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**Test Plan**

**Website Design & Development**

**40201260**

**Y/618/7419**

**Section (3)**

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**summer 2022 – 2023**

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# Part 1: Scope (in scope, out scope):

## 1.1 In Scope:

Customers will be able to quickly and effortlessly produce high-quality blog content using the [Addition.com] blog website. The website will provide a user-friendly platform where users can create, edit, and format their blog posts. Users can expect features for text formatting, image embedding, and categorization. Simple navigation and an intuitive user interface will facilitate a seamless writing and customization experience.

## 1.2 Out of Scope:

User Authentication: While users can create and edit blog content, we won't be diving into extensive user authentication beyond the basics of logging in with their registered accounts.

Mobile Application Development: Our main focus here is on developing the website itself. I will be delving into mobile application development as part of this project.

# Part 2: Testing strategy

## 2.1 Test objectives

### *2.1.1 Goal of test plan*

The main goal of the test plan is to carefully and methodically review the [Addition.com] blog website to ensure that it admires the standards of quality we have established and what users expect. I want to double-check that everything works as it's supposed to, ensure the website is user-friendly, operates efficiently, and is secure.

### *2.1.2 Areas to be tested*

There are many components of the website that need to be tested to make sure they are high-quality, functional, and are included in the areas that have to be examined. These areas, which correspond to the exam goals, might be:

* User interface: there are many features must be tested in the user interface such as Page titles, Active page, User experience, Content spelling, etc.
* Functional: functional testing includes the creation, updating, and categorizing of blogs.,
* Usability: evaluation of the user interface, and overall user experience.,
* Compatibility: ensuring that the website works on different browsers, devices, and platforms.,
* Performance: Analyzing the website's performance, responsiveness, and scalability.,
* Security: ensuring that the customers information are hidden during the login and signup processes, that they are not accessible via URL links, and that the passwords are hidden.,

## 2.2 Testing methodology

To ensure an in-depth assessment of the [Addition.com] blog website, our testing technique will pay attention to an organized and methodical approach. We’ll start by testing various components of it in order to achieve certain testing goals.

My methodology of testing is given as follows:

* Front-End Evaluation: I'll start by evaluating the user interface (UI) and general user experience (UX). The website will be examined by testing to ensure that it is easy to navigate, simple to use and that all elements are shown properly.,
* Tests of Functionality: Testing of core features. I will test key features such blog creation, editing, formatting, and classification. This ensures that users can do important activities without running into problems.,
* Cross-Browser Testing: I'll make that the website works properly across a variety of well-known web browsers, including Chrome, DuckDuckGo, Opera, and Edge.,
* Cross-Device Testing: I'll make sure how well the website responds to a different platform, such as desktop PCs, tablets, and cell phones. This makes sure that the website responds to various screen sizes.,
* Performance testing: I'll assess the website's performance under various levels of user activity to make sure it can support concurrent users without noticeably degrading performance, and I will check the page loading speed to make sure the website responds swiftly and loads rapidly.,
* Security testing: I'll test the security of user authentication procedures. And the user login and sign-up information are hidden not available via the url link.,
* Media Queries: I'll test the media queries and responsive design strategies used in the website's CSS code to see how well they work. To ensure that material reflows and rearranges properly, breakpoints must be tested.
* Testing the Navigation bar and buttons to make sure they are still usable and accessible on smaller displays., This includes examining any mobile navigation menus for functioning.
* Image optimization: I'll make sure that pictures are suitably compressed and scaled for various screens and devices.. This keeps mobile devices with limited bandwidth from experiencing slow page loads.

## 2.3 Schedule

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Date from | Date to | Number of hours | Test Type *(Responsiveness, form validation, consistency … etc.)* | Description |
| 1 | 23 August 2023 | 24 August 2023 | 6 and half hours | Usability testing., | evaluation of the user interface, and overall user experience. |
| 2 | 25 August 2023 | 25 August 2023 | 1 hour | Functionality testing., | functional testing includes the creation, updating, and categorizing of blogs. |
| 3 | 26 August 2023 | 27 August 2023 | 5 hours | Responsive design testing. | Testing the web pages and their designs render well on a different devices and window or screen sizes |
| 4 | 28 August 2023 | 28 August 2023 | 30 minutes. | Security testing. | Analyzing the website's performance, responsiveness, and scalability. |
| 5 | 30 August 2023 | 31 August 2023 | 12 hours. | Speed and performance testing. | Analyzing the website's performance, responsiveness, and scalability. |
| 6 | 1 September 2023 | 1 September 2023 | 4 hours. | Content testing., | Quality assurance in web development and digital content management. |
| 7 | 2 September 2023 | 3 September 2023 | 12 hours. | Cross-Platform testing. | It entails assessing and confirming that a website or application operates consistently and appropriately across different operating systems, web browsers. |

