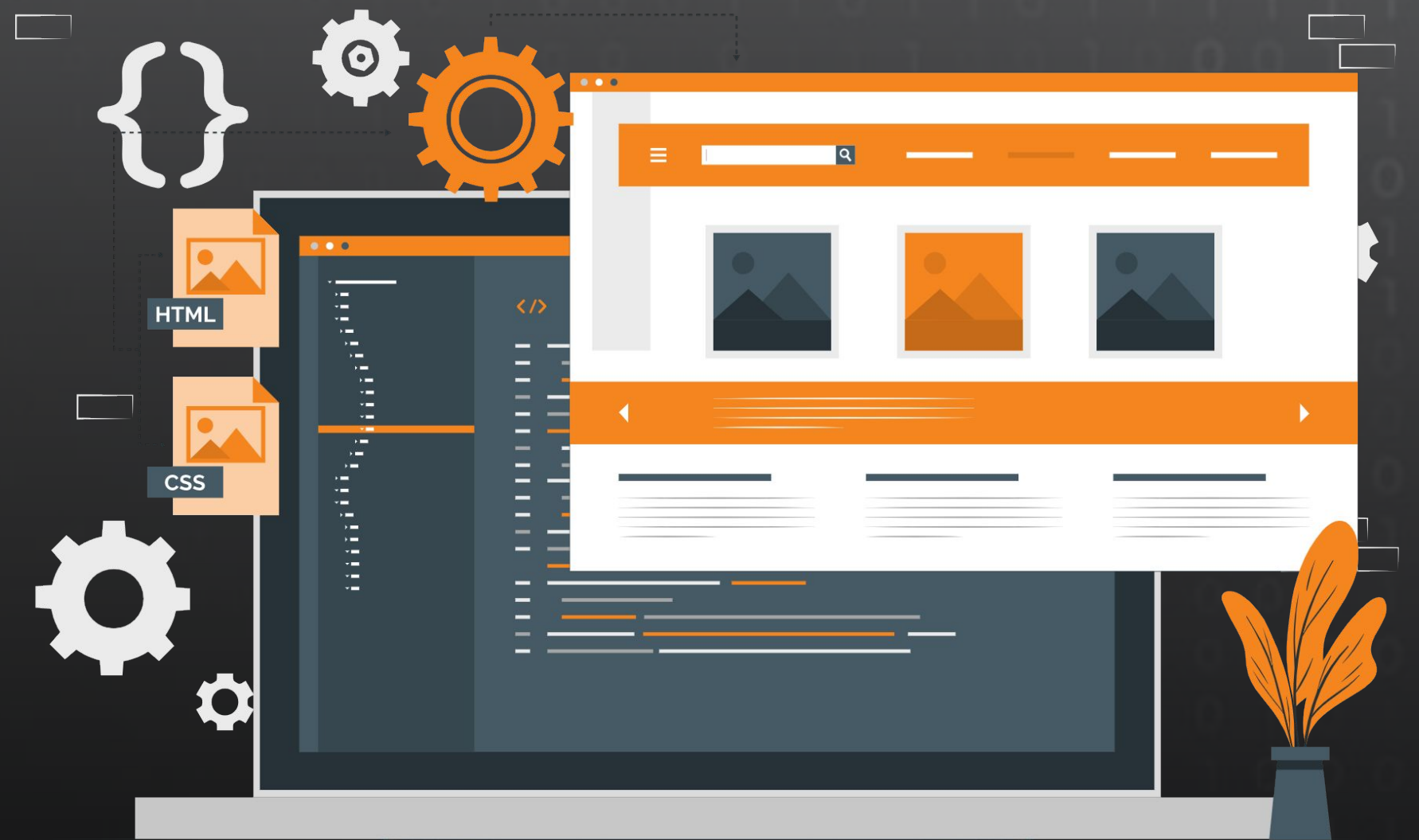


# Web Browser





# Topics to be covered

- Introduction to the web browsers
- History of web browsers
- Features of web browsers
- Introduction to browser engine
- Responsibilities of browser engine
- Browser rendering process
- Common browser compatibility issues



# Web browsers

Introduction to web browsers

History of web browsers





# Features of web browsers

1. Tabbed browsing
2. Bookmarks
3. History
4. Privacy and Security
5. Extensions and Plugins
6. Developer Tools





# Introduction to Browser Engine

A browser engine, also known as a rendering engine, is a software component that processes HTML, CSS, and JavaScript code to display web pages on a user's screen. When a user requests a web page, the browser engine retrieves the page's code from the server and processes it to create a visual representation of the page.



