

# RANDOM QUOTE GENERATOR

A MINI PROJECT REPORT

*Submitted by*

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## Random Quote Generator

This mini project report outlines the development of a Random Quote Generator, blending HTML, CSS, JavaScript, and Python. The project's objective is to create an aesthetically pleasing and responsive front-end interface with a Java-Script logic that fetches and displays random quotes. The document is structured to cover the introduction, problem statement, technical details, key features, project highlights, a bonus feature, conclusion, and references

The project focuses on the significance of inspirational quotes in the digital age, aiming to create a tool that not only enhances programming skills but also spreads positivity in the digital community.

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## 1. Introduction

### 1.1 Project Overview

In the age of modern world and digital market, inspirational quotes and sayings have become a source of motivation and positivity for everyone. Creating a Random Quote Generator is an really exciting project that will allow us to blend our skills in HTML and CSS web development and programming.

### 1.2 Project Objectives

Primary objectives of this project are as follows:

- Its one of the major primary objective is to create an aesthetic and responsive front-end interface using HTML and CSS.
- To use Java Script as a back-end interface and provide the functionality to fetch and display random quotes.
- To develop a back-end server using Python that retrieves random quotes.

### 1.3 Project Significance

The Random Quote Generator project is a great opportunity to explore the world of web development and back-end programming. Additionally, it serves as a fun way to provide users with daily inspirational words. By completing this project, we not only enhance our programming skills but also contribute to the digital community by spreading positivity.

### 1.4 Organization of the Document

This document is divided into various sections to guide us through the project successfully. We will start with HTML and CSS, followed by JavaScript and Python implementation .

## 2. Problem Statement

The challenge at hand is to design and develop a Random Quote Generator that can generate and display inspirational quotes, and other text form of textual inspiration. This system must meet the following specific requirements:

### 2.1 User-friendly Interface

- Creating an intuitive and visually appealing front-end interface using HTML and CSS.

### 2.2 Ensuring responsiveness

- Ensuring that the web page is responsive, adapting to different screen sizes such as desktops, tablets and mobile phones without any issue.

### 2.3 Error Handling

- Implement robust error handling and validation mechanisms to ensure a smooth user experience, This includes handling network errors, server unavailability, and invalid requests gracefully.

### 2.4 Backend Server

- Develop a backend using Python that serves as the source of quotes. This server must be capable of handling incoming requests from the front-end.

### 2.5 JavaScript Logic

- Implement JavaScript functionality to fetch and display random quotes from a server.

### 3. Technical Details

Technical details for the project “Random Quote Generator” are listed below:

#### 3.1 User Interface(HTML and CSS)

3.1.1 Design Interface: Creating a user friendly interface with HTML and style it using CSS, providing a “Generate New Quote” button and quote display here.

3.1.2 Responsiveness: Ensure that the interface design is responsive to accommodate different screen sizes.

#### 3.2 JavaScript Functionality

3.2.1 Quote Retrieval: Implement JavaScript to fetch random quotes from a predefined list.

3.2.2 Display Logic: Develop JavaScript code to fetched quotes in the designated area on user interaction.

#### 3.3 Python Server

3.3.1 Server Setup: Optionally, create a Python-based backend server to serve quotes to the frontend.

3.3.2 Display Logic: Develop JavaScript code to fetched quotes in the designated area on user interaction.

#### 3.4 Error Handling

3.4.1 Error Scenarios: Identify common error scenarios, such as bugs in the site and fix them.

## 4. Key Features

### 4.1 Front-end

4.1.1 Generate Quote Button: A button that triggers the display of a new random quote.

4.1.2 Quote Display Area : An area where the randomly selected quote is presented to the user.

### 4.2 Quote Data Handling

4.2.1 Predefined Quotes: A collection of quotes stored in a data structure for selection.

4.2.2 Random Selection: Logic to choose a random quote from collection for display.

### 4.3 JavaScript Functionality

4.3.1 Fetching Quotes: JavaScript code is used to retrieve quotes from the data structure.

4.3.2 Display Logic: JavaScript code to update the UI(user interface) with the fetched quote.

### 4.4 Backend Server

4.3.2 Quote Serving: A Python-based backend server to serve the quotes to front end for up

## 5. Project Highlights

### Exploring Project Features Through Code Snippets

#### 5.1 HTML:

##### 5.1.1 HTML Document Structure:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Document</title>
7      <link rel="stylesheet" href="style.css">
8
```

##### 5.1.2 Page Title:

```
6      <title>Document</title>
```

##### 5.1.3 Heading for the Project:

