

EDGE HILL UNIVERSITY

CIS3303 – USABILITY TESTING & DATA
ANALYSIS

BSc WEB DESIGN & DEVELOPMENT

Coursework

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Abstract

This report will cover a Usability Testing Project conducted on campleaders.com. The tests include Site Analytics, User Log Analysis, Accessibility Testing, Performance Testing, Cognitive Walkthroughs and Heuristic Evaluation. The results of all tests have been used to formulate solutions for any problems found. One of the problems found was taken and put to the test with a coded HTML5 prototype. The solution was deemed successful after analysis via Cognitive Walkthrough and Heuristic Evaluation.

1 Introduction

This document will report the findings of a usability testing project conducted with the website campleaders.com. The developers of the site have identified 3 main issues and it is the aim of this project to investigate them. They are as follows:

- Conversion of users to a completed sign up is not high enough.
- Poor Accessibility
- Low conversion of users accessing with Mobile Devices.

A series of different Usability Testing and Data Analysis techniques will be employed to discover all problems with the site and compile a set list of them along with possible solutions. One of these problems will then be taken further and a prototype will be created that will solve it.

Prior to the actual analysis, the Methods will be discussed to establish exactly how it will be undertaken. This will then be followed by a series of results and recommendations and then documentation of the prototype created.

2 Methodology

The following sections will discuss the techniques that will be utilised in this project. An outline will be given for each method along with more specific explanation into how it will be used. These methods include: Site Analytics, Performance Analysis, Cognitive Walkthrough and Heuristic Evaluation.

2.1 Site Analytics

The first stage of analysis will involve 3 forms of site analytics. Google Analytics of campleaders.com, User Log Analysis from the campleaders.com server and Remote Accessibility and Performance Analysis. These will each be discussed in the following.

2.1.1 Google Analytics

Google Analytics is an online service provided by Google that can undertake various types of analysis via the web. For this project the relevant service is site tracking. Google Analytics has been used by campleaders.com to track their users to see where and how they navigate around the site. This analysis has resulted in a series of diagrams showing each page with annotations illustrating the tracking information.

There will be no direct interaction with Google Analytics for this analysis stage. Instead a selection of these diagrams that show the results of the main pages of campleaders.com have been provided. It is these that will be discussed with small conclusions being drawn. The conclusions may not directly unearth any issues but instead they will most likely raise more questions or provide direction for the other analysis methods.

2.1.2 User Log Review

campleaders.com has also provided a set of access logs from a 30 day period. These logs will be processed by scripts coded in the Python programming language. The aim of this will be to produce a set of tables and graphs that show the following 5 criteria:

- Most commonly used Devices

- Most commonly user Web Browsers
- Pages most Users Start On
- Pages most Users Leave the site from.
- Common Paths taken by Users.

Finding out more in each of these 5 areas will give more insight into how the campleaders.com is used. The findings of which will primarily be applied to the other analysis techniques. However, some of the data collected could be applied to the Google Analytics results to either concur with or contradict them. Also by the end this stage some issues may already be discovered for further investigation.

2.1.3 Accessibility

Unlike the previous two analysis methods this stage will involve direct interaction with the site campleaders.com. Using extensions of the Google Chrome web browser a series of tests will be carried out to find any issues regarding accessibility. The different extensions are listed as follows:

- aXe

aXe is an extension that is run via the developer tools of Google Chrome. It analyses a websites code and lists any errors within it that involve accessibility.

- Accessibility Developer Tools

This extension also runs within the Developer Tools of Chrome. It provides more functions than aXe but the extras are not applicable to this analysis stage (they will be used later on). Comparatively it runs through the same process of analysing a websites code to find any accessibility issues. One key difference is the way in which it presents the results. Where aXe simply lists each error, this tool assigns a grade of importance to each one. From here it then lists them from Severe Errors to less important Warnings. Additionally it also shows the features that have passed the test which may not have a great impact on this analysis but is still a good a feature.

- WAVE Evaluation Tool

WAVE is a tool that unlike the others does not run alongside Chrome's Developer Tools. It runs separately as a page is being viewed and takes up a small portion on one side to list any errors or warnings it may find. The main advantage of this extension is the way in which it applies these findings to the actual page. It provides a graphical overlay to the page and adds annotation for each item within its results. This allows an analyst to see exactly which element it is referring to without having to look at any code.

It was decided to use multiple Accessibility Evaluation Tools to triangulate their results. This will improve the chance of flagging up all existing issues. All of the above tools achieve the same goal but do so in varying degrees of specificity and differing approaches. Combining these was seen as most effective to get the best out of them.

2.1.4 Performance Analysis

Performance Analysis involves testing the speed and efficiency of site loading and interaction. This will be tested using the Accessibility Developer Tools mentioned previously. The browser found to be used most when viewing the site will be utilised for this as it will ensure the test will represent the experience of as many of the Users as possible. The actual testing will involve loading of pages and running Site Performance and Network Utilisation Audits. The results of which could outline issues where the content loading is particularly slow either due to the amount of resources or the way in which the site is coded. The result should bring forward any issues and the aim from here is to see if they apply to the other problems found so far.

2.2 Cognitive Walk-through

Nielsen (1995b) defines a cognitive walkthrough as a detailed procedure that simulates the problem solving process of a user. The idea is to focus on evaluating a design on ease of learning through each step of a human-computer dialogue .

Preece et al. (2015) compiled a set of 5 steps for the process of a cognitive walkthrough. These are the generic steps but can be applied dynamically by

developers. This means they can modify the steps to suit the more particular needs of a project. The steps are listed as follows:

1. Prepare

Identify the Users and their characteristics. Define sample tasks Users would undertake using the design being evaluated. These will involve the key steps. Create a medium in which to evaluate the design. Either a description, rough sketches or a prototype. Along with this a sequence of actions will be defined that will be followed by the User to complete their task.

2. Gather

Gather the people involved in the evaluation. This can vary dependent upon the circumstances of the project. There is usually at least two, the designer and an expert evaluator who understands the concept of the system. There can be more evaluators or more designers but there can also be a single analyst who is evaluating a design externally. It is the latter option that will be undertaken for this project.

3. Walk-through

This part involves the actual Cognitive Walk-through. The evaluators go through the sequence of actions for each task within a context of a typical User scenario. While doing so they try to answer the following questions:

- *Will the User know what to do?*
- *Will the User see how to do it?*
- *Will the User understand from feedback whether or not the action was correct?*

The answers to which will be documented.

4. Record

Also during the evaluation a record will be made of any critical information produced. This will include:

- Any assumptions of what would cause a problem and a why.
- Side issues and Design Changes.

- A Summary of the Results.
5. **Review** Finally the evaluation will be concluded and all of the gathered information will be presented as a series of problems found. From here a collection of fixes will be devised to counter those issues.

2.3 Heuristic Evaluation

Heuristic evaluation is defined by Nielsen (1995b) as the most informal method of usability testing where specialists evaluate elements of a design based on whether or not they follow established principles (or Heuristics). Hartson et al. (2012) and Preece et al. (2015) agree that it is common practice now to incorporate the Heuristics put together by Nielsen (Nielsen, 1995a). This method involves going through a design, similarly to a cognitive walk-through, and continuously checking it against the Heuristics. Acting as a set of rules for the design to ideally follow, these heuristics are listed below.

- **Visibility of System Status**

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

- **Match Between System and The Real World**

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

- **User Control Freedom**

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

- **Consistency and Standards**

Users should not have to wonder whether different words, situations, or actions mean the same thing.

- **Error Prevention**

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

- **Recognition Rather Than Recall**

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

- **Flexibility and Efficiency of Use**

Accelerators – unseen by the novice user – may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

- **Aesthetic and Minimalist Design**

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

- **Help Users Recognise, Diagnose, and Recover from Errors**

Error messages should be expressed in plain language (no code), precisely indicate the problem, and constructively suggest a solution.

- **Help and Documentation**

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

This section has established the Usability Testing Methods that will be used in order to undertake this project. The next section will document the results of the analysis and the recommendations formed from them.

3 Results & Recommendations

This section will detail the results of all Usability Tests conducted within this project. For each type of analysis this will include a review of the method, presentation of the data collected and a list of conclusions made. These conclusions will differ across the types of tests. In the earlier analysis methods some of the conclusions will be decisions made about key factors involved in later tests. The rest will be problems found accompanied with suitable solutions. Progressively through the series of tests the amount of problems found & solutions provided will increase.

3.1 Results - Site Analytics

As previously established the Site Analytics will include analysis of Google Analytics Results, User Logs, Accessibility Audits and Performance Tests. The following will document this stage and draw suitable conclusions from it.

3.1.1 Google Analytics

The Google Analytics results provided were annotated screenshots of a series of pages from campleaders.com (*See Appendices*). These primarily highlight user clicks and additional page statistics that are defined below. Each of the pages will be discussed individually and compared overall.

Page Statistics Definitions:

- *Average Time*: The average time spent viewing the page by Users.
- *Bounce Rate*: The rate of Users who start at this page and then leave without making any other requests.
- *Exit Rate*: The rate of Users who leave the site from this page.
- *'cutoff'*: The lower limit of the Users view once opening a page. Anything below this requires scrolling down to be seen.

The following will analyse the results of seven pages from campleaders.com. For each of these the key statistics will be highlighted and a brief analysis will be made.

Homepage

- **Average Time:** 47s
- **Bounce Rate:** 30%
- **Exit Rate:** 34%
- **Notes:** Relatively low bounce and exit rates as well as short average viewing time. Most User clicks are on the 'Find out More' button followed by 'login' and 'Apply' and other actions visible straight away. Very few scroll down to view content after the 'cutoff'. This shows that Users quickly choose a new action from those visible straight away rather than viewing more of the page.

About Summer Camps

- **Average Time:** 1 minute
- **Bounce Rate:** 67%
- **Exit Rate:** 14%
- **Notes:** Very high bounce rate meaning many start here and leave without making any other requests. The longer average time and low exit rate however suggest that those who come from another page to this one spend more time viewing the content and then move on. The most user clicks focus on 'Types of Camps' button at the bottom therefore most must scroll down and read. Slight increase seen in the number of clicks on 'Apply'.

Types of Camps

- **Average Time:** 27s
- **Bounce Rate:** 34%
- **Exit Rate:** 8%
- **Notes:** Much lower bounce and exit rates along with low average viewing time clearly shows users move on from this page quickly

to another. The clicks point more towards one of the top 4 images on the page that take users to pages about specific types of camps. Much less click apply at this point (4.5%).

About Day Camps

- **Average Time:** 1 minute 16s
- **Bounce Rate:** 76%
- **Exit Rate:** 15%
- **Notes:** Very High bounce rate suggests a possible issue with the page, or the new users decide to leave after reading the content. Those coming from other pages however often move on to another. Most of those who do not leave scroll down and click on 'Types of Jobs' button to move on. The long viewing time suggests they actually study the content as they do rather than just quickly navigating away. An increase can be seen in the number of users clicking 'Apply Now', with it jumping from 5.2% on the homepage to 9.9% on this page.

Types of Jobs

- **Average Time:** 26s
- **Bounce Rate:** 39%
- **Exit Rate:** 12%
- **Notes:** Very little time is spent on this page by Users, there is a reasonable bounce rate and very low exit rate suggesting again that those who come from another page are more likely to continue. The majority of clicks from here are on the 'Camp Counselor' link to the job specific page. A small amount click 'apply' but this is not much higher than the homepage and not as high as on the about page.

Apply - Start Application

- **Average Time:** 22s
- **Bounce Rate:** 26%
- **Exit Rate:** 10%
- **Notes:** On this page most users make a quick decision and move on. 69% go straight to applying for a job working 'directly with children' while others either go for 'behind the scenes' or a different action such as 'login' or even return to the homepage. This could suggest that some users get to this page and then turn back but this would be rare as most still move on to apply.

Apply - Register

- **Average Time:** 1 minute 21s
- **Bounce Rate:** 69%
- **Exit Rate:** 40%
- **Notes:** The long average time shows the users pay close attention to this page yet there is a very high bounce and exit rate suggesting that even though they spend more time on this page a large number leave without completing their application. Some even clicked on 'Apply' again which would restart the process and some went back to the homepage suggesting that some part of this page makes them want to go back to the start or leave.

The findings of these analytics will contribute mostly to the rest of the testing rather than the results and recommendations. These will be included in the site analytics conclusion at the end of this section. Before this the other techniques need to be discussed, next is User Log Analysis.

