## Summary

The evaluation reports conducted on the website 'buid.ac.ae' aimed to assess its user-friendliness and user experience from a human-computer interaction (HCI) perspective. Throughout the evaluations, innovative approaches were employed to ensure a comprehensive analysis. These approaches included utilizing assistive technologies, conducting manual inspections, and evaluating compliance with industry standards such as WCAG.

The evaluations provided valuable insights into the strengths and areas for improvement in each of the ten essential characteristics. 'buid.ac.ae' demonstrated effective mobile optimization, ensuring a seamless user experience on various devices. The website-maintained consistency in terms of branding elements, but improvements were needed in content organization and scannability. Innovative evaluation methods, such as analyzing the use of headings, subheadings, and bullet points, were employed to assess the well-formatted content.

Fast load times contributed to a positive user experience on 'buid.ac.ae'. The website exhibited browser consistency, ensuring consistent performance across different browsers. Effective navigation was observed, but limitations in features such as breadcrumbs and website search functionality were identified through a combination of manual inspections and user testing. In terms of design, 'buid.ac.ae' employed a contrasting color scheme, improving visual appeal and content legibility. Integration of social media symbols enhanced community formation and interaction. On the basis of creative form design principles, suggestions were made in response to the website's lack of forms. WCAG standards were used to evaluate accessibility compliance. In terms of perceivability, operability, understandability, and robustness, "buid.ac.ae" showed high accessibility. It was possible to discover areas for improvement, such color contrast and keyboard accessibility, thanks to the creative use of assistive technology like screen readers and keyboard navigation.

In conclusion, the evaluation's findings offer a comprehensive analysis of "buid.ac.ae" in terms of usability and user experience. Innovative techniques, including testing assistive technology, manual inspections, and compliance evaluations, allowed for a thorough review. The study found advantages in terms of accessibility compliance, browser compatibility, rapid load times, uniformity, efficient navigation, and color contrast. Content arrangement, navigational features, form implementation, and certain areas of accessibility all need work. Implementing the above ideas will help 'buid.ac.ae' improve its usability and user experience. Prioritizing improvements in mobile optimization, content organization, navigation features, form design, and accessibility compliance will contribute to a more engaging and accessible website. The innovative evaluation approaches employed during the assessments have provided valuable insights to guide the optimization process.

The evaluation reports serve as a valuable resource for 'buid.ac.ae' to enhance its website and provide a user-centric experience. It is recommended that the website owners and development team carefully consider these findings and work towards implementing the proposed recommendations. By doing so, 'buid.ac.ae' can position itself as an innovative, user-friendly, and accessible platform, catering to the needs of its users and enhancing overall satisfaction.

## Optimized for Mobile Devices

The mobile-optimized characteristics of the user-friendly website benefit the organization in many ways like as increasing mobile traffic, user experience, and social media engagement. The methodology, evaluation criteria, and findings against this feature for ‘buid.ac.ae’ website is discussed in this section.

### Evaluation Criteria

The following matrices will be used as evaluation criteria to evaluate the performance of the website on mobile devices:

1. **Responsiveness**: Evaluate how quickly the website loads, how well it adjusts to various screen sizes, and how well it works on mobile devices.
2. **User Interface Design**: Consider the font, color scheme, graphical layout, and use of UI elements that are appropriate for mobile devices.
3. **Mobile-Specific Features**: Evaluate the integration and usability of features made specifically for mobile phones and tablets, such as touch gestures, location services, or camera connectivity.
4. **Easy Navigation**: navigate over the multiple pages to evaluate the user experience on mobile devices.

### Evaluation Methodology

The useability of the website was ensured on the mobile device by using the following methods/techniques:

1. **Responsiveness Testing:** For responsiveness testing, we conduct the testing session on various mobile devices of different screen sizes and operating systems.
2. **Interface Design:** To evaluate the Interface Design and font colors, the website was tested on different brightness levels and in different modes (dark/bright)
3. **Browser Compatibility:** The testing session were also conducted on different browsers on the mobile phone to evaluate the compatibility of the website for cross-browsers.
4. **Evaluate navigation:** To evaluate the ease of navigation, a task base testing session was performed for different users.