```
<h1><u>RANDOM QUOTE GENERATOR</u></h1>
```

##### 5.1.4 Navbar Section:

```
13      <div id="navbar">
14          This is a project from TEAM G8
15          <a href="#" class="nav" target="_blank">About Us</a>
16          <button class="bookmark">Bookmark this Quote</button>
17      </div>
18
```



### 5.1.5 Content:

```

18     </div>
19     <div id="background-color">
20         <div id="main">
21             <div id="header"><header>Quote of the Day!!</header>
22             </div>                <br>
23         <br>
24         <br>
25         <div id="quote">"The quote of the day is to sleep"</div>
26         <br>
27         <br>
28         <br>
29         <br>
30         <br>
31         <br>
32         <hr>
33         <div id="buttons">
34             <button id="main-button">Generate New Quote</button>
35         </div>
36     </div>
37
38 </div>
39
40
41
42 </body>
43 </html>

```

## 5.2 CSS:

### 5.2.1 Main div Styling:

```

# style.css > body
1  #main{
2      background-image: radial-gradient(■rgb(124, 218, 233), ■white);
3      height: 300px;
4      width: 700px;
5      margin-top:10px;
6      transform: translate(50%,50%);
7      border-radius:20px;
8      border: solid □black 2px;

```

## 5.2.2 Heading section styling:

```

11  #header{
12      text-align: center;
13      font-size: 30px;
14      font-weight: bold;
15  }

```

## 5.2.3 Quote:

```

16  #quote{
17      text-align: center;
18      font-size: 25px;
19  }

```

## 5.2.4 Styling for 'h1' element:

```

21  h1{
22      font-family: 'Times New Roman', Times, serif;
23      margin-left: 450px;
24      font-style: bold;

```

## 5.2.5 Styling background for the body:

```

27  body{
28      background-image: linear-gradient(to bottom right, pink, white);
29      height: 100%;
30      background-repeat: no-repeat;
31      background-attachment: fixed;
32  }

```

## 5.2.6 Styling for main-button:

```

# style.css > .bookmark
33  #top{
34      background-color: antiquewhite;
35  }
36  #main-button{
37      margin-left: 520px;
38      color: white;
39      color: blue;
40      border-radius: 10px;
41      height: 21.2px;
42      width: 150px;
43  }
44  }

```

### 5.2.7 Hover effect for main-button and styling for navbar:

```

45  #main-button:hover{
46  transition: 0.15s;
47  height:30px;
48  width:170px;
49  border-radius:10px
50  }
51  hr{
52  border-top: 1px dashed black;
53  }
54
55  #navbar{
56  height:100px;
57  background-color:black;
58  margin-left:-8px;
59  text-align:center;
60  margin-right:-8px;
61
62  justify-content: space-evenly;
63  align-items: center;
64  color:white;
65  display: flex;
66  flex-direction: column;

```

### 5.2.8 Book mark button styling:

```

90
91  .bookmark:hover{
92  transition: 0.15s;
93  height:30px;
94  width:170px;
95  border-radius:10px
96
97  }
98

```

## 6. Bonus Feature

### 6.1 User Engagement:

With 'Bookmark Your Favorite Quote', users can actively engage with the project by selecting and saving quotes that resonate with them on a personal level.

### 6.2 Personalization:

This feature allows users to create a collection of quotes that hold special meaning to them, personalizing their experience with the project.

### 6.3 Enhanced Satisfaction:

By providing the option to bookmark quotes, user satisfaction is greatly enhanced, leading to extended interaction with the project.

### 6.4 Optional Feature:

It's important to note that this feature is entirely optional, preserving the core functionality of the Random Quote Generator.

## 7. Conclusion

### 7.1 Conclusion: Exploring the World of Quotes

As students embarking on this web development journey, we set out to create a Random Quote Generator that would not only sharpen our skills but also offer an enjoyable and educational experience for users.

### 7.2 Bonus Feature – Bookmarking :

We decided to go the extra mile by introducing the 'Bookmark Your Favorite Quote' feature. This feature empowers users to connect on a personal level with the quotes they find meaningful.

### 7.3 Learning and Sharing:

Beyond the project's technical aspects, we've placed great emphasis on education

## 8. References

### 8.1 W3Schools - HTML Tags

Reference: "W3Schools - HTML Tags,"

W3Schools.com URL: <https://www.w3schools.com/html/default.asp>

### 8.2 CSS Tricks –

Styling with CSS Reference:

"CSS Tricks - Styling with CSS," CSSTricks.com URL: <https://css-tricks.com/>