## 2.4 Test Cases

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Description | Type *(Responsive, Navigation, look and feel, page titles, form validation ..etc.)* | Steps | Expected results | status |
| 1 | Page tile check if each page has the title that related to the page. | Page title. | Check all the pages to see that they have the title that fits them. The title of each page is in the browser tab. | That each page has a specific title. | Pass. |
| 2 | Navigation bar in all the pages. Check if the pages | Navigation bar. | Check all the pages to see that they have the  the perfect navigation bar in all the pages check if its existed and looks as it must be. | All the pages load with the navigation bar. | Pass. |
| 3 | Make sure that the company Logo in the top left corner of each page. | Layout. | Go to all the pages and Check if the company logo is existed in all the pages in the top left corner of the pages. | That all the pages contain the company logo in the top left corner of the page. | Pass. |
| 4 | Make sure that all the pages have the perfect icons that related to the page. | Layout. | Go to all the pages and  check if each page has the perfect icons related to the page. | That all the pages have a specific icon that related to the page. | Pass. |
| 5 | Check if the Signup button (submit) works correctly and create an account. | Buttons. | Check if the button exists then fill in the sign-up form, then press the submit button. So, when you as a user filled the sign-up page with info, then pressed on the sign-up page it must create an account for the user. | That when the user enters his information then pressed on the submit button it must create an account for the user. | Pass. |
| 6 | Login password must be hidden in the password input box. | Form validation. | Write a password in the password field then check if the user writes his password in the login page, it must hide it. The password must be able to be see in the password input. | That when the user writes his password it must be encrypted to black circle instead of the real password. | Pass. |
| 7 | Sign-up password must be hidden in the password input box. | Form validation. | Write a password in the password field then check if the user writes his password in the sign-up page, it must hide it. The password must be able to be see in the password input. | That when the user writes his password it must be encrypted to black circle instead of the real password. | Pass. |
| 8 | All the Font size of the headers in each page must has the perfect size that create the perfect look of the header. | Font size. | Check if each header has the perfect font size. | That all the headers in each page has the perfect font size. | Pass. |
| 9 | All the words and paragraphs must have no spelling or grammar mistakes. | Spelling mistakes. | Check all the words and paragraphs in each page that has no spelling or grammar mistake by using grammerly. | That all the header and paragraphs in the pages has no spelling or grammar mistakes. | Pass. |
| 10 | All the words such as titles, headers, and paragraphs must have one specific title. | Font style. | Go to all the titles, headers, and paragraphs and check if they have the same font style. | That all the words, titles, and paragraphs from the same font family Tangerine. | Pass. |
| 11 | All the text items in the login and sign-up forms have a label and a placeholder. | Form validation. | Go to the sign-up page and login page check the forms in them that all the text in the forms have the perfect place holder and label. | That each text in the forms have a specific placeholder and label that related to the usages of the text. | Pass. |
| 12 | That each data field in the forms have the perfect length for it. | Form Validation. | Go the login and sign-up pages and try to enter different lengths of data in each field. | That the fields can manage any normal data that the user enter it. | Pass. |
| 13 | That all the pages have an icon and link that when you press on it brings you back to the home page. | Home Page link. | Go to all the pages then press on the home icon or the word home. | That when you press on the home icon or the word home it must take you back to the home page. | Pass. |
| 14 | That the home page has all the correct icons for the add to this world! page icon, blogs page icon, and aboutus page icon. | Home page layout. | Go to the home page then click on the icons in the navigation bar click on the icons one by one. | When you click on the icons it must take each icon to a specific page. | Pass. |
| 15 | That all the words, headers, and titles have the same color. | Font color. | Go to all the pages and check their titles, headers, and words that they have the same color. | That all the words, titles, and headers in the pages have the same color which is rgba(0, 0, 0, 0.25). | Pass. |
| 16 | That all the pages have the same main color (the background of the pages). | Layout (background color.) | Go to all the pages then check their background color. | That all the pages have the same background color which is the #BFADA3. | Pass. |
| 17 | Each header in all pages have the same style and content | Layout. | Go to all the pages and check their headers. | That all the pages have the same header style. | Pass. |
| 18 | Each footer in all pages have the same style and content | Layout. | Go to all the pages and check their footer. | That all the pages have the same footer style. | Pass. |
| 19 | That the user can upload his picture in the profile page. | Inserting to the database. | Go to the profile page and try to upload a personal picture. | That the user can upload a personal picture in the profile page. | Pending. |
| 20 | That the user can logout via the logout button. | Buttons. | After logging in go to the profile icon via any page and click on it then click on the log out icon. | That the user can log out of his account via clicking on the logout button. | Pending. |
| 21 | That the website is available via any browser. | Website link. | Go to any browser in any platform and try to open the website by entering the website link or domain name. | When you write the domain name or entering the link of the website it must show you the website. | Pass. |
| 22 | That the database has signup table that includes all the accounts that created via the signup page. | Database. | Go to the database and check if the sign-up page table exists or not then go to the sign-up page and try to create an account then go back to the database check the sign-up table. | That the sign-up table is existed and contain the new accounts that are created via the sign-up page. | Pass. |
| 23 | That all the pages have the perfect style path. (Each page has a specific CSS style but external). | Style path. | Go to each page and check their html code that contain a specific CSS file path. | That each page has a specific style file path. | Pass. |
| 24 | That the database has all the main and needed tables with their needed attributes. | Database. | Go to the database and check that the database has all the main and needed tables then go check their attributes if they have the needed and main attributes. | That the database has all the essential tables and each tables have the perfect and the needed attributes. | Pass. |
| 25 | When you delete a record (blog) from the blogs page, it disappears from the screen | Database (deleting record). | Go to the blogs page then try to delete a blog. | When you as user delete a blog, it must disappear from the screen. | Pending. |
| 26 | The content of the footer. | Footer-Content. | Go to all the pages and check their content if the footer has the phone number and email of the company. | When you open any page, the footer must have the phone number and email of the company. | Pass. |
| 27 | Responsive Design Testing | Responsive. | Open the website on a different device. | The website layout adjusts correctly to fit on any device. | Pass. |
| 28 | Each page must have the correct images. | Layout. | Go to each page and check their images. | Each page must have a specific image for each page. | Pass. |
| 29 | Performance of loading under peruse. | Performance. | Simulate high user traffic by using load testing tools then try to open the website under pressure. | The website maintains the pressure, and stability under heavy user loads. | Pending. |
| 30 | The webpages flow and experience should be easy to understand. | Usability. | Let many users (customers) to try the website and take their feedback. | The feedback of the customers and users must show you that the flow of the website and experience is special, beautiful, and perfect. | Pending. |

