WORD COUNTER

A MINI PROJECT REPORT

Submitted by

Group/Team No: G1/T1

SEJAL BANSAL, 2310991208,
SHIVAM JASWAL, 2310991209,
SHIVANSHI JAIN, 2310991210,
SHIVIKA, 2310991211

in partial fulfillment for the award of the degree

of

BACHELEOR OF ENGINEERING

in

COMPUTER SCIENCE & ENGINEERING

CHITKARA UNIVERSITY

CHANDIGARH-PATIALA NATIONAL HIGHWAY
RAJPURA (PATIALA) PUNJAB-140401 (INDIA)

DECEMBER & 2023

Table Of Contents

1. ABSTRACT

The "Word Counter" project is a software application designed to analyze and count words in a given text or document. Its primary function is to efficiently process text input and provide users with essential statistics, such as the total word count, unique word count, and frequency. This tool serves various purposes, including aiding writers, editors, and researchers in assessing the content of their text, tracking progress, and identifying keywords or common phrases. The Word Counter project aims to enhance text analysis and productivity by simplifying the word counting process.

It provides information about the number of words in the document. It is useful when the length of the document is limited to some number of words.

2. INTRODUCTION

2.1 Background :

2.1.1 Importance of Accurate Word Counting :

- Emphasize the critical role of word counting in various applications, such as writing, editing, and academic research.
- Clearly state the primary goal of the project is to develop an efficient automated word counting tool.
- Emphasize the importance of providing users with a quick and accurate alternative to manual counting.
- Highlight how accurate word counts contribute to the quality and precision of textual content

2.1.2 Challenges in Manual Counting :

- Outline the limitations of manual word counting, including the potential for errors, time inefficiency, and impracticality for large volumes of text.
- Illustrate the need for an automated solution to overcome these challenges.

2.2 Objectives :

2.2.1 Efficient automated Word Counting:

2.2.2 User-Friendly Interface:

- Outline the objective of creating a user-friendly interface for the Word Counter.
- Stress the importance of making the tool accessible to a wide range of users, including those without technical expertise.

3 PROBLEM STATEMENT

3.1 Identification of the Problem :

3.1.1 Time Consuming Manual Counting:

- Identifying words manually is a time-consuming task, especially when dealing with large documents**.**
- Users often find themselves spending significant amounts of time on a repetitive and mundane process, diverting valuable resources from more productive activities.

3.1.2. Error-Prone Manual Counting:

- Manual word counting is susceptible to human error, leading to inaccuracies in the final count.
- Typos, miscounts, and distractions during the counting process can compromise the reliability of manually obtained word counts.

3.2 Significance of the Problem:

3.2.1 Impact on Productivity:

- The inefficiency of manual word counting directly affects productivity, particularly for writers, editors, and researchers who rely on accurate word counts for various purposes.
- Automating this process can significantly improve overall efficiency and allow users to focus on higher-value tasks.

3.2.2. Criticality in Data Analysis:

- In fields such as data analysis and research, where precise textual metrics are essential, the accuracy of word counts is crucial.
- Manual counting's margin for error can lead to flawed analyses, hindering the reliability of research outcomes and decision-making processes.

4 TECHNICAL DETAILS

4.1 Architecture Overview:

4.1.1 Web-Based Overview:

- The Word Counter project adopts a web-based architecture using HTML, CSS, JavaScript, and Python.
- Users interact with the application through a browser, ensuring platform independence and easy accessibility.

4.1.2. Client-Side Processing:

- The architecture primarily relies on client-side processing, with the HTML for the structure, CSS for styling, and JavaScript for implementing the word counting algorithm.
- This lightweight architecture minimizes server dependencies and ensures a responsive user experience.

4.2 Algorithm Explanation:

4.2.1 Client-Side Word Count Algorithm:

- The JavaScript implementation includes a client-side word counting algorithm.
- It parses the input text, identifies words, and maintains an accurate count, all within the user's browser, eliminating the need for server-side processing.

4.2.2 Tokenization of Accuracy:

- The algorithm utilizes tokenization to accurately identify and count words.
- By breaking the input text into tokens and considering various word boundaries, the algorithm improves accuracy, especially in handling punctuation, spaces, and special characters commonly found in textual content

.

5 KEY FEATURES

5.1 User Interface:

5.1.1 Intuitive Design:

- The user interface is designed with simplicity and intuitiveness in mind, ensuring that users can easily navigate and interact with the Word Counter.
- Clear and concise elements, such as input fields and buttons, are strategically placed for a seamless user experience.