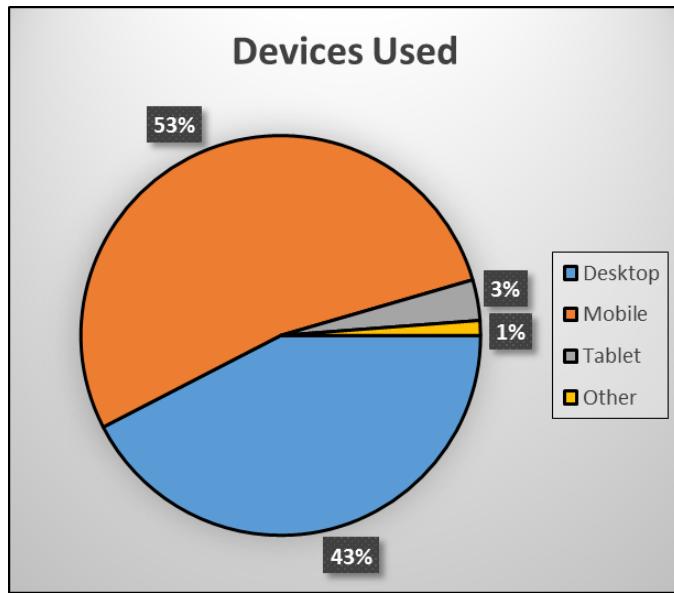


Figure 1: Devices Used to view GB campleaders.com

3.1.2 User Log Analysis

The access logs for the GB version of campleaders.com were analysed using coded Python scripts (*See Appendices*). In doing this four graphs and one table were produced. Each of these are shown in **Figures 1-5** and will be discussed in the following.

Devices Used

Figure 1 shows that mobile devices are used most to access campleaders.com. This is closely followed by Desktop computers (including laptops) with a small amount using Tablets or other devices. This applies more importance to the inclusion of mobile testing given the majority of the user base is accessing campleaders.com through their mobile phones.

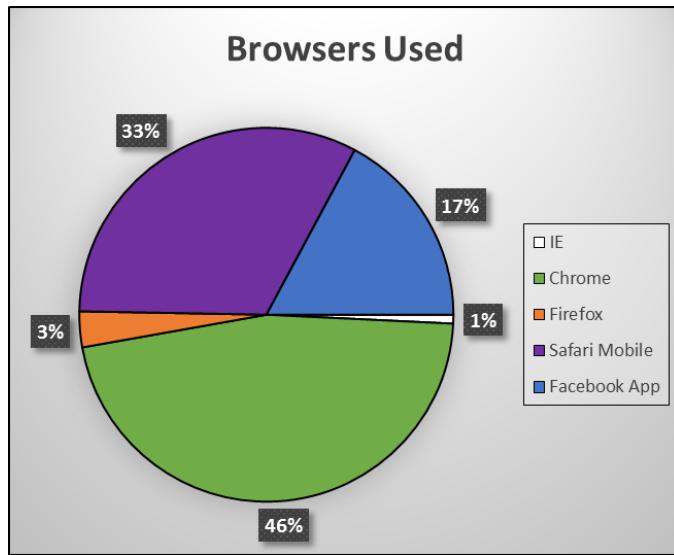


Figure 2: Browsers Used to view GB campleaders.com

Browsers Used

Figure 2 shows that Google's Chrome is the most used web browser when viewing campleaders.com followed by Apple's Safari mobile. This again highlights the prominence of mobile and Safari will be used for the tests on that device. It also justifies that Chrome should be used during the desktop tests given that the only other contender is Mozilla's Firefox with a very small usage. Another interesting point is the significant use of the Facebook App Browser, this suggests that many users often go to campleaders.com from facebook possibly via links shared by the organisation or people who are already part of it.

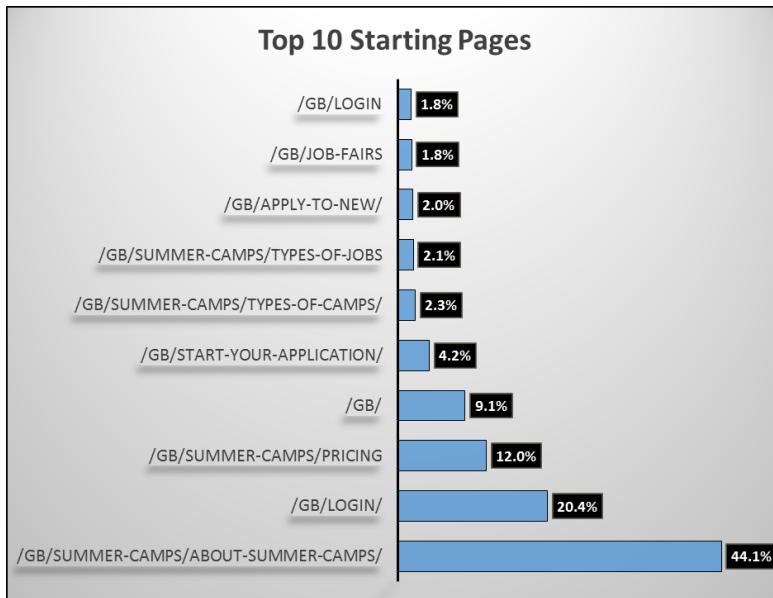


Figure 3: Most common starting pages.

Starting Pages

Figure 3 highlights the top 10 most common starting pages for users of campleaders.com. Most would assume that nearly all users should start on the homepage. However, that page (/gb/) stands as only the 4th most popular start page. More users start on the 'Pricing', 'Login' or 'About' pages rather than the campleaders home. This could be caused by the way in which the users discover Campleaders. If they get there via links on external websites or on social media (Facebook Application mentioned earlier) then there is a good chance that those links could go to specific pages rather than the landing page. It is possible that very few go about searching for the site and finding it as designers would expect, instead they are taken to it from another site and sent directly to a page of their interest.

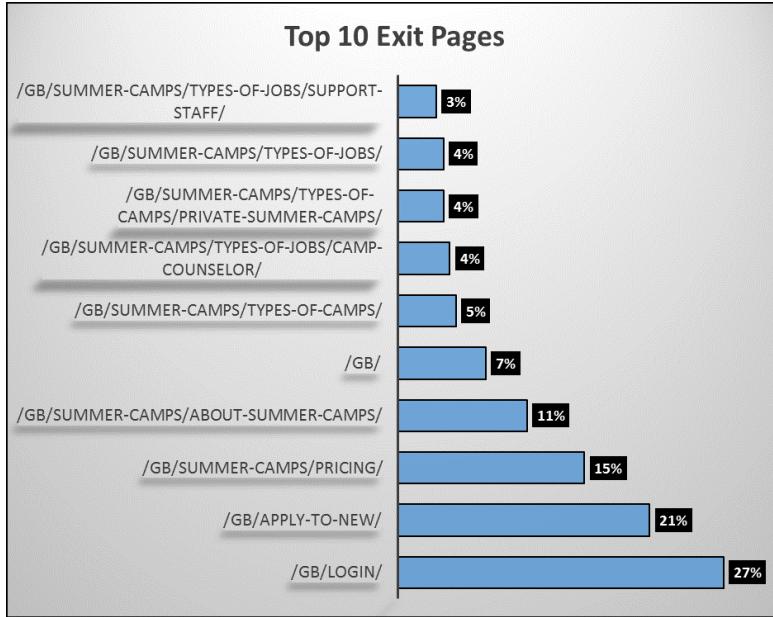


Figure 4: Most common exit pages.

Exit Pages

Figure 4 depicts the opposite of **Figure 3** as it shows the top 10 most common exit pages. These are the pages that users leave from. These results alone can show a number of contradicting themes. Having the 'Login' page as the most common could either suggest that there is a problem on that page or it could be simply because a lot of users have logged in, used the site and then logged out again which would redirect them back to the login page. Without further analysis however it cannot be decided which of these is the case. What is of more interest is the other pages that make this top 10. The 'Apply', 'Pricing' and 'About' pages are very high which clearly suggests that users could be having problems and leaving. Of course this could also be users leaving for other reasons such as them deciding they do not want to apply after finding out more. Further analysis may reveal why these are so high in the exit ranks.

Top 10 Common Paths
('gb/login/')
('gb/login/-- /gb/login/')
('gb/summer-camps/about-summer-camps/')
('gb/summer-camps/pricing'-- '/gb/summer-camps/pricing/')
('gb/')
('gb/summer-camps/about-summer-camps/-- '/gb/summer-camps/about-summer-camps/')
('gb/summer-camps/about-summer-camps/-- '/gb/start-your-application/-- '/gb/apply-to-new/')
('gb/summer-camps/pricing'-- '/gb/summer-camps/pricing/-- '/gb/summer-camps/pricing'-- '/gb/summer-camps/pricing/')
('gb/-- /gb/')
('gb/summer-camps/about-summer-camps/-- '/gb/summer-camps/types-of-camps/')

Figure 5: Top 10 Common Paths Taken by GB Users.

Common Paths

Figure 5 is a section of a table of paths taken by campleaders.com users. The top 10 paths are shown and are highlighted in different colours to represent their nature. The following will explain the meaning of each colour:

- **Red:** Bounces. These paths consist of a single request meaning that these users have got onto the page and then left without interacting with it any further.
- **Orange:** 'Slow Bounces'. These paths are from users who have stayed on one page, made a few requests meaning they are interacting with it in some way and then left without going any further.
- **Cream:** 'Navigation'. Paths taken by users who have actually moved between pages on the site are shown in this colour.
- **Green:** 'Goal Reached'. These paths are the ones that show users navigating around the site and ending up at 'Apply' page which is where the organisation wants as many users to get to. This does not necessarily mean that the users have signed up they may get to this page and leave without applying.

The table shows that of the top 10 most common paths taken by users only one actually shows them getting to the 'Apply' page while most others either bounce or actually interact with the site without reaching the end

goal. Note is to be taken of the top results involving the 'Login' page as these could be valid uses of the site where users log in, interact with their personal page(which is not included in the log) and then leave. Regardless these results do indicate a distinct lack of navigating and goal reaching users. It also further highlights a pattern of pages that could be the source of some user issues.

3.1.3 Accessibility Analysis

Accessibility Testing was conducted using the Google Chrome web browser and the three development tools mentioned previously (*See Methodology: Site Analytics*). The following is a compilation of the more consequential results collected by these tools. Screenshots of the testing process have been added to the appendices at the end of this document. The tools used the WCAG Guidelines 2.0 (W3.org, 2008) when analysing the accessibility of the site. Therefore these results are in reference to sections of that guide which is available at <https://www.w3.org/TR/WCAG20/>.

1. Colour Contrast (See WCAG Guideline 1.4.3)

Self Explanatory, some elements were found to not have a sufficient contrast ratio for most users to see them (based on visual deficiencies).

2. Non-Unique Element IDs (See WCAG Guideline 4.1.1)

Multiple HTML elements were found to have the same ID which is conflicting

3. Image Alternative Text (See WCAG Guideline 1.1.1)

A large number of images were found to not have alternative (or 'alt') text applied to them, this means that in situations where the images cannot be shown (accessibility settings or loading issues) there will be no other indication of them existing.

4. HTML Language Attribute (See WCAG Guideline 3.1.1)

The language of the html

5. Empty Links (See WCAG Guideline 2.4.4 & 2.4.9)

Various links were found to not contain any text. This appeared to be primarily because they consist of images or empty spaces with image backgrounds. These forms of links cause problems for screen reading software as they cannot pickup any text within a graphic therefore the link is passed over and unusable.

6. Element Focus & Keyboard Use (See WCAG Guideline 2.1)

A user should be able to navigate through a website solely through use of their keyboard. This should be accommodated by a CSS focus

(Mozilla, 2017) where the currently selected element is highlighted and a user can then see the highlight move through the links as they navigate with their keyboard (usually using 'TAB'). campyleaders.com was found to not have this feature.

7. Inconsistent Aria Roles (See WCAG Guideline 4.1.2)

The use of Aria Roles in HTML (W3.org, 2016) is a technique used to improve the accessibility of websites. These were found to have been used with campyleaders.com but not consistently and with some errors. The rules compiled by (Devis, 2017) (author of Accessibility Developer Tools) bring the requirements of Aria roles into a simpler form that are easier to follow.

8. Control Labels (Apply page, See WCAG Guideline 3.3.2)

The registration form on the apply page was found to have input controls without labels. Looking at the fields they are arguably labelled as they have text within them. However, this text will not be registered by accessibility software meaning it will not be declared what is required for each field to those users.

Note: All but one (**No.8**) of these were found across the pages of campyleaders.com, therefore the page specifics have not been provided with exception to that single issue.

It is strongly suggested that the development team of campyleaders.com review their site code following the WCAG Guidelines with particular attention paid to the above issues.

3.1.4 Performance Analysis

Performance was conducted using the Google Chrome web browser and the audit function of the Accessibility Developer Tools extension (*See Methodology: Site Analytics*). The tests were run on multiple pages of campleaders.com with priority given to those identified to be of interest in the previous analysis stages. Screenshots of some of these tests are provided (*See Appendices*). The following discusses the main performance issues that were discovered. The same set of particular issues arose across all of the tested pages, therefore the pages will not be specified for each problem.

1. CSS Issues

A large number of external CSS styling files were being loaded by each page. Combining this CSS code into a much lower number of files will improve the performance of the site.

