95-481/95-881

Web Application Development

AI Lab Report

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**Lab:** 2

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**AI System**: chatGPT

# Iteration #1

## Request

ntroduction:

Welcome to our online platform dedicated to promoting green computing through the adoption of e-books over traditional paper books. As the world becomes increasingly aware of the environmental impact of our choices, it's crucial to explore sustainable alternatives. Our collection of e-books not only provides valuable knowledge but also contributes to a greener and more eco-friendly world.

Section 1: The Environmental Impact of Paper Books

Highlight the environmental consequences of traditional paper book production, including deforestation, energy consumption, and pollution. Emphasize the need for a shift towards more sustainable alternatives.

Section 2: Advantages of E-Books

- \*\*Reduced Carbon Footprint:\*\* E-books eliminate the need for paper production, transportation, and disposal, significantly reducing the carbon footprint associated with traditional books.

- \*\*Resource Conservation:\*\* By choosing e-books, users contribute to the conservation of trees, water, and energy, helping preserve natural resources.

- \*\*Waste Reduction:\*\* E-books eliminate the production of physical waste, such as paper, ink, and packaging materials, contributing to a cleaner environment.

Section 3: Accessibility and Convenience

- \*\*Anywhere, Anytime Access:\*\* E-books provide the flexibility to access content from various devices, promoting anytime, anywhere learning.

- \*\*Search and Navigation:\*\* Enjoy the convenience of searching, highlighting, and navigating through content effortlessly with digital features.

- \*\*Customization:\*\* Personalize your reading experience with adjustable font sizes, backgrounds, and interactive elements.

Section 4: Supporting Green Initiatives

- \*\*Partnering with Publishers:\*\* Explore partnerships with publishers committed to sustainability, ensuring that the e-books available on our platform align with eco-friendly practices.

- \*\*Carbon-Neutral Operations:\*\* Detail any efforts your platform takes to offset its carbon footprint and operate in an environmentally responsible manner.

Section 5: How You Can Contribute

Encourage users to join the green computing movement by:

- \*\*Choosing E-Books:\*\* Make the conscious choice to opt for e-books over traditional paper books.

- \*\*Spreading Awareness:\*\* Share information about the environmental benefits of e-books with friends and family.

- \*\*Participating in Recycling Programs:\*\* If users still have physical books, encourage them to recycle or donate them to promote circular economy practices.

Conclusion:

By embracing e-books, we can collectively make a positive impact on the environment. Join us in building a sustainable future where knowledge coexists harmoniously with ecological responsibility. Explore our collection and be part of the green computing revolution today!

Here are the contents. Provide the HTML code for a webpage for the above contents. The webpage will include a navigation components.

Result

<!DOCTYPE html>

<html>

<head>

<title>Green IT Book Collection</title>

<style>

body {

font-family: Arial, sans-serif;

}

.navbar {

background-color: #333;

overflow: hidden;

}

.navbar a {

float: left;

display: block;

color: white;

text-align: center;

padding: 14px 16px;

text-decoration: none;

}

.navbar a:hover {

background-color: #ddd;

color: black;

}

.section {

margin: 20px;

padding: 20px;

border-bottom: 1px solid #ccc;

}

</style>

</head>

<body>

<div class="navbar">

<a href="#book1">Green IT</a>

<a href="#book2">Sustainable IT Architecture</a>

<a href="#book3">The Green Computing Book</a>

<a href="#book4">Green Technology Strategies</a>

<a href="#book5">IT Governance</a>

<a href="#book6">The Green and Virtual Data Center</a>

</div>

<div class="section" id="book1">

<h2>Green IT: Reduce Your Information System's Environmental Impact While Adding to the Bottom Line</h2>

<p>By Toby Velte, Anthony Velte, and Robert Elsenpeter</p>

<p>This eBook provides practical advice on how to make your IT more environmentally friendly and efficient. It's great for understanding the basics of Green IT and its impact on the environment.</p>

</div>

<div class="section" id="book2">

<h2>Sustainable IT Architecture: The Progressive Way of Overhauling Information Systems with SOA</h2>