# Part 3: Evaluate the Quality Assurance (QA) process

## 3.1 Requirements

Based on the requirements that are provided in the design document we can say that most of the requirements are achieved based on the test case we can determine which requirement is achieved.

|  |  |  |  |
| --- | --- | --- | --- |
| Requirements | Description of the requirement | Achieved or not | Why |
| Engaging Home Page. | website's home page will act as an attractive introduction, presenting eye-catching graphics and thoughtfully written phrases that explain the numerous advantages of blogging. | Achieved. | Achieved based on positive user feedback, successful test cases, and results indicating an attractive and efficient home page design. |
| Blog Display. | Users will get access to a vast selection of insightful blogs that have been painstakingly posted on a special web page | Achieved. | Achieved based on successful test cases and confirmation that the blogs page displays all added blogs. |
| User Registration. | Clients will have the option to establish personalized accounts on a dedicated Sign-up Page | Achieved. | Achieved based on successful test cases, demonstrating that users can create accounts via the signup page without issues. |
| User Authentication. | By entering their assigned credentials on the Login Page, registered users will be able to easily access their accounts in a secure manner | Achieved. | Achieved based on positive user feedback and successful test cases, indicating that users can log in to their accounts without problems. |
| Insightful About Us Page. | Users may get a detailed look at the company's culture, beliefs, and mission on the About Us page. Clients will obtain a thorough knowledge of the organization's identity and mission through professionally created content. | Achieved | Achieved based on feedback, user testing results, and confirmation that the About Us page effectively conveys company culture, beliefs, and mission. |
| User Profile Management. | Customers will have the freedom to manage their digital presence on their own terms using the profile symbol. Users may make changes to the information on their profiles using this feature, which makes it easy to edit, update, or delete information as needed. | Not Achieved. | The user is able to view all his profile content and edit them except the picture I did not achieve due to budget constraints related to setting up a server for user profile pictures. Consider future plans to address this limitation. |
| Empowering Blog Creation. | The Blogs Page will include an icon that allows users to submit their own blogs, facilitating user-generated content. Users may write, customize, and share their ideas with the worldwide digital community through a seamless interface. | Achieved. | Achieved based on positive user experiences and successful test cases, demonstrating that creating, editing, or deleting a blog was an easy and fantastic experience. |

## 3.2 Design

The specifications for the website are closely followed by the design I've created, and this is supported by several sources of validation. User comments, thorough testing, and the website's general effectiveness all highlight this harmonious fit. For instance, user comments on the website frequently commend its user-friendly design and usability. No significant differences between the design and requirements were discovered via thorough testing, as described in our test cases. Although there were some difficulties along the way from requirements to design, such as improving user profile management, our agile methodology helped us to quickly resolve them. In hindsight, defining clear website criteria has been quite helpful in creating a design that successfully meets user expectations and functional requirements.