CSS was also found to be at times loaded after JavaScript files. This prevents parallel downloads making it much slower. Making sure that all CSS is loaded before JavaScript would be advised. Finally, a number of CSS files were found to be un-optimised. With a large amount of un-used CSS rules being loaded that will have no effect on the pages. It is acceptable to have some un-used CSS rules because some pages may require some styling that others do not. However, were many cases found where none of the pages actually used some of the codes styling. Removing all of the unneeded code will improve the websites network performance.

2. External JavaScript Issues

Similarly to the CSS issues (above) there are a large number of external JavaScript files being loaded on each page. If they were condensed to a smaller number it would benefit performance greatly.

3. Non-Parallelised Downloads

A considerable number of requests are made by each page of campleaders to the same root domain these include the previously mentioned external CSS and JavaScript. Downloading so much from a single domain is best done with parallel downloads as it is much quicker than acquiring the files one at a time. Combining this technique with the aforementioned cut down of external assets will considerably improve performance.

4. Images

A few of the images loaded onto the pages of campleaders.com were found to not have dimensions specified. This is a smaller issue but still slows down the loading of a site. Specifying a 'width' and 'height' value for each image will prevent this.

Note: The test produced a result regarding Cookies claiming that the size of the sites Cookies should be reduced. They are actually at around 50bytes which is not really a large cookie and further research has suggested that this is not a valid warning.

3.1.5 Summary

This section has documented the Site Analytics of campleaders.com. The result of this is a series of small but effective improvements that can be made to the coding to improve accessibility and performance. In addition the following points have been made that will directly impact the next analysis stages.

- The majority of campleaders.com users are on mobile, coupled with the poor conversion from mobile makes it imperative that the devices version is tested.
- Users do not necessarily start at the homepage. An alternative cognitive walkthrough could be conducted that does not involve the homepage as a starting point. This may help understand what the users are experiencing.
- The Home, About, Pricing, Start Application and Apply pages require particular attention in the further analysis given the significance in the results found from the User Log analysis and Google Analytics.

This concludes the Site Analytics of this project and the next step is to further analyse campleaders.com with Cognitive Walkthroughs and Heuristic Evaluation.

3.2 Results & Recommendations - Cognitive Walkthrough

A Cognitive walkthrough was conducted with both the desktop and mobile version of campleaders.com. The desktop walkthrough was done with a desktop computer with the site open in the Google Chrome browser. The mobile walkthrough was done with an Apple iPhone using the built in Safari web browser.

Initially the mobile test was going to be done using the developer tools mobile emulation in Chrome using the same desktop computer. However, this feature does not always accurately emulate a mobile device as found by Strahorn (2016) and Google Developer Bakaus (2016) even suggests that it should not be relied upon over testing with an actual device.

Both walkthroughs were conducted with a single User in mind. This may sound short sighted but the one of the focus points of this project is to find out why there is such a low amount of people actually signing up to camp leaders. From previous research it is clear that some make it to the application page but there is no guarantee that they actually complete it. This is where the cognitive walkthroughs may shed more light on it. Therefore the following user profile was in place for both walkthroughs.

Profile: New User going to campleaders.com to find out more about the organisation and apply if they wish to.

During the walkthroughs the evaluator spoke into a device to record their thoughts rather than taking notes. This was seen as more effective in getting all of the critical information. The recordings were then played back and rough notes of the critical information were made (*See Appendices*).

In order to make the walkthroughs as thorough as possible they both started at the homepage. It has been previously highlighted that most users do not start on this page but rather than disregarding the homepage it will simply be kept in consideration that the 'About' and 'Pricing' pages could of been starting pages. The walkthroughs were documented in the form of critical information gathered from each page (*See Methodology: Cognitive Walkthrough*). This was combined to produce a list of problems found, each of these will now be discussed with possible solutions. The problems found only on mobile will be listed separately, however many of the problems found on desktop still apply to mobile.

3.2.1 Desktop Version

All Pages

1. **Problem:** Images are used as links throughout the Campleaders site. These cannot be directly interpreted as active links because of them being just images with text overlays.

Solution: Replacing the text overlays with actual buttons will provide a more obvious navigational route for users to take. They can assign a relation between the images and the page the button will lead them to.

Alternatively if the images need to stay the same then the addition of some instruction is suggested. Adding a line of text before the group of images that tells the users that if they click on them they will be taken to the corresponding page.

Specific Camp Pages (E.g. 'Private Camps')

2. **Problem:** All of the pages for specific types of camps have a small grey box section titled 'At a Glance' with some words and phrases related to the type of camp. The information provided by them is useful, however, the words and phrases are active links that simply refresh the page. Users notice they are clickable by hovering over and then they are left confused when they click on one as the page resets.

Solution: Either remove the links from these phrases. Or if there should be content related to them, make pop-up boxes or drop down boxes that appear when a phrase is clicked on and put the content there.

Types of Jobs Page

3. **Problem:** Within the main block of text on this page some of the words act as links. However, they are styled in a dark grey colour. This colour does not highlight links very well, to a user this does not look like an interactive element.

Solution: Either Change the colour of the link text to make them stand out better. Or apply a button style to each word. Be careful not to break up the text too much, if button styling is used it must be subtle enough to still blend the words into the text but substantial enough to make the links noticeable.

Application Process Page

4. **Problem:** Each step that is explained on this page is accompanied with a very large image. These were found to take up the entire page as a user scrolls down which is not ideal. A user wants to be able to distinguish a clear set of steps, these excessively large images break up the flow and make the content harder to focus on.

Solution: Scale down the images to better suit the structure of the page. Keeping the images will be effective but they need to just accompany the steps and not takeover the screen.

Pricing Page

5. **Problem:** The aspects introduced to a user on this page raise more questions than they answer. There are in total 4 buttons that take the user to the same 'Start Application' page. Three of which now have 'Apply Now, Pay Later' on them and the other just has 'Apply Now'. First of all the difference in the button suggests to a user that they invoke a different action but they do the same thing. Secondly two of the buttons are on the separate price plans, this suggests that the choice a user makes affects their application. What they do not realise is they get to the same place either way, and their choice of price plan is not made until they actually apply. Giving this inconsequential choice to a user adds to their thinking time and cognitive load to only lead to the same outcome.

Solution: This page would be more effective if it simply informed the users about the price plans and just had one 'Apply Now' button below them. It should explain to them that 'Here are our price plans, you will choose one once you start your application so click "Apply Now" below'.

Start Application Page

6. **Problem:** Upon entering the Start Application page users are presented with a 'Step Indicator' that highlights their position as being at Step 2 of 3. Users are likely to think 'What happened to Step 1? Did I miss something?'. This makes them question their previous actions and some may go back just to check, doing this will break their flow and slows down the overall application process.

Solution: The step indicator should either start at Step 1, as the user would expect. Or it should be used on the earlier pages to show them what Step 1 actually is. This could be achieved by adding the step indicator to the static header once they have gone past the homepage.

Apply to New Page

7. **Problem:** The form on the application page has no help text. Users know what to enter into each field but there is no indication of which fields (if any) are actually required. Some are more inclined to avoid entering phone numbers or other pieces of personal information. Therefore if they think they can they will try to progress without divulging them. For this page such an action brings up an error.

Solution: Adding help text to the form for each field will improve the registration process. This could involve a small dialogue on the side that explains what the particular field requires. Also add an indication of which fields are required. This can either be the use of '*' or another symbol along with a short explanation of what it means. Alternatively a short statement at the top of the form such as 'All Fields are Required to Register' would also tell users that they must fill in all of the fields.

8. **Problem:** If a user invokes an error on the form of the page a message appears to notify them of it. The actual message and its appearance is very poor. The small text and colours make it difficult to read and the actual language used does not explain to a user what is going on.

Solution: The message needs to be styled better with colours more fitting to the overall site design but still contrasting enough to make it stand out. E.g Simple White box with a thick red border and large black text. The actual message should explain what the problem is and how the user can rectify it. So rather than just 'Phone Number can't be blank', it should say something similar to 'A Phone Number is required for registration, please enter a valid phone number and proceed.'. Making these changes will increase the first time success rate of user registration.

3.2.2 Mobile Version

All Pages

9. **Problem:** All of the pages of campleaders.com consist of a large image at the top a page title over the top of it. This is not a problem for computer users but on mobile this takes up almost the entire screen. Usually it is all that users see when loading a page along with the top navigation. There is no indication of more content being further down so some users may think that they need to use the navigation to move on to find what they are looking for.

Solution: Either scale down the images so that some of the page content moves up above the 'Cutoff' and can be partly seen making users want to scroll down. Or add instruction of some sort that tells users to scroll down to find the content. This could be a simply arrow/scroll symbol that could be animated to grab their attention. Alternatively the text 'Scroll Down for More' would work just as well.

10. **Problem:** As discussed from the Desktop walkthrough findings the various images used as links cause more problems for mobile users. There is no instruction that tells users they are in fact links, and mobile users cannot 'hover' over them to see if they react like a link. Therefore on mobile they are less likely to be used.

Solution: Making the changes discussed previously would improve this. In addition on mobile the images require 'two taps' to actually use them to navigate. The first tap changes the text overlay to a description and then the second tap takes them to the corresponding page. Most users will not think to tap a second time so they will move on after the first. This should either be mentioned in the instruction provided or be removed. It may be better to simply make it one tap to navigate and cut out the more complicated interaction.

Specific Camp Page

11. **Problem:** The 'Top Tips' sections on these pages were found to have very small text that is almost unreadable without manually zooming in.

Solution: Make the text larger.

Start Application Page

12. **Problem:** The 'Step Indicator' included on this page is only partly visible. The top of the element is hidden behind the static header.

Solution: Applying CSS padding or a margin at the top of this element will move it down. To be more efficient the elements should be put into a responsive layout consisting of columns and rows (W3Schools, 2016). When used properly this ensure that elements do not overlap unless specified.

Apply to New Page

13. **Problem:** The same poorly designed error message appears when invoking an error on the registration form on mobile. However, in addition to this, the page zooms out excessively making the content unreadable to users unless they manually zoom in.

Solution: The exact source of this error could not be identified, it is believed to be part of the styling imported from an external CSS file. If a set stylesheeet was created that specifies that the elements remain the same size if an error occurs (set min width to width of device) then the issue would not arise.

3.3 Results & Recommendations - Heuristic Evaluation

Heuristic Evaluation was conducted on both Desktop and Mobile versions of the following pages:

- Homepage
- About Page
- Pricing Page
- Start Application
- Apply to New

These pages were chosen based on their recurring appearance in the previous analysis stages. They appeared most among the top starting and exit pages, as well as within the common paths found (*See Site Analytics*). Each page was evaluated following the 10 Heuristics discussed in the methodology section. The evaluator went through each page recording their evaluation, this was then played back to transfer into documentation. The documentation (*See Appendices*) consists of the heuristics listed with each page. For each individual heuristic notes were made from evaluating the design. The following will go through the problems found in this evaluation along with possible solutions. Some of the problems found had already been uncovered by the Cognitive Walkthroughs, so they have been skipped for this section. This is why there are far less problems listed below and even none at all for particular pages.

3.3.1 Desktop Version

All Pages

14. **Problem:** The 'Help' link found in the top navigation does not function for new users. The link opens a page that continuously refreshed.

Solution: The page url includes 'Loggedin=No' which suggests that a user must log in to get to this page. However unless a user know this already they will not be logged in. Therefore this link either needs to be removed and placed in an area only 'logged in' users can access or it needs to take users to a login page first before attempting to open the help page.

15. **Problem:** The 'Login' link in the top navigation is faded and does not look at all like a functional link.

Solution: The link should be formatted to either a similar appearance to the other textual links (e.g. 'Blog' or 'Reviews') or into a button style similar to the 'Apply' button. This will make it a more obvious viable action for returning users who have accounts.

16. **Problem:** Throughout campleaders there is no direct exit route available. A user can not navigate back to the previous page they were on unless they use their browser. Of course users who are more experienced with the site will be able to use the dropdown menus to navigate

between pages but those who follow the flow created by the buttons at the bottom of each page may not.

Solution: Adding a 'Back' button or link in the top left of each page would provide a clear exit for users.

Homepage

17. **Problem:** The 'Apply Now' button is located in the top right of the static header. Given that Campleaders want as many people to sign up as possible this should be the first thing users look at. However, the small button 'tucked away in the corner' is not getting peoples attention straight away.

Solution: Move the 'Apply Now' button down into the center of the main image alongside the 'Find out More' button. Now users will see these two options straight away and those who want to find out more can and those who wish to sign up straight away see an option to do so instantly.

18. **Problem:** The 'Learn More' link within the main image of the landing page is difficult to see. This mainly because of the small text against a background image.

Solution: Move the link away from the image or make the text larger and make the button solid (not transparent) to make it easier to see.

Notes

Most of the pages on the site share the same design and layout and are dominated by just content for reading. The only interaction found everywhere is navigational. The buttons work well with subtle but effective affordances and feedback. The image links have numerous flaws which have been established in previous tests (*See Results & Recommendations - Cognitive Walkthrough*).

3.3.2 Mobile Version

All Pages

19. **Problem:** The mobile navigation menu has a few elements that have drop down sub menus. These are visible when a user taps on the small

triangular icon next to the main link. Tapping on the actual text takes the user to that page instead of activating the menu. This could confuse the user because they may tap expecting a drop down menu but instead they are taken to a new page.