<p>By Jean-Michel Detavernier, Philippe Vandenbulke, and Pierre Bonnet</p>

<p>This book focuses on creating sustainable IT architectures using Service-Oriented Architecture (SOA). It's excellent for IT professionals interested in sustainable system design.</p>

</div>

<div class="section" id="book3">

<h2>The Green Computing Book: Tackling Energy Efficiency at Large Scale</h2>

<p>By Wu-chun Feng</p>

<p>This eBook offers an in-depth look at energy efficiency in large-scale computing systems, an important topic for those interested in data centers and large IT infrastructures.</p>

</div>

<div class="section" id="book4">

<h2>Green Technology Strategies: Creating an Energy-Efficient, Low-Emission Future</h2>

<p>By Tom Worthington</p>

<p>This book is suitable for those looking for strategies to implement green technologies in various sectors. It provides a practical approach to reducing energy consumption and carbon emissions through technology.</p>

</div>

<div class="section" id="book5">

<h2>IT Governance: An International Guide to Data Security and ISO27001/ISO27002</h2>

<p>By Alan Calder and Steve Watkins</p>

<p>While not exclusively about Green IT, this book covers aspects of data security and management which are integral to sustainable IT practices.</p>

</div>

<div class="section" id="book6">

<h2>The Green and Virtual Data Center</h2>

<p>By Greg Schulz</p>

<p>This eBook covers the intersection of green computing and virtualization, discussing how virtual data centers can be both efficient and environmentally friendly.</p>

</div>

</body>

</html>

# Iteration #2

## Issue

## Request

Write a javascript program that will calculate the amount of energy in joules and also tons of tnt, released by an input of a magnitude earthquake. The input been entered by the user in an input box and the output is displayed on the web page.

## Result

<!DOCTYPE html>

<html>

<head>

<title>Green Computing with E-Books</title>

<style>

body { font-family: Arial, sans-serif; }

.navbar { overflow: hidden; background-color: #333; }

.navbar a { float: left; display: block; color: white; text-align: center; padding: 14px 16px; text-decoration: none; }

.navbar a:hover { background-color: #ddd; color: black; }

.section { padding: 15px; }

h1, h2 { color: green; }

</style>

</head>

<body>

<div class="navbar">

<a href="#impact">Environmental Impact of Paper Books</a>

<a href="#ebooks">Advantages of E-Books</a>

<a href="#accessibility">Accessibility and Convenience</a>

<a href="#greenInitiatives">Supporting Green Initiatives</a>

<a href="#contribute">How You Can Contribute</a>

</div>

<div class="section" id="impact">

<h1>Environmental Impact of Paper Books</h1>

<p>Highlight the environmental consequences of traditional paper book production, including deforestation, energy consumption, and pollution. Emphasize the need for a shift towards more sustainable alternatives.</p>

</div>

<div class="section" id="ebooks">

<h2>Advantages of E-Books</h2>

<ul>

<li><strong>Reduced Carbon Footprint:</strong> E-books eliminate the need for paper production, transportation, and disposal, significantly reducing the carbon footprint associated with traditional books.</li>

<li><strong>Resource Conservation:</strong> By choosing e-books, users contribute to the conservation of trees, water, and energy, helping preserve natural resources.</li>

<li><strong>Waste Reduction:</strong> E-books eliminate the production of physical waste, such as paper, ink, and packaging materials, contributing to a cleaner environment.</li>

</ul>

</div>

<div class="section" id="accessibility">

<h2>Accessibility and Convenience</h2>

<ul>

<li><strong>Anywhere, Anytime Access:</strong> E-books provide the flexibility to access content from various devices, promoting anytime, anywhere learning.</li>

<li><strong>Search and Navigation:</strong> Enjoy the convenience of searching, highlighting, and navigating through content effortlessly with digital features.</li>

<li><strong>Customization:</strong> Personalize your reading experience with adjustable font sizes, backgrounds, and interactive elements.</li>