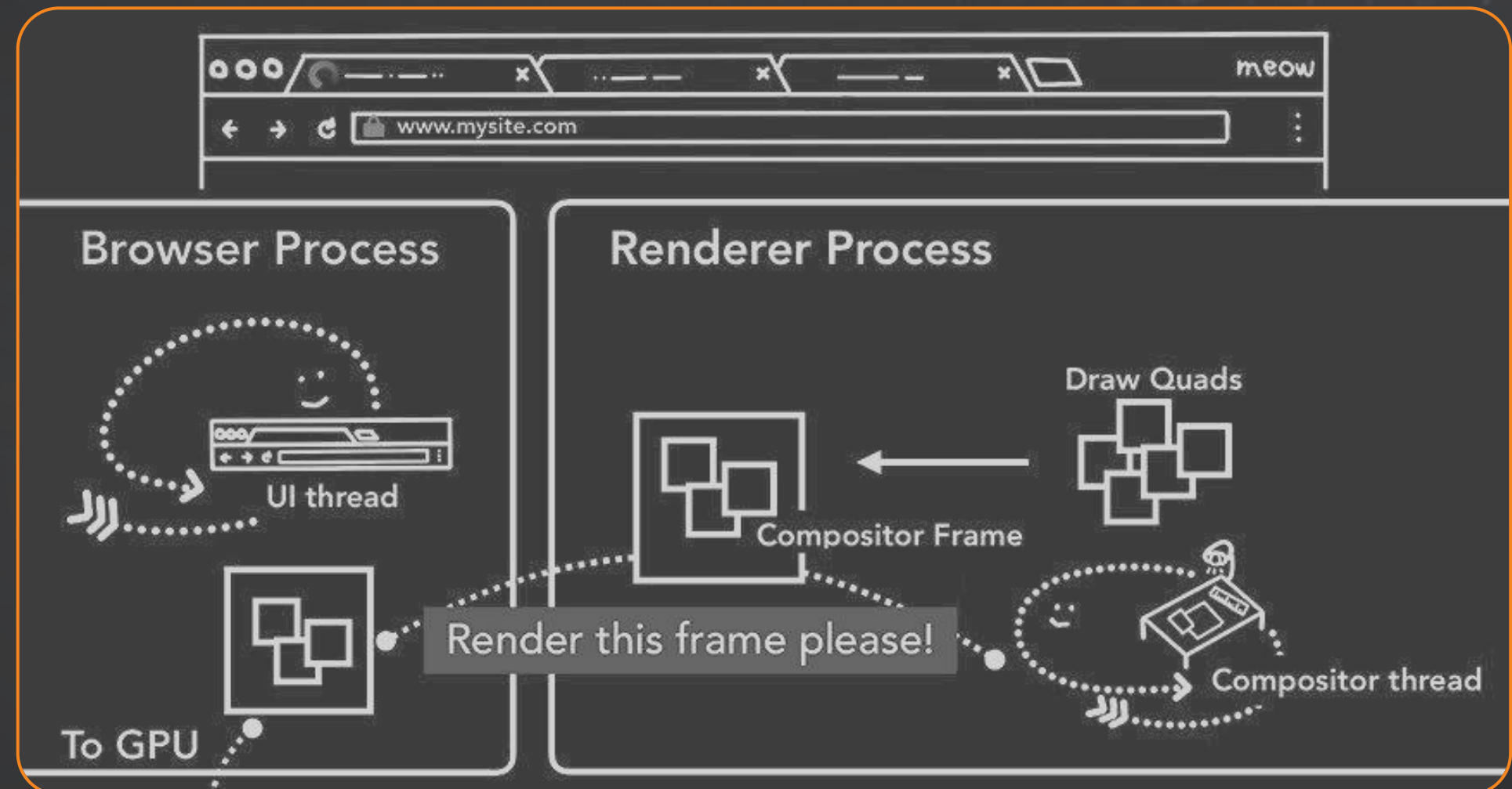
## Some major responsibilities of the browser engine are as follows:-

1. Rendering web pages
2. Handling user interactions
3. Optimizing page load times
4. Supporting web standards
5. Providing developer tools



# Browser rendering process

1. Domain Name System (DNS)
2. Establishing a TCP Connection
3. Sending an HTTP Request
4. Server Processing
5. Generating the HTTP Response
6. Transmitting the HTTP Response
7. Rendering the HTML
8. Fetching External Resources
9. Executing JavaScript
10. Rendering the Webpage
11. User Interaction and Event Handling
12. Ongoing Interaction





# Common browser compatibility issues

1. CSS rendering differences
2. JavaScript Compatibility
3. HTML Markup Interpretation
4. Cross-Browser CSS3 Features





▶ **THANK YOU** ◀