Solution: Remove the drop down features if a user should go to the main page first and then visit the sub pages. Otherwise the main item from which the drop down menu originates should not be a link.

20. **Problem:** At the bottom of each page on mobile there is a long list of links to all of the different pages within the footer. This is a considerably large portion of the page that is likely to never be even looked at by a user. Most find what they are looking for in the main content or find a way to navigate to another page.

Solution: Removing this long list or creating a drop down feature so that the footer remains a small portion of the page will considerably improve page loading.

3.4 Testing Review

This concludes the Main testing part of this project. The Campleaders site has been tested and a series of problems have been found with assigned fixes. The next step is to take one of the problems and create a coded prototype to demonstrate the solution. The chosen problem is the first one discovered within the Cognitive walkthroughs. However, it was brought up numerous times in all of the usability tests. Therefore it was seen as the best choice. The problem is with the Image links used throughout the site. A Prototype of the 'Types of Camps' page will be created using Google Chrome's Developer tools and its access to the source files. The changes suggested to solve this problem will be applied and then the prototype will be tested to see if it is successful.

4 Prototyping

The prototype created for this section consists of a single HTML file which changes a few elements and styling rules of the 'Types of Camps' page. The application of this fix is not limited to this one file however as the same changes can be made to all pages with relative ease. The styling changes have been made within the HTML which is not best practice but for the purposes of this project is was suitable. For optimised used it is suggested that the new CSS rules are taken and integrated into the style sheets used by the site(after optimising them as suggested previously).

The changes made are listed below:

- The text overlays on the images have been replaced with a green button with white text. They are of a similar design to the 'Apply Now' buttons already present on the site. An alternative colour could be the pale blue seen around the site as this may prevent clashing with the 'Apply' buttons. However the green styling seemed effective.
- The images are now brighter by default but get darker when hovered over by the users cursor. This amplifies the feedback given that suggests that the images are links. Of course without any interaction it should be more obvious that the images are links given the presence of buttons.
- A short textual instruction has been added above the images that explains what the images are and how users can interact with them to navigate to other pages.

With the changes made the prototype must now be tested. The next section will document the testing process. It will involve only a Cognitive Walk-through and a Heuristic Evaluation. This is because these two methods can be easily applied to a rough coded prototype. The other techniques used in this project require a more functional prototype to work.

4.1 Prototype Testing

4.1.1 Cognitive Walkthrough & Heuristic Evaluation Results

A cognitive walkthrough was conducted in the same way as with the previous tests. However, a different Profile was used. It is nearly identical to the previous except the user has a specific interest in Special Needs Camps and may be interested in working at one. Another key difference is the walkthrough is more of a run down of their interaction with just the 'Types of Camps' page and no others. Regardless the findings below are in favour of the solution. The findings of this walkthrough can be found in the appendices, with that is a comparison between it and the original findings from the first Cognitive Walkthrough. The original notes found a lot of questions being raised because of the image links. It was unclear what they were if not just aesthetic features. The new evaluation found a significant difference. It is clear because of the buttons that the images are links. Also the feedback gave the user more confidence in knowing that they can interact with these images. Also the instruction text at the top makes it even more obvious what a user should do. There were no questions raised and the user knew exactly what to do. A small criticism would be the fact that the addition of so many green buttons overpopulates the page somewhat. However, changing the colour of the buttons to a pale blue (as mentioned earlier) may take away some emphasis from them and make them fit better into the page design. Overall the Cognitive Walkthrough found the fix to be successful.

A Heuristic Evaluation was conducted with the prototype with the same method as before. As with the prototype Cognitive Walkthrough the evaluation was limited to just the 'Types of Camps' page. The findings of which can be found in the appendices.

The Heuristic Evaluation found the changes made to the image links to be effective. They provide clear signposting and instruction of how the user should interact with the page. The recognizable button design, simple aesthetics and enhanced feedback resulted in a very positive evaluation of the interactive experience. As with the cognitive walkthrough a point was made of possible overcrowding of elements with the large number of new buttons. However, it was seen as a trade off where the buttons make it more usable but the interface less clean. Overall the fix was found to be a success.

5 Conclusion

This project has looked at the website campleaders.com and analysed it using various Usability Testing techniques. A substantial list of problems were found each of which have been assigned a possible fix. These include elements of design, coding and file structure and collectively cover all of the key aspects of a website. If all of the improvements suggested are made the user experience and productivity of the site for the organisation will greatly increase. Prototype testing has proven that at least one of the solutions is suitable, and while they will all improve the site this analysis may not have found all of the problems. However, looking back at the original points from the brief. Solutions have been suggested that should fix accessibility, mobile use and user signup issues.

6 Appendices

6.1 Google Analytics

The following 7 pages is an attached copy of the Google Analytics used in this project.

Pageviews: 25,283 % of Total: 19.00% (128,593) Unique Pageviews: 20,309 % of Total: 20.02% (101,446) Avg. Time on Page: 00:00:47 Avg. for View: 00:00:58 (17.71%) Avg. Page Load Time (sec): 6.28 Avg. for View: 4.39 (54.70%) Bounce Rate: 30.43% Avg. for View: 44.47% (31.57%) % Exit: 34.12% Avg. for View: 25.05% (31.99%) Clicks with more than 0.02% Clicks on Cookies on the Camp Leaders site We use cookies to ensure the best experience on our website. If you continue you agree that you are happy to receive all cookies on the Camp Leaders website. Continue Find out more Show bubbles Show color Browser Size Exit Summer Camps Travel America Help Returners Blog Login Apply Now GB

Work at Summer Camp in America

Dust off your shades and whip out your shorts. Now is your time for a summer work & travel adventure in America!

[Find out more](#)

What type of camps can I work at this summer? [Learn More](#)

-6% Clicks below:

Summer camp placement Food & accommodation Up to \$1500 salary

The Ultimate Summer Camp Job

Welcome to your legendary summer in the States. This is your chance to escape your boredom and live the American dream. Apply with us now for a summer job abroad and make mates from around the world, have unforgettable adventures and epic road trips. It's all yours for the taking.

-6% Clicks below:

Job Fairs Treks & Tours Pricing

I GOT PLACED #campleaders 2016 Photo & Video Competition! 2017 Merchandise Returns

Camp Counselors Summer Camps

-2% Clicks below:

17 YEARS OF AMAZING SUMMERS

100+ CAMP EXPERTS TO HELP YOU FIND A JOB

500+ SUMMER CAMPS WE WORK WITH

-1% Clicks below:

Why Camp Leaders?

We've sent thousands of people to summer camp over 17 years. Every one of our staff members has the past 17 in America and collectively we have over been to 100+ camps of experience. We've worked in all types of 150 summer camps.

Camp Counselors and in all types of summer camps, from private camps to special needs camps to underprivileged camps. When it comes to American summer camp jobs, we know our stuff.

You could be one of the 7000 people we send to camp in 2017.

Spend your summer in the United States [Find out more](#)

Summer Camps Travel America About Great Britain

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Treks and Tours Tips & Articles

Types of Camps Events Brochure Merchandise Partnerships Child Protection Work For Us Contact Us Other Opportunities

Types of Jobs Events Brochure Merchandise Partnerships Child Protection Work For Us Contact Us Other Opportunities

Types of Skills Events Brochure Merchandise Partnerships Child Protection Work For Us Contact Us Other Opportunities

A Day at Camp Events Brochure Merchandise Partnerships Child Protection Work For Us Contact Us Other Opportunities

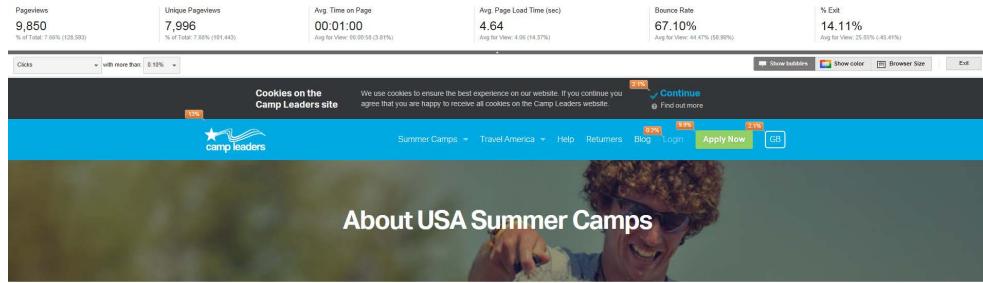
Application Process Events Brochure Merchandise Partnerships Child Protection Work For Us Contact Us Other Opportunities

Pricing Events Brochure Merchandise Partnerships Child Protection Work For Us Contact Us Other Opportunities

The Camp Leaders program is administered in conjunction with our US Department of State approved travel agency, American Student Services. All travel services are provided by American Student Services, Inc., a company that is fully licensed and bonded. Our travel services are provided by Cultural Homestay International in association with American Student Services, Inc.

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About USA Summer Camps

Summer Camp in USA

Introducing the perfect summer jobs for students, grads, gappers and you 'somewhere inbetweeners' the Camp Leaders programme is your opportunity to get paid work in a traditional USA summer camp. If you're thinking marshmallows on the camp fire, tree swings on the lake and a scorching hot summer, then you're spot on.

Epic Memories

-61% Clicks below

Summer camp jobs are like nothing you've ever experienced before. Working as a camp counsellor in the USA, or even behind the scenes as a support staff you'll create memories to last a lifetime and come back to the UK with some legendary travel stories.



Travel & Days Off

We're big believers in balancing work and play and with days off and up to a month of travel time after camp, you'll be able to explore the best of America, whether you fancy New York, Miami, LA, Vegas or a bit of it all, the choice is yours. We'll even sort you out a discount on group road trips with other travellers and summer camp staff.

A Career Boost

-61% Clicks below

Not only will you make loads of friends, but you'll have an experience to wow any future employer - from leading teams to working under pressure, you'll come away from camp with more relevant experiences than you'll be able to talk about in a single interview. Working abroad always impresses employers.

Mates from Around the World

You'll be joining staff from places like Australia, New Zealand, Europe, South America and more. You'll be thrown into an enormous variety of cultures and come out the other side with friends from around the world, which we guarantee will come in handy for future travels.



-61% Clicks below

See the different types of camps you can work at

[Types of camps](#)

Ready to go? Register your details for free...

[Apply](#)

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 About Summer Camps Treks and Tours Events
 Types of Camps Tips & Articles Brochure
 Types of Jobs Merchandise
 Types of Skills Partnerships
 A Day at Camp Child Protection
 Application Process Work For Us
 Pricing Contact Us
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Great Britain

The Camp Leaders program is administered by Camp Leaders Ltd, a registered charity. The program is funded by the Department for International Development (DFID) and the European Union. It is managed by Creative Initiatives, a social innovation company based in London.



Pagesviews
10,904
% of Total: 0.40% (128,593)

Unique Pageviews
6,613
% of Total: 0.52% (91,441)

Avg. Time on Page
00:00:27
Avg for View: 00:00:58 (+52.87%)

Avg. Page Load Time (sec)
2.26
Avg for View: 4.06 (+44.37%)

Bounce Rate
34.66%
Avg for View: 49.47% (+22.01%)

% Exit
8.06%
Avg for View: 25.85% (+8.62%)

[Clicks](#) | with more than 0.10%

Cookies on the Camp Leaders site [Continue](#) [Find out more](#)

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Types of Camps

At Camp Leaders there is a huge variety in the types of summer camp that you can work at. If you're unsure of which camp is for you, have a look at the different types and see which ones best suit your beliefs, hobbies or interests. During your application you can add your type of camp preference and we'll work to match you with the right camp. If you're enthusiastic, fun and up for adventure then you will fit right in at any summer camp in America. If you still can't decide, have a look at the types of skills you will need for the different activities and see which one suits you most.

[Private Camps](#) [Agency Camps](#)
[Special Needs Camps](#) [Jewish Camps](#)

[Christian Camps](#) [Girl Scouts Camps](#) [Sports Camps](#) [Day Camps](#)

[Weight Loss Camps](#)

-13% Clicks below

-6% Clicks below

Ready to go? Apply now for free... [Apply](#)

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Tips & Articles | Brochure | Merchandise

Types of Jobs | Partnerships | Child Protection

Types of Skills | Work For Us | Contact Us

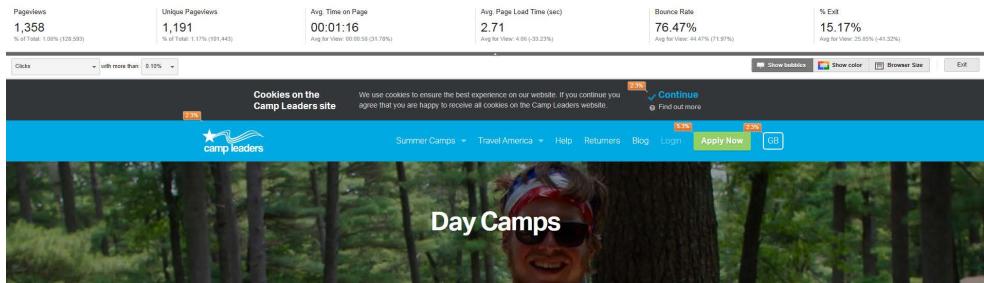
A Day at Camp | Application Process | Other Opportunities

Pricing

The Camp Leader program is administered in conjunction with our US Department of State designated visa sponsor, Culture Interactions International. Doing the process from May 1st until October 1st means your visa application is processed by Cultural Interactions International at immigration and口岸.