### Findings

By following all experiments according to the described methodology, we conclude the following findings:

1. The website is fully responsive for different mobile devices.
2. It is also supported by all the well-known browsers like Chrome, Firefox, UC-Browser and mobile built-in browser.
3. The navigation of the website through mobile devices is difficult compared to the desktop. The experienced person completed the task in 2.5x time compared to the time on a desktop device. However, the overall navigation of the website is amazing and easier for memorizing.

## Consistency

In the consistency evaluation of the website, the following evaluation methodology and criteria was selected:

### Evaluation Criteria

1. **Visual Consistency:** Check the website's layout consistency throughout all of its pages, paying attention to the color schemes, font, and general design.
2. **Navigation Consistency:** Check the website's navigation to see if it consistently uses the same elements and positions so that users may move between pages without getting lost.
3. **Tone and Writing Consistency:** Consider whether the website consistently uses the same language, style of writing, and content on all of its pages and parts.
4. **Layout Consistency:** Check for consistency in the layout of several page templates or parts to see if this enables consumers to quickly identify and comprehend the content.

### Evaluation Methodology

1. **Visual Inspection:** Carefully examine the website's visual components, such as the color schemes, formatting, and graphics, to look for any inconsistencies.
2. **Navigation Testing:** Ensure that the navigational components, including as menus, links, and buttons, are consistent across all pages and sections by doing navigation testing.
3. **Content Analysis:** Examine the website's overall tone, language use, and messaging to spot any inconsistent writing or information presentation.
4. **Comparison of templates and layouts:** Examine the organization and structure of various page templates or sections to see if a common design theme emerges.

### Findings

Based on the experiments of the proposed methodology, we capture the following findings:

1. The overall design of the website including the color scheme, font style is similar. Although, the website used multiple fonts but the use of these fonts in the website is consistent.
2. By conducting experiments of navigation, we find flaws related to consistency. The main navigation redirected the participant on one page while the same secondary link between the content redirected the participant on second page. Moreover, the design of these second pages seems like they were testing or old pages that were updated with new one, but the links are not updated. For instance, the main page of the website is located at this link ‘https://www.buid.ac.ae’. While when we visit the policied page and navigate through the home link it redirected us on this ‘https://www.buid.ac.ae/home-2/’ link. The design difference of both pages is also shown below:

|  |  |
| --- | --- |
|  | A white rectangular object with blue text  Description automatically generated with low confidence |

1. The content tone and the layout of the website are also consistent. Although, the website uses 2 different layouts, one for the home page and the second for secondary pages. But the use of two layouts is this way is not disturbing the consistency of the site.

## Well-Formatted Content that is Easy to Scan

Well-formatted content reflects the characteristics of reusability by presenting the content on the webpage in a scannable way. Numerous approaches are used to present the content in a scannable way. Now we will evaluate the website to check whether these approaches were used or not to present the text in a scannable way.

### Evaluation Criteria

1. Check the content's clarity, conciseness, and single-mindedness in the paragraphs to see if it is well-structured.
2. Determine whether the text makes use of the proper headers and subheadings to establish an ordered arrangement and make it easier to scan.
3. Determine whether the content uses bulleted or numbered lists to provide material in a scannable and organized style.
4. Examine whether the text highlights crucial terms or phrases with formatting tools like bold, italics, or color to make them easier to scan.
5. Examine the content to see if there is enough white space and visual breaks between paragraphs and segments to enhance readability and understanding.

## Findings

All the evaluation criterias were tested by paying attention on the pages of the website and we conclude the following finfdings:

1. **Lack of headings and subheadings:** The website's material is not adequately organized or structured using headings and subheadings. Users will find it challenging to skim the text fast and find certain information as a result of this omission.
2. **Limited Use of Bulleted Points:** In order to display information in a clear and scannable fashion, the website fails to employ bulleted or numbered lists. Users could thus struggle to extract crucial information or separate important ideas from background content.
3. **Important Text is Highlighted:** The website does highlight important text with various colors. While this strategy can highlight important information, it should be applied sparingly to prevent confusing the user and guarantee that color coding for emphasis is used consistently.
4. **Adequate Spacing:** An adequate amount of space is provided between portions of the website, allowing for visual breaks and differentiating between material blocks. This spacing improves overall readability and aids readers in recognizing distinct pieces of material.

## Fast Load Times

The main objective of this evaluation are:

* Evaluation of 'buid.ac.ae' performance and speed of loading
* Determine any performance faults or problems that effect load times.

