



## مهم جدأ

هذا الملف للمراجعة السريعة واخذ الملاحظات عليه فقط ،لانه يحتوي على اقل من 20٪ مما يتم شرحه في الفيديوهات الاستعجال والاعتماد عليه فقط سوف يجعلك تخسر كميه معلومات وخبرات كثيره

يجب عليك مشاهدة فيديو الدرس كاملا

لاتنسى عمل لايك ومشاركة القناة لتعم الفائدة للجميع لا تنسونا من دعائكم

ProgrammingAdvices.com

**Mohammed Abu-Hadhoud** 



#### لا تخن الامانة

الأسعار الخاصة بالكورسات رمزية للغاية ولا تمثل 1% من قيمتها الفعلية، ومع ذلك تتوفر كوبونات دعم لكل طالب محتاج.

عند شراء الكورس، فهو مخصص لك وحدك، ولا يحق لك القيام بما يلي:

- تحمیل الفیدیوهات وتوزیعها.
  - مشاركة حسابك مع الآخرين.
- الاشتراك في شراء الكورس مع أصدقائك، حيث يحق لكل فرد كوبون دعم إذا كان بحاجة إليه.
  - استخدام کوبون دعم دون وجه حق.

إن مخالفة هذه التعليمات قد تؤدي إلى إغلاق المنصة، مما يحرم آلاف الطلاب من فرصة التعلم. وستكون مسؤولًا أمام الله عن ذلك، وأنا لن اسامح من يسيء استخدام هذه المنصة.

> تذكر أن الله لا يبارك في عمل مبني على أخذ حقوق الآخرين أو حرمانهم من التعلم. لا تبدأ حياتك بما لا يرضي الله.

> > مع تحياتي، د. محمد أبو هدهود





## Example

• Let us see the example.



#### Introduction

- In the modern web environment, performance optimization is critical, and how resources like images and iframes are loaded can significantly impact page load times and user experience.
- •HTML provides a native attribute called <u>loading</u> that can be used to control the loading behavior of <img> and <iframe> tags.
- This lesson will explore the loading attribute, focusing on its values and how it can be used to improve website performance.



### Concept Explanation

- loading Attribute: The loading attribute is a simple HTML attribute that can be added to <img> and <iframe> elements to specify how the browser should load these resources.
- It is designed to defer the loading of resources until they are needed, which can reduce initial page load time, save bandwidth, and improve user interaction speeds.



### Usage

The loading attribute has three possible values:

- lazy: This value tells the browser to delay loading the element until it reaches a calculated distance from the viewport, thereby prioritizing visible content.
- eager: Forces the browser to load the element immediately, regardless of where it appears on the page.
- auto: The browser uses its default loading strategy.
  This could involve immediate loading as soon as the element is parsed (similar to the traditional behavior without lazy loading), or it might incorporate some optimizations based on the user's connection speed, browser settings, and other factors.



# Benefits of Using loading="Eager"

- The loading="eager" attribute in HTML instructs browsers to immediately load specified <img> or <iframe> elements, ensuring priority treatment regardless of their position on the page. This technique, known as eager loading, offers several advantages:
  - Immediate Content Availability: Essential for critical, above-thefold content, ensuring it's loaded instantly to enhance the initial user experience.
  - Improved User Experience: Prevents delays in rendering key visuals, crucial for maintaining engagement and reducing bounce rates.
  - Layout Stability: Prevents layout shifts by loading important images and iframes right away, supporting consistent user experience and SEO.
  - Predictability: Ensures critical resources load immediately, even under slow network conditions, making it reliable for essential content.
  - Consistency Across Browsers: Overrides default loading behaviors, providing uniform behavior across different platforms.



# Benefits of Using loading="Eager"

- Eager loading is especially beneficial for hero images, advertisements, and crucial graphical content, ensuring these elements are visible immediately as users begin interacting with the page.
  - This strategy is pivotal in scenarios where immediate content visibility is linked directly to user engagement and satisfaction.



# Benefits of Using loading="auto"

- The loading="auto" attribute in HTML allows the browser to decide the best method for loading <img> and <iframe> elements based on its default loading algorithm. This is the standard behavior if the loading attribute isn't specified. Here are the key benefits and considerations of using loading="auto":
  - Browser Optimization: Enables the browser to optimize loading based on the user's connection speed, browser capabilities, and other factors.
  - Flexibility: The browser may choose to load images immediately or apply lazy loading techniques based on its performance heuristics and the specific scenario.
  - Reduced Complexity: Simplifies markup by not requiring explicit instructions for each media element, allowing developers to rely on browser intelligence.
  - Balanced Performance: Aims to balance resource loading without overprioritizing or delaying specific content excessively, which could impact user experience.
  - Default Behavior: As the standard behavior, it ensures that images and iframes are handled consistently unless otherwise specified, providing a baseline of predictable behavior across different webpages and applications.



# Benefits of Using loading="auto"

- Using loading="auto" is particularly useful for general content where specific loading strategies are not critical, or where developers prefer to defer to the browser's built-in optimization logic.
- This setting is effective for ensuring that the browser's default strategies are utilized, which are typically well-suited to most general browsing conditions.



#### Best Practices

- Use loading="eager" for critical images that are in the first viewport or near the top of the page.
- Apply loading="lazy" to images and iframes that are below the fold or not immediately necessary.
- Test your webpage's performance with different loading strategies to find the optimal setup for your content and audience.



#### Conclusion

- The loading attribute is a powerful tool for developers looking to optimize web performance by controlling how and when images and iframes are loaded.
- By understanding and implementing this attribute correctly, you can significantly enhance the responsiveness and efficiency of your web pages.