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Day Summer Camps

Very similar to private summer camps, day camps offer children the opportunity to spend time in the outdoors partaking a wide variety of activities and games. These will include the typical summer camp activities including arts & crafts, sports & games, performing arts and so on. The main difference with day summer camps is that

304

-28%

What to Expect

The best 9 to 5 job in the world. The campers will be heading home at the end of the day and arriving on the school bus in the morning, giving you more time off than at any other type of camp.

Top Tip

10 of 10 | Page

- What Not to Expect
Sleepless night? You'll get a typical summer camp in America experience with a higher chance of sleeping through the night without waking up!
- You'll Love
The opportunity to do what you want to do in your time off. Chill out, head into town or explore the outdoors. You'll have plenty of 'me' time at day

Facilities and Accommodation

The vast majority of day camps will provide accommodations for staff to stay over even when the children have gone home for the evening. However, some day camps utilise local university or college accommodation or even family homes of campers, offering you the ultimate experience of immersing yourself into American culture.

The Campers

-28% Clicks below:

Applying for a Day Camp

As part of your Camp Leaders application, you will specify what kind of camp you're interested in working in and we will then look to match you with your preferred camp. Day camps are more like a schedule, so they can be mixed with other camp types. For example, you could work at a special needs day camp or a Christian day camp. We'll automatically send your application to all of the day camps we work with as part of our placement process.

Placement Opportunities with Camp Leaders

Camp Leaders works with over 500 hundred of the best camps in America, giving you some of the highest placement chances in the industry. Camps over in the US use a number of UK-based agencies to recruit staff and Camp Leaders has been one of the key providers for nearly 20 years, giving you the security of finding that summer job in America.

Check out the different job roles at camp

Types of jobs

Ready to go? Apply now for free...

Great Britain



Pageviews
6,851
% of Total: 5.33% (128,593)

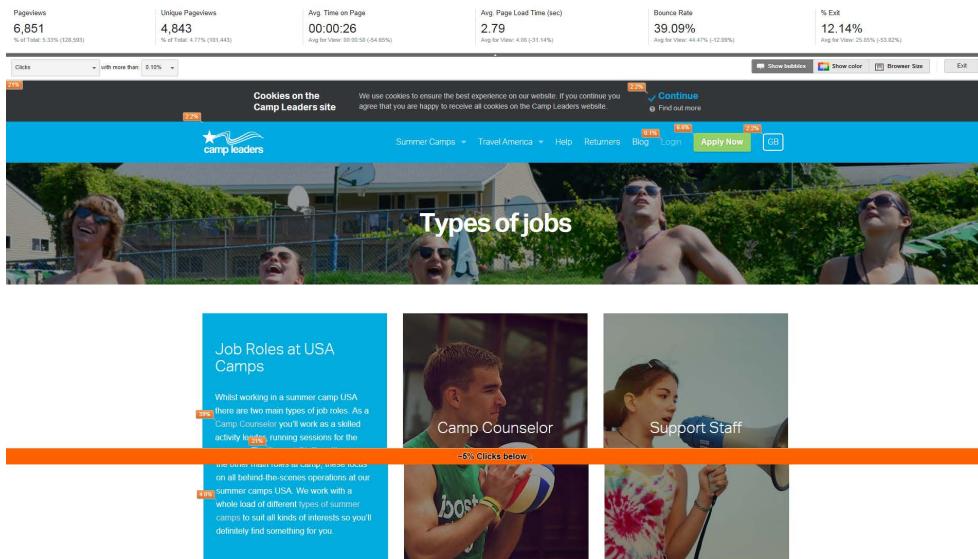
Unique Pageviews
4,843
% of Total: 4.77% (101,442)

Avg. Time on Page
00:00:26
Avg for View: 00:00:58 (+54.85%)

Avg. Page Load Time (sec)
2.79
Avg for View: 4.06 (+31.14%)

Bounce Rate
39.09%
Avg for View: 44.47% (+12.09%)

% Exit
12.14%
Avg for View: 25.85% (+53.02%)

Clicks with more than 0.10% 

Cookies on the Camp Leaders site We use cookies to ensure the best experience on our website. If you continue to agree that you are happy to receive all cookies on the Camp Leaders website.  Continue 

 Summer Camps Travel America Help Returners Blog Login Apply Now GB

Types of jobs

Job Roles at USA Camps

Whilst working in a summer camp USA there are two main types of job roles. As a Camp Counsellor you'll work as a skilled activity leader running sessions for the children. You'll also be involved in helping to manage the day-to-day operations of all behind-the-scenes areas of our summer camps. We work with a whole load of different types of summer camps to suit all kinds of interests so you'll definitely find something for you.

Camp Counselor

Support Staff



Ready to go? Apply now for free... 

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- Trees and Tours
- Events
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- Merchandise
- Types of Skills
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- Child Protection
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- Other Opportunities



The Camp Leaders program is administered in conjunction with our US Department of State designated visa service, Cultural Homestay International. Cultural Homestay International is a leading family run field support organization by Cultural Homestay International is a leading family run field support organization.




Pageviews
6,162
% of Total: 4.79% (128,593)

Unique Pageviews
4,755
% of Total: 4.89% (101,442)

Avg. Time on Page
00:00:22
Avg for View: 00:00:38 (+81.68%)

Avg. Page Load Time (sec)
1.80
Avg for View: 0.00 (<0.05%)

Bounce Rate
26.08%
Avg for View: 44.47% (+41.36%)

% Exit
10.21%
Avg for View: 25.85% (48.51%)

Clicks with more than 0.10%
 Cookies on the Camp Leaders site Continue Find out more
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Step 1 2 3

What job role do you want to work in?

65% Directly with children
Camp Counselors • Activity Leaders
(open to non-students)

25% Behind the scenes
Office • Kitchen • Maintenance
(must be current full-time University student)

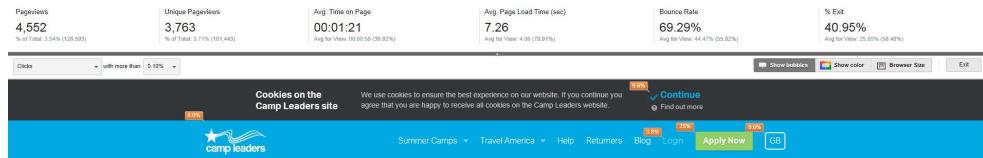
10% Returning to Camp? Log in or Apply

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The Camp Leaders program is administered by USA's sister organization, International Camping Fellowship. Designated as a Superior Cultural Exchange Program during the period from May 1st until October 15th every year. Accredited by Council on Accreditation and American Camp Association.

Step 1 of 3

Your Details

First Name

Last Name

Email

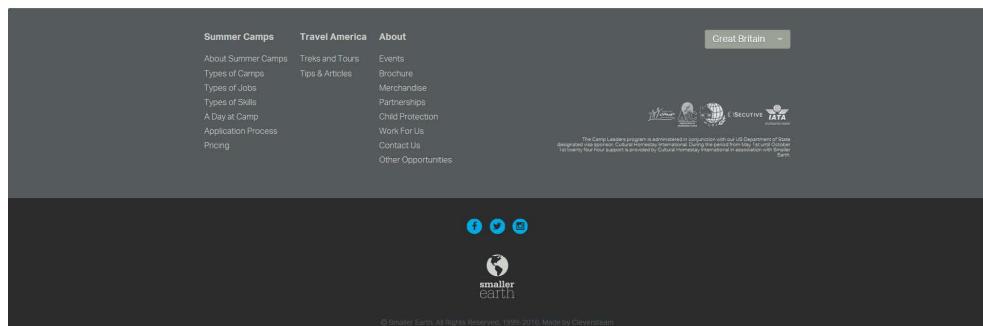
Password (must be at least 8 characters)

Mobile/Cell (No country code required)

Please select a country

Register

Already have an account? [Add application for this program](#)



6.2 Python Scripts

6.2.1 Log Cleaning

```
1 import apache_log_parser
2 import glob
3 import user_agents
4 import re
5 from csv import DictWriter
6
7 """
8
9     This code filters and combines all of the log files into 1 csv
10    It Removes requests for assets or non-GB pages.
11
12 """
13
14
15 parser = apache_log_parser.make_parser('%h%l%u%t%"%r">%s%B"%{'
16
17 EMAIL = re.compile(r"(?:[a-z0-9!#$%^&*+=?^_`{|}~-]+(?:\.\.[a-z0-9!#$%^&*+=?^_`{|}~-]+)*|\".*\")")
18
19 path = 'logs/*.log'
20 directory = glob.glob(path)
21 tracker = 0
22
23 with open('results/gb-cleaned_log.csv', 'w') as out_f:
24     ip_map = {}
25     writer = DictWriter(out_f,
26                         fieldnames=['remote_host',
27                                     'time_received_isofromat',
28                                     'request_method',
29                                     'request_url_path',
30                                     'request_url_query',
31                                     'status',
32                                     'request_header_user_agent'],
33                         extrasaction='ignore')
34     writer.writeheader()
35     for file in directory:
36         tracker = tracker + 1
```

```

37     print('Working on new file:' + str(tracker))
38     with open(file) as in_f:
39         count = 0
40         for line in in_f:
41             line = parser(line)
42             ua = user_agents.parse(line['request_header_user_agent'])
43             if not ua.is_bot:
44                 if "gb" in line['request_url_path']:
45                     if ".css" not in line['request_url_path']:
46                         if ".js" not in line['request_url_path']:
47                             if ".jpg" not in line['request_url_path']:
48                                 if ".png" not in line['request_url_path']:
49                                     if ".gif" not in line['request_url_path']:
50                                         if "assets" not in line['request_url_query']:
51                                             ip_addr = line['remote_host']
52                                             if ip_addr not in ip_map:
53                                                 ip_map[ip_addr] = line['remote_host']
54                                             if 'request_url_query' in line:
55                                                 if EMAIL.search(line['request_url_query']):
56                                                     print('Anonymized')
57                                                     line['request_url_query'] = ''
58                                                     writer.writerow(line)
59
60     print(len(ip_map))

```

6.2.2 Browser Analysis

```
1 from copy import deepcopy
2 from csv import DictWriter, DictReader
3 from pandas import DataFrame
4
5 """      This code runs through taking the user-agent from each individual
6         produces a dataframe with it.
7 """
8
9
10 userAgents = []
11 users = []
12 others = []
13 chrome = 0
14 firefox = 0
15 iexplorer = 0
16 safari = 0
17 safariMob = 0
18 opera = 0
19 facebookApp = 0
20 other = 0
21
22 with open('../results/gb-cleaned_log.csv') as in_f:
23     reader = DictReader(in_f)
24
25     fieldnames = deepcopy(reader.fieldnames)
26
27     for line in reader:
28         if line['remote_host'] in users:
29             pass
30         else:
31             userAgents.append(line['request_header_user_agent'])
32             users.append(line['remote_host'])
33     for entry in userAgents:
34         if 'MSIE' in entry:
35             iexplorer = iexplorer + 1
36         elif 'Chrome' in entry:
37             chrome = chrome + 1
38         elif 'Firefox' in entry:
```

```

39             firefox = firefox + 1
40     elif 'Safari' in entry:
41         if 'iPhone' or 'iPad' in entry:
42             safariMob = safariMob + 1
43     else:
44         safari = safari + 1
45     elif 'Opera' in entry:
46         opera = opera + 1
47     elif 'FBAN' or 'FBIOS' in entry:
48         facebookApp = facebookApp + 1
49     else:
50         others.append(entry)
51         other = other + 1
52 print('IE:\u2022')
53 print(iexplorer)
54 print('Chrome:\u2022')
55 print(chrome)
56 print('Firefox:\u2022')
57 print(firefox)
58 print('Safari:\u2022')
59 print(safari)
60 print('Safari\u2022Mobile:\u2022')
61 print(safariMob)
62 print('Opera:\u2022')
63 print(opera)
64 print('Facebook\u2022App')
65 print(facebookApp)
66 print('Others:\u2022')
67 print(other)
68 if others:
69     for idx in range(0, 30):
70         print(others[idx])
71
72 graph_browsers = ['IE', 'Chrome', 'Firefox', 'Safari', 'Safari\u2022Mobile']
73 graph_browsersCount = [iexplorer, chrome, firefox, safari, safariMob,
74
75 data = DataFrame({'device': graph_browsers, 'count': graph_browsersCount})
76 print(data)
77
78 data.to_csv('../results/browsers.csv', sep='\t', encoding='utf-8')