5.1.2 Responsive Layout:

- The interface adapts to different screen sizes and devices, providing a consistent and responsive layout.
- This feature enhances accessibility, allowing users to access and utilize the Word Counter across a variety of devices, including desktops, laptops, tablets, and smart phones.

5.2. Real-Time Counting:

5.2.1 Instantaneous Results:

- The Word Counter provides real-time word counting, displaying results instantaneously as the user inputs or modifies the text.
- Users can observe the word count dynamically updating, allowing for quick feedback and facilitating an efficient writing or editing process.

5.2.2 Efficient Resource Utilization:

- Real-time counting is achieved through efficient client-side processing, minimizing the need for server requests**.**
- This not only ensures a responsive user experience but also optimizes resource utilization, making the Word Counter lightweight and fast.

6 PROJECT ADVANTAGES

6.2 Time Efficiency:

- The automated nature of the Word Counter significantly reduces the time required for word counting.
- Users experience a swift and efficient process, especially when dealing with large volumes of text, enhancing overall productivity.
- Users receive instantaneous word count results as they type or input text.
- This real-time feedback eliminates the need for a separate counting step, saving valuable time during writing, editing, or data analysis tasks.

6.2 Accuracy:

- The Word Counter algorithm ensures a high level of accuracy in word counting.
- By employing advanced tokenization techniques and considering various linguistic elements, the tool minimizes errors and provides precise word count results.
- Users can rely on consistent and reliable word count results across different types of text.
- The automation eliminates the variability associated with manual counting, offering users confidence in the accuracy of their word count data.

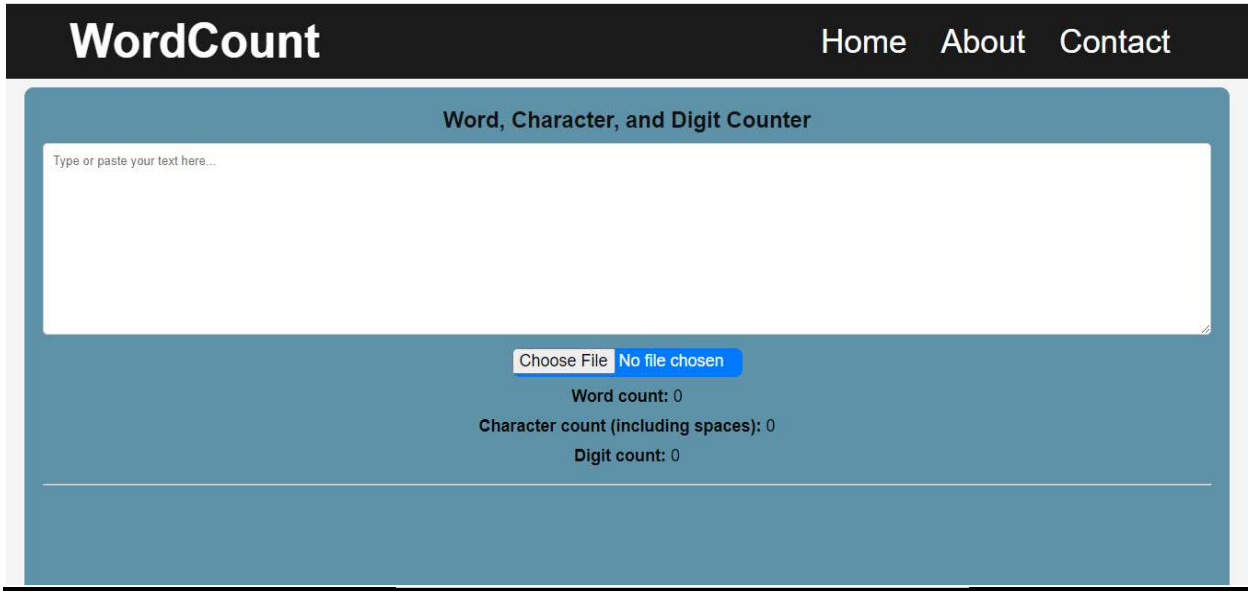
7. BONUS FEATURE

File Upload for .txt Documents:

The Word Counter project introduces a versatile bonus feature, empowering users to seamlessly upload .txt files directly into the application, expanding its functionality beyond manual input. This enhancement addresses the needs of users dealing with extensive text documents, allowing for efficient word counting without the constraints of manual entry. Within the user-friendly interface, a dedicated file upload option streamlines the process. Users simply click to upload their .txt file, triggering the application to instantaneously process the document and provide a real-time word count. This feature not only boosts efficiency but also preserves the original structure of the document, ensuring accuracy in the counting process. As users increasingly rely on the application for diverse word counting needs, this bonus feature adds a layer of adaptability, accommodating different document formats and enhancing the overall user experience. Looking ahead, the project envisions further expansion, exploring additional file format support and enhanced file management features, such as renaming and organizing uploaded files. The file upload functionality represents a pivotal step in making the Word Counter a comprehensive and user-centric tool, catering to a wide range of user preferences and document types.