</ul>

</div>

<div class="section" id="greenInitiatives">

<h2>Supporting Green Initiatives</h2>

<p>Explore partnerships with publishers committed to sustainability, ensuring that the e-books available on our platform align with eco-friendly practices. Detail any efforts your platform takes to offset its carbon footprint and operate in an environmentally responsible manner.</p>

</div>

<div class="section" id="contribute">

<h2>How You Can Contribute</h2>

<ul>

<li><strong>Choosing E-Books:</strong> Make the conscious choice to opt for e-books over traditional paper books.</li>

<li><strong>Spreading Awareness:</strong> Share information about the environmental benefits of e-books with friends and family.</li>

<li><strong>Participating in Recycling Programs:</strong> If users still have physical books, encourage them to recycle or donate them to promote circular economy practices.</li>

</ul>

</div>

<div class="section">

<h1>Conclusion</h1>

<p>By embracing e-books, we can collectively make a positive impact on the environment. Join us in building a sustainable future where knowledge coexists harmoniously with ecological responsibility. Explore our collection and be part of the green computing revolution today!</p>

</div>

</body>

</html>

# Iteration #3

Issue: does not include site map

Request: also include a site map

Result:

<!DOCTYPE html>

<html>

<head>

<title>Green Computing with E-Books</title>

<style>

body { font-family: Arial, sans-serif; }

.navbar, .sitemap { overflow: hidden; background-color: #333; }

.navbar a, .sitemap a { float: left; display: block; color: white; text-align: center; padding: 14px 16px; text-decoration: none; }

.navbar a:hover, .sitemap a:hover { background-color: #ddd; color: black; }

.section, .sitemap-section { padding: 15px; }

h1, h2 { color: green; }

.sitemap-section { background-color: #f2f2f2; }

.sitemap a { float: none; }

</style>

</head>

<body>

<div class="navbar">

<a href="http://example.com/section1">Environmental Impact of Paper Books</a>

<a href="http://example.com/section2">Advantages of E-Books</a>

<a href="http://example.com/section3">Accessibility and Convenience</a>

<a href="http://example.com/section4">Supporting Green Initiatives</a>

<a href="http://example.com/section5">How You Can Contribute</a>

</div>

<!-- Your content sections go here -->

<div class="sitemap-section">

<h2>Site Map</h2>

<div class="sitemap">

<a href="http://example.com/section1">Environmental Impact of Paper Books</a>

<a href="http://example.com/section2">Advantages of E-Books</a>

<a href="http://example.com/section3">Accessibility and Convenience</a>

<a href="http://example.com/section4">Supporting Green Initiatives</a>

<a href="http://example.com/section5">How You Can Contribute</a>

<!-- Add other sections as necessary -->

</div>

</div>

</body>

</html>

# Iteration #4

Issue: does not have breadcrumb

Request:also include a breadcrumb

Result:

<!DOCTYPE html>

<html>

<head>

<title>Green Computing with E-Books</title>

<style>

body { font-family: Arial, sans-serif; }

.navbar, .sitemap { overflow: hidden; background-color: #333; }

.navbar a, .sitemap a, .breadcrumb a { color: white; text-decoration: none; }

.navbar a, .sitemap a { float: left; display: block; text-align: center; padding: 14px 16px; }

.navbar a:hover, .sitemap a:hover { background-color: #ddd; color: black; }

.breadcrumb { background-color: #f2f2f2; padding: 10px 15px; color: black; }

.breadcrumb a:hover { color: blue; }

.section, .sitemap-section { padding: 15px; }

h1, h2 { color: green; }

.sitemap-section { background-color: #f2f2f2; }

.sitemap a { float: none; }

</style>

</head>

<body>

<div class="navbar">

<a href="http://example.com/section1">Environmental Impact of Paper Books</a>

<a href="http://example.com/section2">Advantages of E-Books</a>

<a href="http://example.com/section3">Accessibility and Convenience</a>

<a href="http://example.com/section4">Supporting Green Initiatives</a>

<a href="http://example.com/section5">How You Can Contribute</a>

</div>

<div class="breadcrumb">

<a href="http://example.com">Home</a> > <a href="http://example.com/category">Category</a> > Current Page

