

# **Browser Components**

#### **AGENDA**

- 1. Browser Engines
- 2. Browser Components

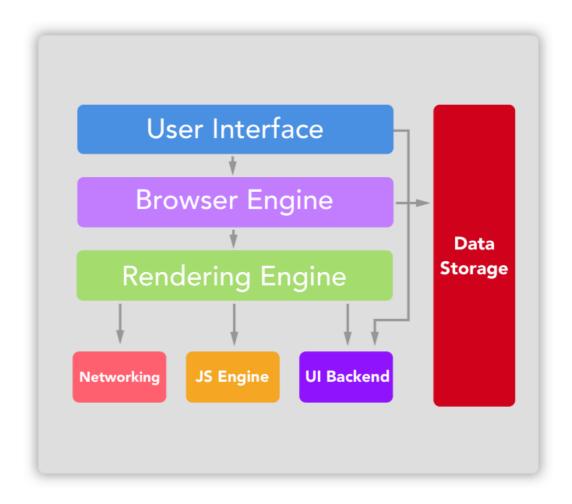
### 1. Browser Engines



Source: https://en.wikipedia.org/wiki/Comparison\_of\_browser\_engines



## 2. Browser Components

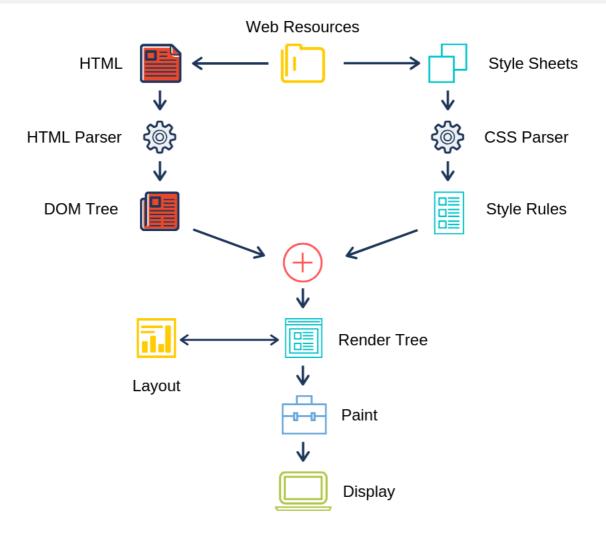


Source: https://codeburst.io/how-browsers-work-6350a4234634

#	Name	Desc
1	User Interface	Address Bar, Home, Back buttons,
2	Browser Engine	Receive action from UI, then works with Storage + Rendering Engine
3	Rendering Engine	Display requested content (HTML/CSS), or more (pdf, xml) with plugins
4	Networking Component	Handle network tasks (HTTP, WebSocket, WebRTC)
5	Javascript Engine	Javascript Engine (V8, SpiderMonkey,)
6	UI Backend	Used for drawing everything (UI + in the rendering engine), use OS interface (checkbox, dropdown,)
7	Data Storage	Used for persisting data locally (http cookies, browser caching, web storage: local storage, session storage and IndexedDB)

# 3. Rendering Engine

### Read more about Repaint and Reflow



Source: https://www.bitcoininsider.org/article/66724/how-do-web-browsers-work



### Tham khảo

- https://codeburst.io/how-browsers-work-6350a4234634
- https://www.browserstack.com/guide/browser-rendering-engine
- https://www.html5rocks.com/en/tutorials/internals/howbrowserswork
- https://blog.sessionstack.com/how-javascript-works-the-rendering-engine-and-tips-to-optimize-its-performance-7b95553baeda

#### 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.

### Liên hệ tác giả để được hỗ trợ:

- V Facebook: https://www.facebook.com/nvhauesmn/
- V Fanpage: https://www.facebook.com/learn.easyfrontend
- Voutube Channel: https://www.youtube.com/easyfrontend