**DOM :**

The Document Object Model (DOM) is a programming interface for HTML and XML documents. It represents the page so that programs can change the document structure, style, and content. The DOM represents the document as nodes and objects. That way, programming languages can connect to the page.

**DOM TREE:**

A DOM tree for our earlier HTML document looks like above. A DOM tree starts from the topmost element which is html element and branches out as per the occurrence and nesting of HTML elements in the document. Whenever an HTML element is found, it creates a DOM node (Node) object from its respective class.

**CSSOM:**

After constructing the DOM, the browser reads CSS from all the sources (external, embedded, inline, user-agent, etc.) and construct a CSSOM. CSSOM stands for CSS Object Model which is a Tree Like structure just like DOM, Each node in this tree contains CSS style information that will be applied to DOM elements that it target (specified by the selector).

**RENDER TREE:**

Render-Tree is also a tree-like structure constructed by combining DOM and CSSOM trees together. The browser has to calculate the layout of each visible element and paint them on the screen, for that browser uses this Render-Tree. Hence, unless Render-Tree isn’t constructed, nothing is going to get printed on the screen which is why we need both DOM and CSSOM trees.

**LAYOUT OPERATION:**

The first browser creates the layout of each individual Render-Tree node. The layout consists of the size of each node in pixels and where (position) it will be printed on the screen. This process is called layout since the browser is calculating the layout information of each node.

**PAINT OPERATION:**

Now that we have layers, we can combine them and draw them on the screen. But the browser does not draw all the layers in a single go. Each layer is drawn separately first.

**COMPOSITING OPERATION:**

Until now, we haven’t drawn a single pixel on the screen. What we have are different layers (bitmap images) that should be drawn on the screen in a specific order. In compositing operations, these layers are sent to GPU to finally draw it on the screen.

**In summary:**

These are the clinical steps that the browser goes through in order by first construction of dom, construction of cssom and eventually merging them into a render tree all down to the compositing operation these are the sequence of events that happen to render things on the screen from html and css text content.