</div>

<!-- Your content sections go here -->

<div class="sitemap-section">

<h2>Site Map</h2>

<div class="sitemap">

<a href="http://example.com/section1">Environmental Impact of Paper Books</a>

<a href="http://example.com/section2">Advantages of E-Books</a>

<a href="http://example.com/section3">Accessibility and Convenience</a>

<a href="http://example.com/section4">Supporting Green Initiatives</a>

<a href="http://example.com/section5">How You Can Contribute</a>

<!-- Add other sections as necessary -->

</div>

</div>

</body>

</html>

# Iteration #5

Issue: does not have anchor text

Request:also include anchor text

Result:

<!DOCTYPE html>

<html>

<head>

<title>Green Computing with E-Books</title>

<style>

body { font-family: Arial, sans-serif; }

.navbar, .sitemap { overflow: hidden; background-color: #333; }

.navbar a, .sitemap a, .breadcrumb a { color: white; text-decoration: none; }

.navbar a, .sitemap a { float: left; display: block; text-align: center; padding: 14px 16px; }

.navbar a:hover, .sitemap a:hover { background-color: #ddd; color: black; }

.breadcrumb { background-color: #f2f2f2; padding: 10px 15px; color: black; }

.breadcrumb a:hover { color: blue; }

.section, .sitemap-section { padding: 15px; }

h1, h2 { color: green; }

.sitemap-section { background-color: #f2f2f2; }

.sitemap a { float: none; }

</style>

</head>

<body>

<div class="navbar">

<a href="http://example.com/section1" title="Learn about the Environmental Impact of Paper Books">Environmental Impact of Paper Books</a>

<a href="http://example.com/section2" title="Discover the Advantages of E-Books">Advantages of E-Books</a>

<a href="http://example.com/section3" title="Explore Accessibility and Convenience of E-Books">Accessibility and Convenience</a>

<a href="http://example.com/section4" title="Read about Supporting Green Initiatives">Supporting Green Initiatives</a>

<a href="http://example.com/section5" title="Find out How You Can Contribute to Green Computing">How You Can Contribute</a>

</div>

<div class="breadcrumb">

<a href="http://example.com" title="Go to the Home Page">Home</a> >

<a href="http://example.com/category" title="Explore the Category Section">Category</a> >

Current Page

</div>

<div class="section" id="impact">

<h1>Environmental Impact of Paper Books</h1>

<p>Highlight the environmental consequences of traditional paper book production, including deforestation, energy consumption, and pollution. Emphasize the need for a shift towards more sustainable alternatives.</p>

</div>

<div class="section" id="ebooks">

<h2>Advantages of E-Books</h2>

<ul>

<li><strong>Reduced Carbon Footprint:</strong> E-books eliminate the need for paper production, transportation, and disposal, significantly reducing the carbon footprint associated with traditional books.</li>

<li><strong>Resource Conservation:</strong> By choosing e-books, users contribute to the conservation of trees, water, and energy, helping preserve natural resources.</li>

<li><strong>Waste Reduction:</strong> E-books eliminate the production of physical waste, such as paper, ink, and packaging materials, contributing to a cleaner environment.</li>

</ul>

</div>

<div class="section" id="accessibility">

<h2>Accessibility and Convenience</h2>

<ul>

<li><strong>Anywhere, Anytime Access:</strong> E-books provide the flexibility to access content from various devices, promoting anytime, anywhere learning.</li>

<li><strong>Search and Navigation:</strong> Enjoy the convenience of searching, highlighting, and navigating through content effortlessly with digital features.</li>

<li><strong>Customization:</strong> Personalize your reading experience with adjustable font sizes, backgrounds, and interactive elements.</li>

</ul>

</div>

<div class="section" id="greenInitiatives">

<h2>Supporting Green Initiatives</h2>

<p>Explore partnerships with publishers committed to sustainability, ensuring that the e-books available on our platform align with eco-friendly practices. Detail any efforts your platform takes to offset its carbon footprint and operate in an environmentally responsible manner.</p>

</div>

<div class="section" id="contribute">

<h2>How You Can Contribute</h2>

<ul>

<li><strong>Choosing E-Books:</strong> Make the conscious choice to opt for e-books over traditional paper books.</li>