```

```
79 print('Browsers Dataframe Saved.')
```

6.2.3 Device Analysis

```
1 from copy import deepcopy
2 from csv import DictWriter, DictReader
3 from datetime import datetime
4 from collections import Counter
5 from pandas import DataFrame
6 import seaborn
7
8 """
9
10         This code runs through the requests of each user and finds the
11         those specified it will be counted. The data will then be put
12
13 """
14
15
16 userAgent = []
17 users = []
18 others = []
19 mobile = 0
20 tablet = 0
21 desktop = 0
22 other = 0
23
24 with open('../results/gb-cleaned_log.csv') as in_f:
25     reader = DictReader(in_f)
26
27     fieldnames = deepcopy(reader.fieldnames)
28
29     for line in reader:
30         if line['remote_host'] in users:
31             pass
32         else:
33             userAgent.append(line['request_header_user_agent'])
34             users.append(line['remote_host'])
35     for entry in userAgent:
36         if 'Windows' in entry:
37             desktop = desktop + 1
38         elif 'Macintosh' in entry:
```

```

39             desktop = desktop + 1
40         elif 'iPhone' in entry:
41             mobile = mobile + 1
42         elif 'Android' in entry:
43             mobile = mobile + 1
44         elif 'BlackBerry' in entry:
45             mobile = mobile + 1
46         elif 'iPad' in entry:
47             tablet = tablet + 1
48         else:
49             others.append(entry)
50         other = other + 1
51 print('Desktop: ')
52 print(desktop)
53 print('Mobile: ')
54 print(mobile)
55 print('Tablet: ')
56 print(tablet)
57 print('Other')
58 print(other)
59 print(others)
60
61 graph_devices = ['Desktop', 'Mobile', 'Tablet', 'Other']
62 graph_devicesCount = [desktop, mobile, tablet, other]
63
64 data = DataFrame({'device': graph_devices, 'count': graph_devicesCount})
65 print(data)
66
67 data.to_csv('../results/devices.csv', sep='\t', encoding='utf-8')
68 print('Devices Dataframe Saved.')

```

6.2.4 Start & Drop Analysis

```
1 from copy import deepcopy
2 from csv import DictWriter, DictReader
3 from datetime import datetime
4 from collections import Counter
5 from pandas import DataFrame
6 import seaborn
7
8 """ THIS CODE NOW SEPARATES THE REQUESTS TO FIND ALL FROM ONE PARTI
9      It Then takes the first and last pages they were on and adds t
10     These are then used to create a dataframe counting the frequen
11     a drop off point and as a start point
12 """
13
14
15 exitPages = []
16 startPages = []
17 users = []
18
19
20 with open('../results/gb-cleaned_log.csv') as in_f:
21     reader = DictReader(in_f)
22
23     fieldnames = deepcopy(reader.fieldnames)
24
25     for line in reader:
26         if line['remote_host'] in users:
27             index = int(line['remote_host'])
28             idx = index - 1
29             exitPages[idx] = line['request_url_path']
30         else:
31             startPages.append(line['request_url_path'])
32             exitPages.append(line['request_url_path'])
33             users.append(line['remote_host'])
34
35 counts = Counter(exitPages)
36
37 graph_exitPages = [pair[0] for pair in counts.most_common(10)]
38 graph_exitPagesCount = [pair[1] for pair in counts.most_common(10)]
```

```
39 data = DataFrame({'exit_pages': graph_exitPages, 'count': graph_exitPa
40 print(data)
41 data.to_csv('../results/last_pages.csv', sep='\t', encoding='utf-8')
42 print('Exit_Pages_Dataframe_Saved.')
43
44 counts2 = Counter(startPages)
45
46 graph_startPages = [pair[0] for pair in counts2.most_common(10)]
47 graph_startPagesCount = [pair[1] for pair in counts2.most_common(10)]
48 data2 = DataFrame({'start_pages': graph_startPages, 'count': graph_st
49 print(data2)
50 data2.to_csv('../results/first_pages.csv', sep='\t', encoding='utf-8')
51 print('Starting_Pages_Dataframe_Saved.')
52 tarting Pages Dataframe Saved.'
```

6.2.5 Paths Analysis

```
1 from copy import deepcopy
2 from csv import DictWriter, DictReader
3 from datetime import datetime
4 from collections import Counter
5 from pandas import DataFrame
6 import seaborn
7
8 """
9
10    This code creates a path for each individual user of campleader
11    It then takes those paths and counts up the number of duplicates
12    The top 20 common paths will be taken and put into a dataframe
13    then a graph for analysis.
14
15 """
16
17
18 exitPages = []
19 startPages = []
20 users = []
21
22 listOfPaths = []
23
24 with open('../results/gb-cleaned_log.csv') as in_f:
25     reader = DictReader(in_f)
26
27     fieldnames = deepcopy(reader.fieldnames)
28
29     for line in reader:
30         if line['remote_host'] in users:
31             index = int(line['remote_host'])
32             idx = index - 1
33             listOfPaths[idx].append(line['request_url_path'])
34         else:
35             listOfPaths.append([line['request_url_path']])
36             users.append(line['remote_host'])
37
38 print(listOfPaths)
```

```
39 list_of_tuples = [tuple(elem) for elem in listOfPaths]
40
41 counts = Counter(list_of_tuples)
42 print(counts)
43
44 graph_paths = [pair[0] for pair in counts.most_common(20)]
45 graph_pathsCount = [pair[1] for pair in counts.most_common(20)]
46 data = DataFrame({'path': graph_paths, 'count': graph_pathsCount})
47 print(data)
48 data.to_csv('../results/common_paths.csv', sep='\t', encoding='utf-8')
49 print('Paths Dataframe Saved.')
```

6.3 Accessibility Test Screenshots

6.3.1 aXe Results - Homepage

The screenshot shows the Chrome DevTools Audits panel with the 'aXe' tab selected. The title bar indicates the page is 'Summer Camp America' at 'www.campleaders.com/gb/#'. The audit results show 46 violations found across various categories:

Category	Violation Count
Elements must have sufficient color contrast	19
id attribute value must be unique	3
Frames must have title attribute	1
<html> element must have a lang attribute	1
Images must have alternate text	17
Links must have discernible text	5

Below the audit results, the Smaller Earth logo and copyright information are visible.

6.3.2 aXe Results Detail Example- Homepage

The screenshot shows a browser window with the title "Summer Camp America" and the URL "www.campleaders.com/gb/#". The page content includes a logo for "smaller earth" and a copyright notice: "© Smaller Earth. All Rights Reserved. 1999-2016. Made by Cleversteam". Below the page content, the browser's developer tools are open, specifically the aXe audit tab. The audit results show 46 violations found. The first violation is detailed in the main pane:

RESULTS

Elements must have sufficient color contrast (19)

id attribute value must be unique (3)

Frames must have title attribute (1)

<html> element must have a lang attribute (1)

Images must have alternate text (17)

Links must have discernible text (5)

Violation 1 of 19

Ensures the contrast between foreground and background colors meets WCAG 2 AA contrast ratio thresholds
[\(More Info\)](#)

Target: body > header > .r_2015 > .r_menu_right > div:nth-of-type(1) > a

HTML:

```
<a href="/gb/summer-camps">
    Summer Camps
        <i class="fa fa-sort-desc"></i>
</a>
```

Summary:
Fix any of the following:

- Element has insufficient color contrast of 2.67 (foreground color: #ffffff, background color: #00aae3, font size: 12.0pt, font weight: normal)

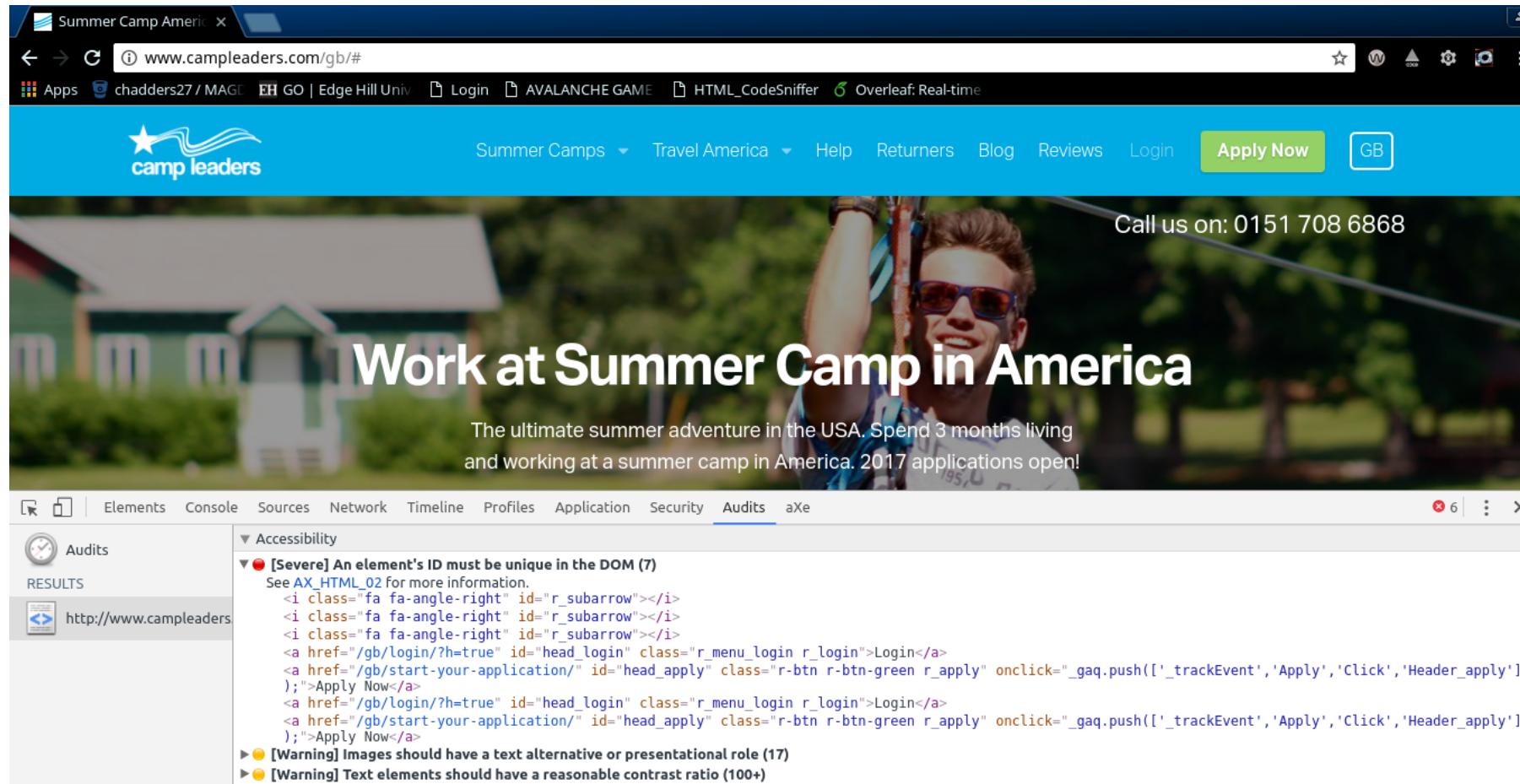
Related Nodes:

6.3.3 Audit Results - Homepage

The screenshot shows the Chrome DevTools interface with the 'Audits' tab selected. The left sidebar displays audit categories: 'Audits' (selected), 'RESULTS', and a partially visible 'http://www...'. The main content area is titled 'Accessibility' and lists the following findings:

- ▶ **[Severe] An element's ID must be unique in the DOM (7)**
- ▶ **[Warning] Images should have a text alternative or presentational role (17)**
- ▶ **[Warning] Text elements should have a reasonable contrast ratio (100+)**
- ▶ **[Warning] The purpose of each link should be clear from the link text (7)**
- ▶ **[Warning] The web page should have a title that describes topic or purpose (2)**
- ▶ **[Warning] The web page should have the content's human language indicated in the markup (2)**
- ▶ **[Warning] These elements are focusable but either invisible or obscured by another element (27)**
- ▶ **[Not applicable tests (12)]**
- ▶ **[Passing tests (6)]**

6.3.4 Audit Results Detail Example - Homepage



The screenshot shows a web browser window with the URL www.campleaders.com/gb/#. The page features a blue header with the Camp Leaders logo, navigation links for Summer Camps, Travel America, Help, Returners, Blog, Reviews, and a prominent green "Apply Now" button. Below the header is a large banner image of a smiling person at a campsite. A phone number "Call us on: 0151 708 6868" is displayed on the right side of the banner. The main headline reads "Work at Summer Camp in America". Below it, a sub-headline says "The ultimate summer adventure in the USA. Spend 3 months living and working at a summer camp in America. 2017 applications open!" At the bottom of the page, the browser's developer tools are open, specifically the "Audits" tab under the "aXe" section. The results show one severe error: "An element's ID must be unique in the DOM (7)" with the code snippet:

```
<i class="fa fa-angle-right" id="r_subarrow"></i>
<i class="fa fa-angle-right" id="r_subarrow"></i>
<i class="fa fa-angle-right" id="r_subarrow"></i>
<a href="/gb/login/?h=true" id="head_login" class="r_menu_login r_login">Login</a>
<a href="/gb/start-your-application/" id="head_apply" class="r-btn r-btn-green r_apply" onclick="_gaq.push(['_trackEvent','Apply','Click','Header_apply']);">Apply Now</a>
<a href="/gb/login/?h=true" id="head_login" class="r_menu_login r_login">Login</a>
<a href="/gb/start-your-application/" id="head_apply" class="r-btn r-btn-green r_apply" onclick="_gaq.push(['_trackEvent','Apply','Click','Header_apply']);">Apply Now</a>
```

There are also two warning items listed:

- [Warning] Images should have a text alternative or presentational role (17)
- [Warning] Text elements should have a reasonable contrast ratio (100+)

6.3.5 Wave Results - Homepage

60

The screenshot shows the Summer Camp America homepage with the WAVE web accessibility evaluation tool overlay. The WAVE tool interface includes a summary of detected issues: 21 Errors, 4 Alerts, 0 Features, 26 Structural Elements, 9 HTML5 and ARIA, and 42 Contrast Errors. The main page features sections for Eligibility, Reviews, and Returners, along with a 'Why Camp Leaders' section and statistics for years of experience, camp experts, and camps worked with. Below this is a 'Featured Blogs' section with three blog posts.