8. Results

Front Page:



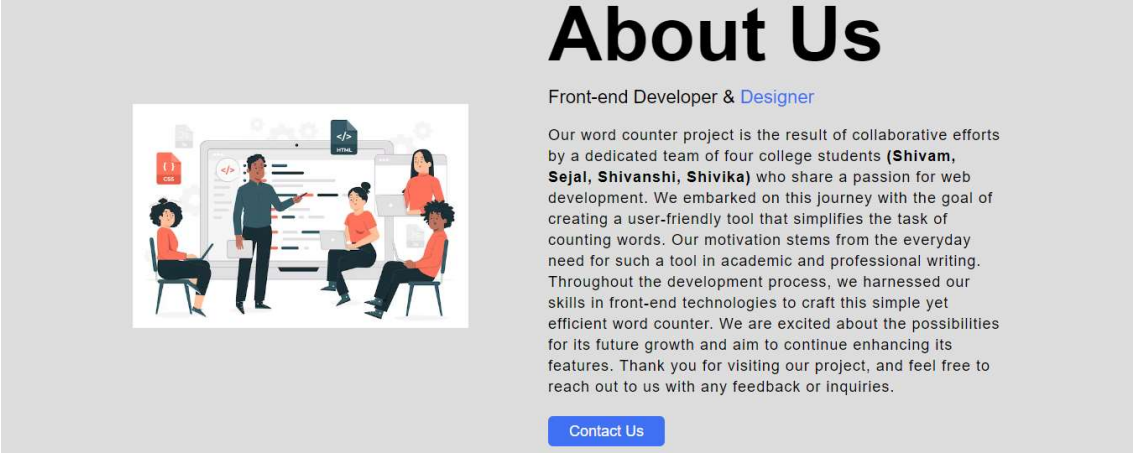
Source Code:

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title> WORD COUNTER</title>
    <link rel="stylesheet" type="text/css" href="index.css">
    <link rel="icon" type="image/png" href="images/new w.jpg">
</head>
<body>
    <nav>
        <div class="menu">
            <div class="logo">
                <a href="index.html">WordCount</a>
            </div>
            <ul>
                <li><a href="index.html">Home</a></li>
                <li><a href="aboutus.html">About</a></li>
                <li><a href="contact.html">Contact</a></li>
            </ul>
        </div>
    </nav>
    <div class="img"></div>
    <div class="center">
        <div class="sub_title">Effortless Word Counting for Writers and Professionals</div>
        <div class="btns">
            <button><a style="color: rgb(242, 246, 247);text-decoration: none; " href="https://en.wikipedia.org/wiki/
            Word_count" target="_blank">Learn More</a></button>
            <button><a style="text-decoration: none; color: black; " href="#12">Count Now</a></button>
        </div>
    </div>

```

```
<div id="12" style="background-color: whitesmoke;" > <br><br><br>
    <div class="container">
        <h1>Word, Character, and Digit Counter</h1>
        <textarea id="text-input" placeholder="Type or paste your text here..." oninput="countWordsAndCharacters()"></
        textarea>
        <input type="file" id="fileInput" accept=".txt" onchange="handleFileSelect()">
        <p class="counter"><span class="count-label">Word count:</span> <span id="word-count">0</span> </p>
        <p class="counter"><span class="count-label">Character count (including spaces):</span> <span
        id="char-count">0</span> </p>
        <p class="counter"><span class="count-label">Digit count:</span> <span id="digit-count">0</span></p>
        <br><hr><br>
        <br><br><br><br><br>
    </div> <br><br><br>
</div>
<div>
    <footer class="footer">
        <div class="copy">&copy; 2023 Word Count PG-13</div>
        <div class="bottom-links">
            <div class="links">
                <span>MORE INFO</span>
                <a href="privacy.html">Privacy and Policy</a>
                <a href="#">Report a Bug</a>
                <a href="#">More Tools</a>
            </div>
            <div class="links"> <br> <br><br>
                <span>SOCIAL LINKS</span>
                <a href="https://www.facebook.com/login/"><img src="images/facebook logo.png" alt=""></a>
                <a href="https://twitter.com/login? lang=en"><img src="images/twitter1 logo.png" alt=""></a>
                <a href="https://www.instagram.com/accounts/login/?hl=en"><img src="images/instagram logo.png"
                alt=""></a>
            </div>
        </div>
```