<li><strong>Spreading Awareness:</strong> Share information about the environmental benefits of e-books with friends and family.</li>

<li><strong>Participating in Recycling Programs:</strong> If users still have physical books, encourage them to recycle or donate them to promote circular economy practices.</li>

</ul>

</div>

<div class="section">

<h1>Conclusion</h1>

<p>By embracing e-books, we can collectively make a positive impact on the environment. Join us in building a sustainable future where knowledge coexists harmoniously with ecological responsibility. Explore our collection and be part of the green computing revolution today!</p>

</div>

<div class="sitemap-section">

<h2>Site Map</h2>

<div class="sitemap">

<a href="http://example.com/section1" title="Environmental Impact Section">Environmental Impact of Paper Books</a>

<a href="http://example.com/section2" title="Advantages of E-Books Section">Advantages of E-Books</a>

<a href="http://example.com/section3" title="Accessibility and Convenience Section">Accessibility and Convenience</a>

<a href="http://example.com/section4" title="Supporting Green Initiatives Section">Supporting Green Initiatives</a>

<a href="http://example.com/section5" title="How You Can Contribute Section">How You Can Contribute</a>

<!-- Add other sections as necessary -->

</div>

</div>

</body>

</html>

***Remember that each person needs to submit their own lab report for individual grading, even though it can be identical to your lab partners. Each person should submit their own unique lessons learned to the discussion board for grading.***

***Title: Embracing Green Computing: E-Books for a Sustainable Future***

***Introduction:***

***Welcome to our online platform dedicated to promoting green computing through the adoption of e-books over traditional paper books. As the world becomes increasingly aware of the environmental impact of our choices, it's crucial to explore sustainable alternatives. Our collection of e-books not only provides valuable knowledge but also contributes to a greener and more eco-friendly world.***

***Section 1: The Environmental Impact of Paper Books***

***Highlight the environmental consequences of traditional paper book production, including deforestation, energy consumption, and pollution. Emphasize the need for a shift towards more sustainable alternatives.***

***Section 2: Advantages of E-Books***

***- \*\*Reduced Carbon Footprint:\*\* E-books eliminate the need for paper production, transportation, and disposal, significantly reducing the carbon footprint associated with traditional books.***

***- \*\*Resource Conservation:\*\* By choosing e-books, users contribute to the conservation of trees, water, and energy, helping preserve natural resources.***

***- \*\*Waste Reduction:\*\* E-books eliminate the production of physical waste, such as paper, ink, and packaging materials, contributing to a cleaner environment.***

***Section 3: Accessibility and Convenience***

***- \*\*Anywhere, Anytime Access:\*\* E-books provide the flexibility to access content from various devices, promoting anytime, anywhere learning.***

***- \*\*Search and Navigation:\*\* Enjoy the convenience of searching, highlighting, and navigating through content effortlessly with digital features.***

***- \*\*Customization:\*\* Personalize your reading experience with adjustable font sizes, backgrounds, and interactive elements.***

***Section 4: Supporting Green Initiatives***

***- \*\*Partnering with Publishers:\*\* Explore partnerships with publishers committed to sustainability, ensuring that the e-books available on our platform align with eco-friendly practices.***

***- \*\*Carbon-Neutral Operations:\*\* Detail any efforts your platform takes to offset its carbon footprint and operate in an environmentally responsible manner.***

***Section 5: How You Can Contribute***

***Encourage users to join the green computing movement by:***

***- \*\*Choosing E-Books:\*\* Make the conscious choice to opt for e-books over traditional paper books.***

***- \*\*Spreading Awareness:\*\* Share information about the environmental benefits of e-books with friends and family.***

***- \*\*Participating in Recycling Programs:\*\* If users still have physical books, encourage them to recycle or donate them to promote circular economy practices.***

***Conclusion:***

***By embracing e-books, we can collectively make a positive impact on the environment. Join us in building a sustainable future where knowledge coexists harmoniously with ecological responsibility. Explore our collection and be part of the green computing revolution today!***