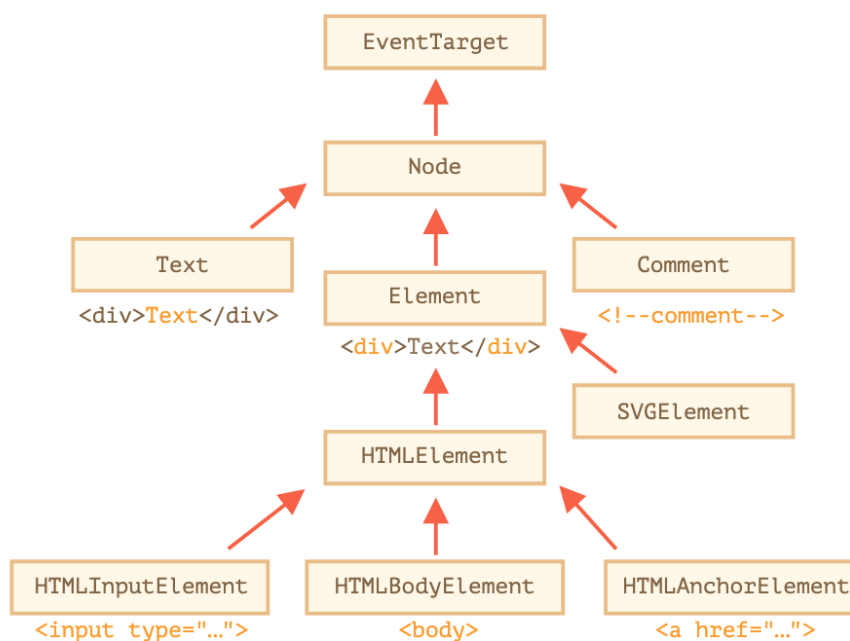


Source: <https://elmprogramming.com/virtual-dom.html>

## AGENDA

1. Node data type
  2. EventTarget interface
  3. Node interface
-

## 1. Node data type



Source: [Basic DOM Node Props | javascript.info](https://javascript.info/basic-dom-node-props)

- **EventTarget**: root "abstract" class
- **Node**: "abstract" class, a base for DOM nodes.
- **Element**: base class for DOM elements.
- **HTMLElement**: basic class for all HTML elements
  - **HTMLInputElement** - the class for `<input>` elements
  - **HTMLBodyElement** - the class for `<body>` elements
  - **HTMLAnchorElement** - the class for `<a>` elements
  - ...

## 2. EventTarget interface

#	Name	Desc
1	EventTarget.addEventListener()	Register an event handler of a specific event type
2	EventTarget.removeEventListener()	Remove an event listener

Source: <https://developer.mozilla.org/en-US/docs/Web/API/EventTarget>

## 3. Node interface

### Properties

#	Name	Desc
1	Node.childNodes	return a <b>live</b> NodeList containing all children (elements, text, comments)
2	Node.firstChild	return the first direct child, otherwise return null
3	Node.lastChild	return the last direct child, otherwise return null
4	Node.previousSibling	return the previous node in the tree
5	Node.nextSibling	return the next node in the tree
6	Node.nodeName	the name of the node (BODY, DIV, #text, #document)
7	Node.nodeType	return an unsigned short representing the type of the node
8	Node.nodeValue	get / set value of the node
9	Node.parentNode	return the parent node
10	Node.parentElement	return an Element that is the parent of this node
11	Node.textContent	get / set the textual content of an element and all its descendants

## Methods

#	Name	Desc
1	Node.insertBefore(newNode, referenceNode)	Insert newNode before referenceNode
2	Node.appendChild(childNode)	Append childNode as the last child of current node
3	Node.cloneNode(deep) - deep = true / false	Clone current code, deep = true -> clone the whole subtree.
4	Node.contains(otherNode)	Check if current node contain otherNode or not
5	Node.hasChildNodes()	Check if has any child node or not
6	Node.removeChild(childNode)	Remove a child node from current node
7	Node.replaceChild(newChild, oldChild)	Replace the oldChild with newChild node

Source: <https://developer.mozilla.org/en-US/docs/Web/API/Node>

## nodeType

Node.nodeType	Value	Description
<b>Node.ELEMENT_NODE</b>	1	An Element node like <code>&lt;p&gt;</code> or <code>&lt;div&gt;</code>
Node.ATTRIBUTE_NODE	2	An Attribute of an Element
<b>Node.TEXT_NODE</b>	3	The actual Text inside an Element or Attr
Node.CDATA_SECTION_NODE	4	A CDATASection, such as <code>&lt;![CDATA[[ ... ]]]&gt;</code>
Node.PROCESSING_INSTRUCTION_NODE	7	A ProcessingInstruction of an XML document, such as <code>&lt;?xml-stylesheet ... ?&gt;</code>
<b>Node.COMMENT_NODE</b>	8	A Comment node, such as <code>&lt;!-- ... --&gt;</code>
<b>Node.DOCUMENT_NODE</b>	9	A Document node
Node.DOCUMENT_TYPE_NODE	10	A DocumentType node, such as <code>&lt;!DOCTYPE html&gt;</code>
<b>Node.DOCUMENT_FRAGMENT_NODE</b>	11	A DocumentFragment node

Source: <https://developer.mozilla.org/en-US/docs/Web/API/Node/nodeType>

## Tham khảo

- <https://javascript.info/basic-dom-node-properties>
  - <https://developer.mozilla.org/en-US/docs/Web/API/Element>
- 

## Khoá học Javascript cho người mới bắt đầu 2021 🎉

- Tác giả: **Hậu Nguyễn** - Founder Easy Frontend
- Khoá học chỉ được published trên Udemy, không thông qua trung gian.
- Khoá học không bán dạng videos upload trên Google Drive hay bất cứ hình thức nào tương tự.
- Khoá học có nhóm discord để hỗ trợ trong quá trình học tập.

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-  Facebook: <https://www.facebook.com/nvhauesmn/>
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