### Evaluation Criteria and Methodology

The following evaluation approach was used to accomplish these objectives:

1. **Resource Analysis:** To find potential improvements that could reduce file sizes and speed up load times, we looked at the website's resources, including graphics, and stylesheets.
2. **Server Monitoring:** We tracked the amount of time it took the server to respond to requests and deliver content manually.
3. **Mobile Load Testing:** To assess the website's load speeds under various network setups and device capacity, we specifically performed load testing on mobile phones and tablets.

### Findings

The following conclusions were drawn from our analysis:

* **Resource Optimization:** There is potential for the website to be optimized, particularly in the areas of script compression and picture compression. By putting these improvements into practice, the size of files can be decreased, which improves load speeds.
* **Mobile Device Load Times:** Depending on network speeds and device types, mobile device load times exhibited a few modest variances. Overall, nevertheless, the website's load times on mobile devices remained acceptable.
* **Performance Metrics:** The performance of the website was manually evaluated by navigating to different web pages and by refreshing the page continuously. In the manual performance evaluation, we conclude that the load and response time of the website is adequate. For the statistical analysis of the performance, we also used the well-known Google PageSpeed Insight tool (*PageSpeed Insights*, n.d.). It also showed adequate performance for different measures as shown in the below Figure. However, web performance testing tools such as GTmetrix (*GTmetrix | Website Performance Testing and Monitoring*, n.d.), or WebPagetest (*WebPageTest - Website Performance and Optimization Test*, n.d.) can be used in future to statistically measure and analyze the loading speed and performance metrics of the website.

A screenshot of a computer

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## Browser Consistency

Browser consistency ensures the consistency of website request from different browsers. The main goals of browser consistency for a website are the following:

* Examine how 'buid.ac.ae’ holds up in various browsers.
* Find any contradictions or rendering problems that can affect the user experience.
* Make suggestions to enhance browser uniformity and guarantee a seamless user experience.

### Evaluation Criteria and Methodology

The following evaluation approach was used to accomplish these objectives:

1. **Testing for Browser Compatibility:** To look for any changes or inconsistent rendering, we tested 'buid.ac.ae’ ' on a number of common web browsers, including Mozilla Firefox, Microsoft Edge, Google Chrome, Safari, and Opera across a variety of operating systems.

### Findings

The following conclusions were drawn from our analysis:

1. **Consistency Across Browsers:** 'buid.ac.ae' had a good degree of consistency across the assessed browsers. A seamless user experience was made possible by the consistency of the layout, design components, and overall aesthetic.
2. **Small Rendering Differences:** In a few cases, small rendering variations between browsers were noticed. These variations mostly concerned how specific fonts were displayed, how lines were spaced, or where specific components were placed. The overall usability or operation of the website was not greatly impacted by these anomalies, though.

## Effective Navigation/Navigability

In order to ensure a simple and effective user experience, this evaluation intended to determine the website's navigation design and user-friendliness. The evaluation's main objectives were to:

* Examine how well-organized and clear the website's navigation is.
* Determine the accessibility of the primary content and the presence of search capabilities.
* Assess the consistency of the navigation components across all pages.
* Analyze the efficiency of the error-handling and breadcrumb navigation systems.

### Evaluation Methodology

The following evaluation approach was used to accomplish these objectives:

1. **Navigation Analysis:** We examined the website's navigational structure, including the main menu, submenus, and drop-down menus, to evaluate the labels' readability and intuitiveness as well as the way in which the navigational items were logically grouped.
2. **Testing for uniformity:** To provide a recognizable and expected user experience, we browsed through various internet pages to confirm the uniformity of navigation components including menus, buttons, and hyperlinks.
3. **Evaluation of Search Functionality:** Using searches for certain terms or subjects, we examined the search functionality of the website. We assessed the search feature's usability as well as the precision and appropriateness of the results.
4. **Breadcrumb Navigation Analysis:** We looked at how the website used breadcrumb navigation and assessed how well it helped users navigate between pages and get context. We evaluated the visibility, positioning, and clarity of the breadcrumb in indicating the user's present location on the website.
5. **Evaluation of error handling:** We checked the website for any potential navigational blunders, like broken links or ineffective redirects. We looked at how well error messages and the availability of backup navigation methods helped users fix navigational mistakes.