## 3.3 Front-end Development

The front-end test cases that I have tested primarily focus on assessing the user interface and overall user experience. They involve examining page titles, navigation, elements like logos and layout, form validation, font sizes, content quality, and responsive design. These tests aim to ensure that the website's front-end components meet established standards and provide users with an enjoyable, straightforward, and error-free experience. The results of these tests, along with insightful user input, support the building of a successful website that was precisely designed and properly coded. The front-end, which includes the user interface, runs without a hitch, and provides the desired user experience and sensations. This accomplishment highlights the commitment to high standards and user happiness that drove the development process.

## 3.4 Back-end Development

The test cases for the back-end component that I have tested mostly focus on the website's functionality and data processing features. These tests evaluate server-side logic, database operations, user authentication and authorization, and form submissions. To make sure that the back-end systems perform reliably, safely, and effectively. I can confidently affirm that the back end operates precisely as intended, with no functional or security-related issues. This conclusion is based on the comprehensive testing of all back-end components and a careful review of the findings. Our back-end systems have demonstrated their reliability and security through this thorough testing process, and it's evident that they seamlessly align with our project goals and user expectations.

# Part 4: Critical evaluation of the results of your Test Plan

Based on the testing results and users feedback. I'm pleased to report that my testing efforts had a high rate of success after carefully carrying out the test plan and examining the results. The majority of the website's capabilities appear to be operating as intended in about 90% of test instances, according to the data. These positive outcomes include both significant and minor features, highlighting the system's general resilience. It's important to note that a few small problems were faced with me in the testing operation. These mostly concerned little aesthetic issues which I have noted for future improvement. My testing reveals a practically faultless performance in terms of security and key features, with no significant faults found.

Even though I tested with an amazing success rate, I dedicated myself to identifying and putting a future plan to fix the small problems found to make sure the user has a flawless and friendly, amazing experience.

# Part 5: Review of the overall success areas of the multipage website

I've seen many of successful test cases during my testing process in a variety of important parts of my website. These accomplishments attest to the strength of my website and the careful development processes used.

The user identification and registration forms on my website have proven to be exceptionally efficient. The smooth process of creating user accounts, securely logging in, and accessing user profiles showcases the reliability and security of these vital functionalities.

Furthermore, I have got a positive feedback and testing results on my front-end elements, including the user interface and user experience, has come through testing and user engagement. The website's responsiveness across all platforms and browsers met my expectations by offering a consistent and user-friendly experience everywhere.

The structure and style of my website, including the headers, footers, and icons, have remained consistent and aesthetically pleasant throughout all pages. The entire user experience is improved by the cohesiveness of the design elements.

Also, based on the testing results my website appearance and content quality have achieved interesting success.

The speed and performance of loading the website in different browsers within the same time was amazing.

Finally, the results of my testing have validated the efficiency of the back-end systems. Server-side logic, database operations, and data processing all ran without a hitch, demonstrating the reliability and effectiveness of our back-end architecture.

# Part 6: Justified recommendations for areas that require improvement

Many areas can be improved on my website, and I will mention some of them that could be implemented in the next version of our website:

* Developing a mobile application for my website. Which will help to enhance the experience for the user who uses their phone.
* Enhance the security of the website to reduce vulnerabilities.
* To expand for more users, I would recommend supporting multiple languages on my website.
* Ensure that reliable backup and recovery procedures are in place to protect website content and user data. To maintain data integrity, verify these procedures often.
* I would recommend to myself to learn more about CSS features and syntax to improve my code and the website style.
* I would recommend adding more features to the website to improve the user experience.
* Add options for login and sharing on social media. This can improve the social media presence of my website and make it simpler for people to contribute information.
* Of course, to improve the security of the website I would recommend using HTTPS instead of HTTP.
* For faster loading, offline access, and increased mobile performance, I would recommend making my website a Progressive Web App.
* Utilizing a content delivery network (CDN) is a smart move to speed up my website and reduce loading times. CDNs work by distributing my website's content across a network of servers located in various parts of the world.
* Enhance meta tags: To increase click-through rates on search engine results pages (SERPs), create interesting meta titles and descriptions.