Summer Camp America x www.campleaders.com/gb/

WAVE
web accessibility evaluation tool

Styles No Styles Contrast

Summary
WAVE has detected the following:
21 Errors
4 Alerts
0 Features
26 Structural Elements
9 HTML5 and ARIA
42 Contrast Errors

Panel Options
DETAILS: A listing of all the WAVE icons in your page.
DOCUMENTATION: Explanation of the WAVE icons and how you can make your page more accessible.
OUTLINE: The heading structure of the web page.

Eligibility

Reviews

Returners

Why Camp Leaders

17 YEARS OF AMAZING AMERICAN SUMMERS

100+ CAMP EXPERTS TO HELP YOU FIND A JOB

500+ AMERICAN SUMMER CAMPS WE WORK WITH

Featured Blogs

Top tips to win over camp

18 reasons you should be a

Feedback | Powered by WebAIM

10:42 02/01/2017

6.3.6 Wave Results Detail Example - Homepage

61

Summer Camp America > www.campleaders.com/gb/

WAVE
web accessibility evaluation tool

Details

Contrast Errors (42)
 42 X Very Low Contrast [Sample](#)

Contrast Tools

Foreground color: #0000ff
Lighter | Darker

Background color: ffffff
Lighter | Darker

Contrast Ratio: 8.6:1
Normal Text: [Sample](#)
AA: Pass
AAA: Pass
Large Text: [Sample](#)
AA: Pass
AAA: Pass
[Desaturate page](#)

Feedback | Powered by WebAIM

Contrast Errors (42)

We've sent thousands of people to summer camp America over the past 17 years. Every one of our staff members has been to camp in America and collectively we have over 150 summers of experience. We've worked in all types of Camp Counselor jobs and in all types of summer camps, from private camps to special needs camps to underprivileged camps. When it comes to summer camp America jobs, we know our stuff.

Why Camp Leaders

17 YEARS OF AMAZING AMERICAN SUMMERS

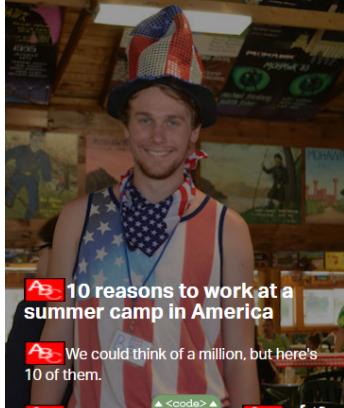
100+ CAMP EXPERTS TO HELP YOU FIND A JOB

500+ AMERICAN SUMMER CAMPS WE WORK WITH

Featured Blogs



A Top tips to win over camp directors
Liam has spent years working with American Camp Directors, here's his top application tips for you to win them over.



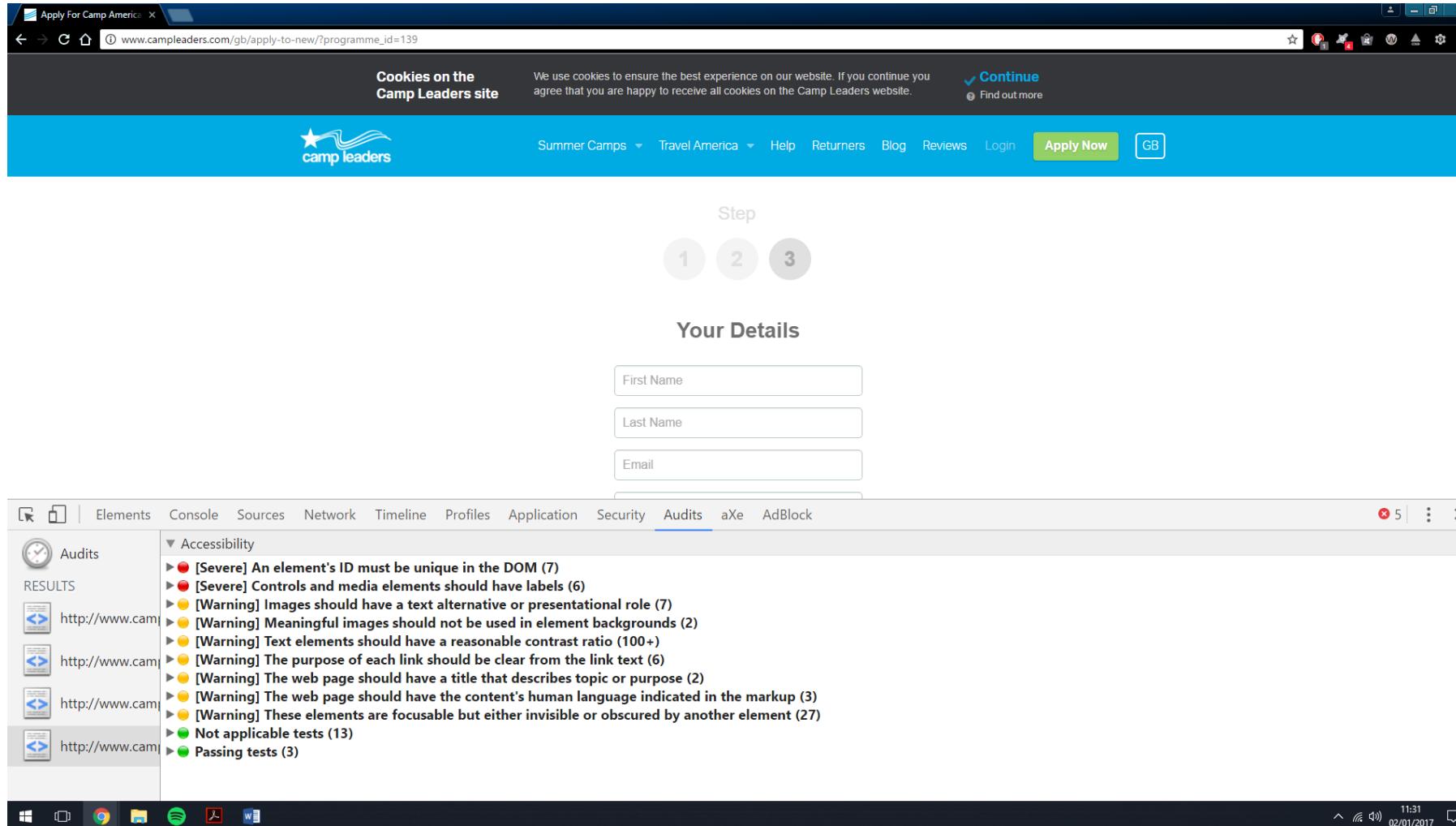
A 10 reasons to work at a summer camp in America
We could think of a million, but here's 10 of them.



A 18 reasons you should be a camp counselor next summer
Working as a summer camp counselor may be the one of the greatest experiences of your life. And here's why.

11 11 2016 | Laura McClements | [f](#) [t](#)

6.3.7 Audit Results - Apply to New Page



6.4 Performance Test Screenshots

6.4.1 Audit Results

The screenshot shows the Chrome DevTools Audits panel open on a page from campleaders.com. The main content area displays a list of performance optimization suggestions under two categories: Network Utilization and Web Page Performance. Each suggestion includes a severity icon (red for critical, yellow for informational), a link to the specific rule, and a count of how many times it applies.

Category	Suggestion	Count
Network Utilization	Combine external CSS	11
	Combine external JavaScript	18
	Leverage browser caching	14
	Minimize cookie size	
	Parallelize downloads across hostnames	28
	Serve static content from a cookieless domain	28
	Specify image dimensions	15
Web Page Performance	Optimize the order of styles and scripts	4
	Put CSS in the document head	12
	Remove unused CSS rules	3539

6.4.2 Audit Results Detail Example

The screenshot shows the Chrome DevTools Audits panel for the website www.campleaders.com. The main content area displays a performance audit report with three main sections:

- Network Utilization:** 11 CSS resources served from www.campleaders.com.
- Combine external JavaScript (18):** 18 JavaScript resources served from www.campleaders.com.
- Leverage browser caching (14):** Resources missing cache expiration and short-freshness cacheable resources.

On the left sidebar, there are two entries under the **RESULTS** section:

- <http://www.campleaders.com/>
- <http://www.campleaders.com/>

The top navigation bar of the browser window shows the URL www.campleaders.com/gb/, along with other tabs and icons.

6.5 Cognitive Walkthrough Notes

The following is an attached PDF document of the notes taken after analysing the Cognitive Walkthrough recordings.

Cognitive Walkthrough Findings (Desktop)

'I want to find out more about camp leaders and decide if I want to sign up or not'

- Homepage
 - Looked straight at 'Find out More'. And Click.
- About Page
 - Read through content, clear and interesting.
 - Page suggests at the bottom that I move on to 'Types of Camps'.
 - Clicked on 'Types of Camps' Button.
- Types of Camps
 - Looked straight to selection of images each with text.
 - Are they links?
 - Hovered over some and notices they darken.
 - Must be links?
 - Clicked on 'Sports Camps'.
- Sports Camps
 - Straight to list on RHS (Top Tips etc.). Text a bit small but nice way of listing key info.
 - Not sure if there is content below (cutoff).
 - 'At a Glance'? What is this? Just relevant words and phrases or links?
 - Hovering over the text shows they are links.
 - Looks like they could maybe go to another page or expand/animate to show more information regarding the particular phrase?
 - Clicking on them refreshes the page? What?
 - Oh well, move on.
 - Scroll down to suggested 'Job Roles' button. Click.
- Types of Jobs
 - Look straight at 2 images with text over top.
 - Then reads text, confused about colour of linked words as grey? What do they do?
 - Ignores this, moves back to images, hovers over, the text changes to short descriptions of the job types, clicks on 'Camp Counsellor'.
- Camp Counsellor
 - Scans content, notices eligibility, and skills required. Clicks 'Skills' Button.
- Skills Page
 - Notices images straight away, 2 large ones and 3 smaller ones underneath cutoff.
 - Hovering over the 2 big ones gives a description but the others do not. Are the bottom 3 less important? But outdoors? Shouldn't that be as important as sports coaching?
 - Clicked on 'Sports Coaching'.
- Sports Coaching
 - Image selection to different sports, same as before.
 - Looks at tennis coach page.
 - Noticed button 'A Day at camp' at bottom of page.
 - Clicks button.
- Day at Camp
 - Scanned content, scrolling down and then seen big button 'Application Process'.
 - Clicks button.
- Application Process
 - Looks like step by step guide?