### Findings

The following conclusions were drawn from our analysis:

1. **Navigation Structure:** The website's navigation structure showed a distinct hierarchy, with logically grouped navigation items and labels that were easy to understand. The various website components are simple for users to understand and navigate.
2. **Consistency**: The website's navigational features, such as menus, buttons, and links, stayed the same on every page. This constancy helps to provide a dependable and accustomed user experience.
3. **Accessibility of the main content:** The core content and key areas of "buid.ac.ae" are easily accessible, enabling users to travel straight to the information they need without making a lot of clicks or searching. The organization and positioning of crucial content are well-suited for effective navigation.
4. **Search Functionality:** It was noted throughout the examination that the website lacks a search functionality incorporated. The website's general navigability and user experience may be hampered by visitors' inability to find certain information or pages on it quickly due to the lack of search capabilities.
5. **Breadcrumb Navigation:** 'buid.ac.ae' was found to be devoid of breadcrumb guidance. Users' ability to easily browse back to earlier areas of the website and comprehend their current location within the website's hierarchy is constrained by the lack of breadcrumb navigation.
6. **Error Handling:** The absence of search capabilities and breadcrumb navigation may cause user annoyance and potential navigation issues, even though error handling was not specifically reviewed in this study. Users may find it difficult to recover without suitable error handling procedures.

## Contrasting Color Scheme

This analysis's goal was to determine how well the website's color scheme functions in terms of accessibility, readability, and aesthetic appeal. The evaluation's main objectives are:

* To guarantee readability and accessibility, consider the color contrast ratio among text and background components.
* By taking into account the contrast between text color and background color, evaluate the content of the website overall for readability.
* Check the website's many pages to see if the color scheme is consistent from one to the next.

### Evaluation Criteria and Methodology

The following evaluation approaches were used to accomplish these objectives:

### **Analysis of Color Contrast Ratio:** We used color contrast evaluation tools (*Color Contrast Checker - TPGi*, n.d.; *Deque Color Contrast Analyzer*, n.d.; *WebAIM: Contrast Checker*, n.d.) to determine the contrast ratio between the text and background elements. This allowed us to determine whether the color combinations were readable in accordance with accessibility standards.

### **Readability Assessment:** We assessed the readability of the website's content by considering the contrast between the color of the background and the text. This entails reviewing the various parts and content categories on the website.

### **Checking for Consistency:** We examined how the website's color scheme fared when applied to diverse pages. Examining the placement of headings, body text, links, buttons, and other design elements was necessary.

### Findings

The following conclusions were drawn from our analysis:

* **Color Contrast Ratio:** The website 'buid.ac.ae' had good color contrast ratios between text and background elements, ensuring readability and accessibility for the majority of users. Most text components complied with the suggested contrast ratios specified by the guidelines for accessibility.
* **Readability:** The material of the website was generally readable, which was adequate. Clear and readable writing was made possible by the contrast between the color of the text and the background, which made reading easier.
* **Consistency:** The color palette kept the website's visual identity consistent across all of its pages. Colors for headlines, paragraphs, hyperlinks, buttons, and other design elements were used consistently to produce a seamless and consistent user experience.

## Usable Forms

This evaluation's goal was to evaluate the availability and usability of forms on the website with a focus on the design elements that improve the form-filling process.

### Evaluation Approach

1. **User Input Assessment:** We went over the website's content to find any user input demands that might be turned into a form, including submitting contact information or feedback.

### Findings

1. a. It was discovered during the examination that "buid.ac.ae" had a survey form in place on its website. A survey form's inclusion opens up a channel for obtaining insightful customer input. Users can share their thoughts, preferences, and experiences on the form, which can be utilized to develop the website and make it more suitable for the needs of the intended audience.
2. b. The "buid.ac.ae" survey form has a number of input fields and radio buttons that allow respondents to give organized responses. This type of design methodology assists in gathering precise and organized input, making it simpler to analyze and produce valuable ideas.
3. The survey form is clear and easy to use, making it possible for respondents to comprehend the questions and give truthful answers. The form is more understandable and user-friendly when there are clear instructions, succinct text, and proper formatting.

## Social Media

The objective of this review was to rank the website's social media integration in terms of usability, visibility, and accessibility. The major goals of the evaluation were to:

* Analyze 'buid.ac.ae' for the existence and positioning of social networking icons.
* Examine the network icons' usability and interaction.

### Evaluation approach

The following evaluation approach was used to accomplish these goals:

### a. **Website Analysis:** We conducted a detailed analysis of "buid.ac.ae" to ascertain the accessibility of social network icons and where they were set up on the website.