```
</div>
<script>
    function countWordsAndCharacters() {
        const text = document.getElementById('text-input').value;

        // Count words
        const words = text.match(/\b\w+\b/g) || [];
        document.getElementById('word-count').textContent = words.length;

        // Count characters (including spaces)
        document.getElementById('char-count').textContent = text.length;

        // Count digits
        const digits = text.match(/\d/g) || [];
        document.getElementById('digit-count').textContent = digits.length;
    }

    function handleFileSelect() {
        const fileInput = document.getElementById('fileInput');
        const file = fileInput.files[0];

        if (file) {
            const reader = new FileReader();

            reader.onload = function (e) {
                const content = e.target.result;
                // Update the textarea with the file content
                document.getElementById('text-input').value = content;
                // Recalculate counts
                countWordsAndCharacters();
            };
```

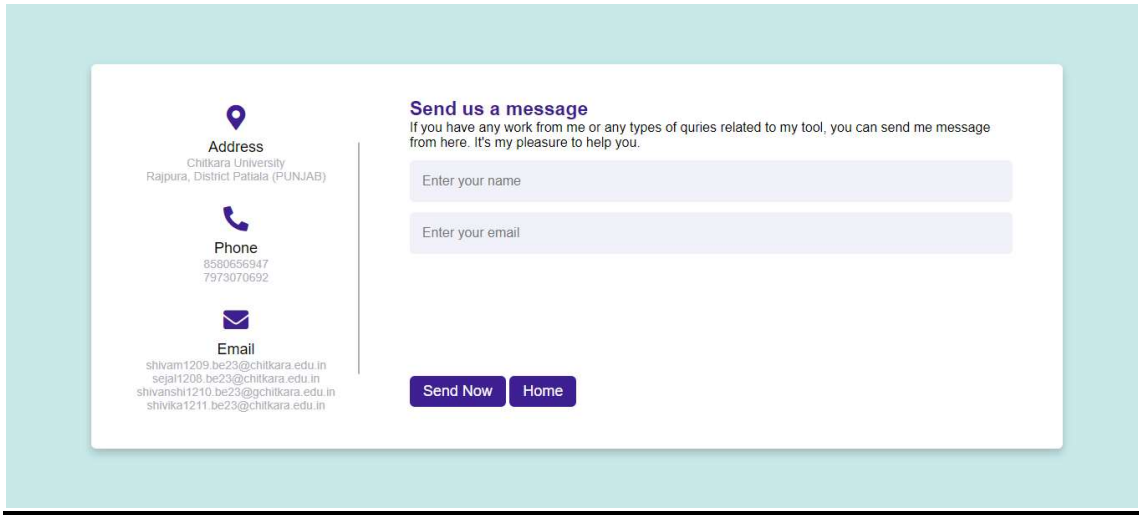
About Us Page:



Source Code:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
 <title>About Us</title>
  <link rel="stylesheet" href="about.css">
</head>
<body>
  <nav>
    <div class="menu">
      <div class="logo">
        <a href="index.html">WordCount</a>
      </div>
      <ul>
        <li><a href="index.html">Home</a></li>
        <li><a href="aboutus.html">About</a></li>
        <li><a href="contact.html">Contact</a></li>
      </ul>
    </div>
  </nav>
  <section class="about-us">
    <div class="about">
      <img src="https://img.freepik.com/vecteurs-libre/illustration-concept-atelier-codage_114360-8112.jpg?size=626&
      ext=jpg" class="pic">
      <div class="text">
        <h2>About Us</h2>
        <h5>Front-end Developer & <span>Designer</span></h5>
          <p>Our word counter project is the result of collaborative efforts by a dedicated team of four college students
          <b>(Shivam, Sejal, Shivanshi, Shivika)</b> who share a passion for web development. We embarked on this journey
          with the goal of creating a user-friendly tool that simplifies the task of counting words. Our motivation stems
      <img src="https://img.freepik.com/vecteurs-libre/illustration-concept-atelier-codage_114360-8112.jpg?size=626&
      ext=jpg" class="pic">
      <div class="text">
        <h2>About Us</h2>
        <h5>Front-end Developer & <span>Designer</span></h5>
          <p>Our word counter project is the result of collaborative efforts by a dedicated team of four college students
          <b>(Shivam, Sejal, Shivanshi, Shivika)</b> who share a passion for web development. We embarked on this journey
          with the goal of creating a user-friendly tool that simplifies the task of counting words. Our motivation stems
          from the everyday need for such a tool in academic and professional writing. Throughout the development
          process, we harnessed our skills in front-end technologies to craft this simple yet efficient word counter. We
          are excited about the possibilities for its future growth and aim to continue enhancing its features. Thank you
          for visiting our project, and feel free to reach out to us with any feedback or inquiries.</p>
        <div class="data">
        <a href="contact.html" class="hire">Contact Us</a>
        </div>
      </div>
    </div>
  </section>
</body>
</html>
```