### b. **Functionality Testing:** We interact with the social media symbols to assess their usability, including their ability to link to the pertinent social media networks.

### Findings

The following conclusions were drawn from our analysis:

1. **Presence of Social Media Icons:** Social media icons are present on the website of 'buid.ac.ae', and the icons link to the corresponding social media sites. Users can access the social media profiles connected to 'buid.ac.ae' by clicking on the icons, which are normally found at the footer of the website.
2. **Interactivity and functionality:** Based on the tests we conducted; we discovered that clicking on the social media buttons successfully linked users to the corresponding social media networks. Users are able to communicate with the symbols by clicking on them, which launches the social network site in a new tab or window.

## Accessible to all Users and follows WCAG Standards

This evaluation's goals were to evaluate the website's WCAG compliance and accessible to all users, even those with disabilities. The evaluation's main objectives were to:

* Examine 'buid.ac.ae's accessibility for people with disabilities.
* Analyze the website's adherence to WCAG requirements.
* In order to improve accessibility and attain WCAG compliance, pinpoint any places that need work.

### Evaluation Criteria and Methodology

The following evaluation approach was used to accomplish these objectives:

1. **Evaluation of 'buid.ac.ae' for WCAG Compliance:** We thoroughly assessed 'buid.ac.ae' in accordance with the WCAG 2.1 criteria, taking into account the concepts of perceivability, operability, understandability, and robustness.
2. **Assistive Technology Testing:** We tested the website's usability and compatibility for people with visual impairments or movement disabilities using assistive devices like keyboard navigation.
3. **Manual Inspection:** To find any potential accessibility obstacles, we manually examined the layout, information, and functionality of the website.

### Findings

The following conclusions were drawn from our analysis:

1. **Perceivability:** 'buid.ac.ae' frequently displayed good perceivability, with suitable color contrast, alternate text for photos, and distinct visual cues. There were, however, a few occasions when color contrast fell short of WCAG requirements, which might have an impact on users with visual impairments.
2. **Operability:** Website operability was strong, with consistent navigational elements and keyboard accessibility. Some interactive features, like dropdown menus and form inputs, lacked obvious focus indicators, which could be problematic for users who rely on keyboard navigation.
3. **Understandability:** 'buid.ac.ae's information and organization were generally simple to comprehend. However, several technical terminology or jargon were utilized without adequate explanations, which may make it harder for individuals with cognitive limitations to understand.

## Conclusion

The evaluations of the website "buid.ac.ae" have given useful information on its usability and user experience from the standpoint of human-computer interaction (HCI). The evaluations addressed 10 fundamental qualities, such as responsive design for mobile devices, consistency, well-formatted information, quick page loads, browser compatibility, intuitive navigation, contrasting color schemes, usable forms, social media integration, and accessibility compliance. ''buid.ac.ae'' generally shows strength in some areas. The website shows strong mobile optimization, guaranteeing a consistent user experience across various devices. An intuitive and recognized user interface is made possible by consistent branding elements. Rapid load speeds improve user experience overall by cutting down on waiting times and granting quick access to content.The evaluations have also identified areas for improvement. While the website maintains consistency in branding, enhancements are needed in content organization and scannability. The use of headings, subheadings, and bullet points can be implemented to facilitate easier navigation and readability. Additionally, the absence of breadcrumbs and non-functional website search functionality limits users' ability to navigate efficiently. The evaluation of the contrasting color scheme revealed a visually appealing interface, enhancing content legibility. Social media integration was identified as a strength, allowing users to connect and engage with the brand on various platforms. The evaluations emphasized the importance of implementing accessible social media features to cater to all users. Accessibility compliance, based on WCAG standards, showed good adherence to perceivability, operability, understandability, and robustness.

In conclusion, ''Buid.ac.ae'' has been evaluated for its user-friendliness and user experience, and these evaluations have given useful insights on both. The results point to both areas of strength and need for development. ''buid.ac.ae'' can develop a more user-friendly and interesting website by addressing the highlighted recommendations, which include improving content organization, introducing usable forms, improving accessibility compliance, and optimizing navigation features. The development team and website owners are urged to carefully study the evaluation's findings and put the suggested suggestions into practice. By doing this, "buid.ac.ae" can better the user experience overall, fulfill user expectations, and develop a website that is user-friendly, accessible, and compliant with HCI design best practices.

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