Contact Page:



SourceCode:

```
<html lang="en" dir="ltr">
  <head>
    <meta charset="UTF-8">
    <title>Contact Us Form </title>
    <link rel="stylesheet" href="contact.css">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.2/css/all.min.css"/>
     <meta name="viewport" content="width=device-width, initial-scale=1.0">
   </head>
<body>
  <div class="container">
    <div class="content">
      <div class="left-side">
        <div class="address details">
          <i class="fas fa-map-marker-alt"></i>
          <div class="topic">Address</div>
          <div class="text-one">Chitkara University</div>
          <div class="text-two">Rajpura, District Patiala (PUNJAB)</div>
        </div>
        <div class="phone details">
          <i class="fas fa-phone-alt"></i>
          <div class="topic">Phone</div>
          <div class="text-one">8580656947</div>
          <div class="text-two">7973070692</div>
        </div>
        <div class="email details">
          <i class="fas fa-envelope"></i>
          <div class="topic">Email</div>
          <div class="text-one">shivam1209.be23@chitkara.edu.in</div>
          <div class="text-two">sejal1208.be23@chitkara.edu.in</div>
          <div class="text-two">shivanshi1210.be23@gchitkara.edu.in</div>
          <div class="text-two">shivika1211.be23@chitkara.edu.in</div>
        </div>
```

```
        <div class="text-two">shivanshi1210.be23@gchitkara.edu.in</div>
        <div class="text-two">shivika1211.be23@chitkara.edu.in</div>
      </div>
    </div>
    <div class="right-side">
      <div class="topic-text">Send us a message</div>
      <p>If you have any work from me or any types of quries related to my tool, you can send me message from here.
      It's my pleasure to help you.</p>
    <form action="#">
      <div class="input-box">
        <input type="text" placeholder="Enter your name">
      </div>
      <div class="input-box">
        <input type="text" placeholder="Enter your email">
      </div>
      <div class="input-box message-box">

      </div>
      <div class="button">
        <input type="button"  value="Send Now" onclick="alert('Thank You for Contacting Us')">
        <a href="index.html"><input type="button" value="Home"></a>
      </div>
    </form>
  </div>
  </div>
 </div>
</body>
</html>
```

9. CONCLUSION

9.1 Key Points of the Project:

9.1.1 Successful Implementation: The Word Counter project has been successfully implemented, providing users with a user-friendly and efficient tool for real-time word counting

9.1.2 Team Collaboration: The project's success is a testament to effective team collaboration, where each member played a crucial role in contributing to the development and refinement of the Word Counter.

9.1.3 Responsive Design: The responsive design ensures that the Word Counter is accessible and functional across various devices, contributing to a seamless user experience.

9.1.4 Positive User Feedback: Initial user feedback indicates a positive response to the Word Counter's design and functionality, affirming its value in various applications.

9.2 Team's Main Takeaways:

9.2.1 Learning and Skill Development: Team members gained valuable experience and skill development throughout the project, particularly in web development using HTML, CSS, and JavaScript.

9.2.2 Importance of Feedback: The project underscored the significance of user feedback in refining and improving the Word Counter. Continuous feedback loops were crucial for iterative development.

9.2.3 Challenges Encountered: Acknowledging and overcoming challenges, such as the handling of extremely large texts, provided the team with insights into problem-solving and optimization.

7.2.4 Gratitude and Team Bonding: The team expresses gratitude for the collaborative effort, recognizing the importance of effective communication, shared goals, and mutual support. The project experience strengthened team bonds.

References/Links used

- Wikipedia – Word Count : https://en.wikipedia.org/wiki/Word_count
- Word Counter for Reference: https://wordcounter.net/
- Background image of Main Page:https://images.unsplash.com/photo-1587620962725-abab7fe55159?ixlib=rb-1.2.1&ixid=MnwxMjA3fDB8MHxwaG90by1wYWdlfHx8fGVufDB8fHx8&auto=format&fit=crop&w=1031&q=80)
- Image of About Us page: https://img.freepik.com/vecteurs-libre/illustration-concept-atelier-codage_114360-8112.jpg?size=626&ext=jpg