- Images are very big? Scrolling down they take up the entire page hard to focus on the text in between.
 - At bottom notices pricing button, click.
- Pricing Page
 - Looks straight at two 'price plans'.
 - Buttons have changed to 'Apply Now, Pay Later'? But what if I want to pay straight away? Do I have to pay in instalments? What if I click the top 'Apply Now' Button? Can I Pay in full then?
 - Click top 'Apply Now' at top.
- Start Application
 - Step indicator at top says 2/3, what happened to 1?
 - Two main green buttons showing the choices I have.
 - Chose 'directly with children'.
- Apply to New
 - Looks straight at form
 - Clearly need to fill in the fields as labelled and click 'Register', but there is no specification as to which fields are required? Can I get away with not giving a phone number as I would rather not.
 - Entered all except phone number.
 - Clicked Registers.
 - Error? Page has refreshed and a new box has appeared, very ugly box with pink background, small black text and a thick blue border? It says 'Phone Number Can't Be Blank'? Okay so I need to enter a number? Feels like the page is showing me something from 'behind the scenes' rather than what should be on the page.
 - Entered Phone number and moved on, registered successfully.
- **DONE**

Cognitive Walkthrough Findings (Mobile - iPhone 5)

'I want to find out more about camp leaders and decide if I want to sign up or not'

- Homepage
 - Looks straight at main image with text over it. Can't See anything else.
 - It looks like all I can do is use the menu unless I can scroll down to see more content?
 - Taps Menu Icon, set of dropdown menus and 'Apply Now' button. Not sure which menu is right for me so going to retract menu and try scrolling.
 - Attempts to scroll down and finds more of the page, sees 'Find out More' button. That's what I am looking for. At least I assume it is a button there is no real way of knowing unless I try, Tap.
- About Page
 - Looks straight at large image title text. Some more text below it but nothing else, a gap at the bottom clearly shows I can scroll down.
 - Scrolls down, rest of content is quite clear and easy to read.
 - Scans text keeps going until reaches bottom and notices 'Types of Camps' button and site suggests that I tap that. Tap.
- Types of Camps
 - Top image and title takeover, cannot see content unless I scroll down. Same again.
 - Find set of images each with text over them they seem to be different types of camps. They might be links but don't know. Tried tapping image 'Special needs Camps' and now opened new page.
- Special Needs Camps
 - Nav & Big image and title taking up page. Scroll down to read more.
 - Items 'Top tips' etc are listed with icons but very small text, can just about read it though.
 - 'At a glance' section, is this just descriptive? Or interactive? Ignored and moved on.
 - Scanned rest of content until 'types of jobs' button reached. Tap.
- Types of Jobs
 - Big image and title again, need to scroll.
 - Reading first block of text, some words grey? What does that mean?
 - Rest are images, same list of links?
 - Tapped 'Camp Counsellor' image, just changed text on it to a description of what the job is. Is that it? Is that all I can find about it right now?
 - Only option I can see is the 'Apply Now' button at the bottom? Assume I can find out more about the jobs later on?
- Start Application
 - Looks straight at green buttons.
 - Top nav and logo at top with 3 circles with cutoff tops underneath, looks like they've got numbers in them? Moving on.
 - Buttons are options for what job role I want? Thought I'd looked at jobs?
 - There is some words around the buttons, are they linked?
 - Tapped 'Behind the Scenes'.
- Apply to New
 - Page opens, looks straight at step counter, must have been what was cutoff on the last page. Indicates that im at step 3? I THINK? Last page must have been step 2 so

what happened to step 1? Then looking down from Your Details title I can see a form for me to fill in to register.

- Form fields are labelled so I can enter what they want.
 - Don't want to put phone number in, do I have to? There is no 'required' indicators.
 - Filled in all except phone number.
 - Tapped 'register'
 - Page has refreshed and zoomed out. Can see the entire form now but really small and there is a new box above it . The box is pink with a blue border and I think it has some text in it?
 - Zoomed in manually and can now see the error message 'Phone Number cant be blank'. So I need to enter a phone number.
 - Entered all details and registered
- **DONE**

6.6 Heuristic Evaluation Notes

The following is an attached PDF document of the notes taken after analysing the Heuristic Evaluation recordings.

Heuristic Evaluation Findings (Desktop)

- Homepage
 - Visibility of system status: Hover feedback on buttons, very subtle. Top Navigation buttons either have dropdown feedback or none at all. With exception to Login button that is greyed out then goes white upon hover. Most interaction is Navigational.
 - Match between system and the real world: All real world terms and structure is common amongst websites.
 - Consistency and standards: N/A.
 - User control and freedom: No need.
 - Error prevention: Not much really just the presence of 'suggestive' navigational buttons. However, if they want more people to 'Apply Now' then why have that tucked away in top right and not in the center replacing or alongside 'find out more'. No real errors that can be made however as there is not actual user input.
 - Recognition rather than recall: Recognisable design with top nav bar, drop down menus etc.
 - Help and documentation: 'Help' link at top but does not work. Page continually refreshes and does not respond. URL suggests that login is required?
 - Flexibility and efficiency of use: Login button for returners and those experience with site, they can also use the dropdown menu to directly go to a page rather than navigate through the designed flow. Login should be a button, not a faded text link.
 - Aesthetic and minimalist design: Simple design, not too complicated just not that effective. Link in top section to 'Types of camps' not easy to read, white text on image is not very readable. Images are excessively large as well.
 - Help users recognize, diagnose, and recover from errors: No need for error messages
- About Page
 - Visibility of system status: Same as homepage. No interaction other than navigation.
 - Match between system and the real world: Same as homepage.
 - Consistency and standards: Design is consistent.
 - User control and freedom: No real control given other than the static top navigation.
 - Error prevention: No real need for errors.
 - Recognition rather than recall: Introduction of this flow (see notes) with button at bottom of page leading to next one in chain (types of camps). Sight is suggesting towards either following the page flow or jumping to apply page.
 - Help and documentation: Broken as before.
 - Flexibility and efficiency of use: Same as before.
 - Aesthetic and minimalist design: Same as before.
 - Help users recognize, diagnose, and recover from errors: No need.
- Pricing Page
 - Visibility of system status: Same as before.
 - Match between system and the real world: Same as homepage.
 - User control and freedom: No clear exit, can use Campleaders logo to get to home but users cannot get to their previous page without using the browser.
 - Consistency and standards: Design is consistent.

- Error prevention: Same as before.
- Recognition rather than recall: Confusion caused by lack of instruction. Appears to have choices between pricings but clicking either of the 4 apply buttons gets the user to same place. 3 of the Buttons have changed however to 'Apply Now Pay Later' causes questions of 'Is there a difference?' and 'Can you apply now pay now?'. Too Much thought.
- Help/Doc: Same as before.
- Flexibility and efficiency of use: Same as before.
- Aesthetic and minimalist design: Same design, Too many apply buttons all result in the same thing.
- Help users recognize, diagnose, and recover from errors: No need.
- Start Application
 - Visibility of system status: Not much different, same green button style for the two main ones.
 - Match between system and the real world: Same as homepage.
 - User control and freedom: No need.
 - Consistency and standards: Design is consistent.
 - Error prevention: No need.
 - Recognition rather than recall: Step indicator? Set to step 2 out of 3, 'What happened to 1?'. 'Or' text between the two buttons is not clear but it is obvious that they cannot choose both. The supposed explanatory words below the buttons may not be good enough, better with small written explanation rather than just a few words.
 - Help and documentation: Same as before.
 - Flexibility and efficiency of use New option at bottom for returners.
 - Aesthetic and minimalist design: Same simplistic design.
 - Help users recognize, diagnose, and recover from errors: No need.
- Apply to New
 - Visibility of system status: Clicking in fields highlights them and adds text cursor, same feedback with green button as previous ones.
 - Match between system and the real world: Same as homepage.
 - User control and freedom: No need.
 - Consistency and standards: Design is consistent.
 - Error prevention: No help text present when interacting with the form. User could assume that they do not need to fill in all of the fields.
 - Recognition rather than recall: Step indicator now at 3, same question again 'what about step 1?'
 - Help and documentation: Same as before.
 - Flexibility and efficiency of use: Good instruction to apply using own registered details of returners.
 - Aesthetic and minimalist design: Same design simple and clear but with flaws.
 - Help users recognize, diagnose, and recover from errors: Error message is poorly designed, appears above the form in a small pink box with thick blue outline. Text is small and black, not very readable. Also the message is very basic, simply says 'Email can't be blank' rather than 'An Email Address is required, Please Enter a valid Email Address'.

- **Notes**
 - Obvious Flow put in by developer:
 - About->types of camps(cycle)->types of jobs(cycle)->Types of Skills(cycle)->Day at Camp->Application Process->Pricing->Apply
 - Each page has a button at the bottom that leads on to the next one in the flow.
 - Most pages are the same with just with different content and no real interaction other than navigation. Real flaws are found in the application pages. Although the buttons and links in the other pages are not optimised.

Heuristic Evaluation Findings (Mobile)

- Homepage
 - Visibility of system status: Menu Interaction or Buttons, buttons have same basic feedback. Menu appears upon tapping menu ('burger') icon. Each element can be tapped to go to pages and some have drop down features. The dropdown elements require precise tap on the triangular symbol to work if you select the main item's text you are taken to that page. One of the menus does not have any sub items. List of image links do not look like links, tapping once changes the text to a description of the page it will go to then tapping a second time takes them to it. It is not clear to the user that they must do this.
 - Match between system and the real world: Same as with other tests.
 - User control and freedom: Some control with static navigation bar.
 - Consistency and standards: N/A.
 - Error prevention: No errors other than navigating to wrong page.
 - Recognition rather than recall: No instruction regarding image links. Recognisable Mobile Menu.
 - Help and documentation: Same error, link provided but does not work.
 - Flexibility and efficiency of use: Login link provides accelerator for returning users however this is very difficult to see.
 - Aesthetic and minimalist design: Simplistic design, fits the content in well.
 - Help users recognize, diagnose, and recover from errors: N/A
- About
 - Visibility of system status: Same as homepage. Simple buttons and top mobile navigation.
 - Match between system and the real world: Same as before.
 - User control and freedom: Same control from static navigation bar.
 - Consistency and standards: consistent design with large image at top with title overlay and remainder of content followed by navigational button at bottom.
 - Error prevention: N/A
 - Recognition rather than recall: N/A Only content for reading no interactive elements other than navigational.
 - Help and documentation: Same issue as before.
 - Flexibility and efficiency of use: Same as before with login button. No extra features.
 - Aesthetic and minimalist design: Same simplistic design.
 - Help users recognize, diagnose, and recover from errors: N/A
- Pricing
 - Visibility of system status: Same as before with buttons and navigation.
 - Match between system and the real world: Same as before.
 - User control and freedom: Same control from static navigation bar.
 - Consistency and standards: Same design and navigation.
 - Error prevention: N/A
 - Recognition rather than recall: No instruction given, suggests that one of the two price plans must be chosen but choosing either button or either of the 2 other apply buttons get you to the same place. Adds cognitive load where it may be better to mention the pricing as an advisory and let them choose after signing up.
 - Help and documentation: Same issue as before.

- Flexibility and efficiency of use: Same as before.
 - Aesthetic and minimalist design: Third party fees section does not fit into mobile well, RHS column squashed in. Footer is a very long list of links, seems like a lot to load in when the users are less likely to even look at them.
 - Help users recognize, diagnose, and recover from errors: N/A
- Start New Application
 - Visibility of system status: Same as before, buttons and nav.
 - Match between system and the real world: Same as before.
 - User control and freedom: Static nav remains.
 - Consistency and standards: Design not really changed just different content.
 - Error prevention: N/a
 - Recognition rather than recall: Same issue with step indicator as with previous test. Indicates stage 2, what happened to 1? Same as with desktop version.
 - Help and documentation: Same as above.
 - Flexibility and efficiency of use: Same as above.
 - Aesthetic and minimalist design: Same simplistic design with differing content.
 - Help users recognize, diagnose, and recover from errors: N/a
- Apply to New
 - Visibility of system status: Same with buttons and nav. Feedback when selecting a field highlighting it and cursor appears.
 - Match between system and the real world: Same as the rest of the site.
 - User control and freedom: Same as before.
 - Consistency and standards: Same consistent design,
 - Error prevention: No specification on what needs to be included, are all fields required?
 - Recognition rather than recall: No instruction on what to do instruction, user can 'muddle through' but should have help text.
 - Help and documentation: Same as above.
 - Flexibility and efficiency of use: Same as above. Also added link for returning users directly underneath form.
 - Aesthetic and minimalist design: Simple design, clean and allows focus on form elements.
 - Help users recognize, diagnose, and recover from errors: Page reloads zoomed out a lot with small error message box, unreadable and unusable without manually zooming back in.

6.7 Prototyping

6.7.1 Types of Camps Page: Before Changes

The screenshot shows a web browser window with the title 'Types of Summer Camp' at the top. The URL in the address bar is www.campleaders.com/gb/summer-camps/types-of-camps/#. The main heading 'Types of Camps' is displayed prominently over a background image of a campsite with green trees and a blue sky. Below the heading is a paragraph of text about the variety of summer camps available. To the right of the text are nine smaller images, each representing a different camp type: Private Camps, Agency Camps, Special Needs Camps, Jewish Camps, Christian Camps, Girl Scouts Camps, Sports Camps, Day Camps, and Weight Loss Camps. The bottom of the screen shows the Windows taskbar with various icons and the date/time '03/01/2017 16:37'.

At Camp Leaders there is a huge variety in the types of summer camp that you can work at. If you're unsure of which camp is for you, have a look at the different types and see which ones best suit your beliefs, hobbies or interests. During your application you can add your type of camp preference and we'll work to match you with the right camp. If you're enthusiastic, fun and up for adventure then you will fit right in at any summer camp in America. If you still can't decide, have a look at the types of skills you will need for the different activities and see which one suits you most.

Private Camps

Agency Camps

Special Needs Camps

Jewish Camps

Christian Camps

Girl Scouts Camps

Sports Camps

Day Camps

Weight Loss Camps

www.campleaders.com/gb/summer-camps/types-of-camps/weight-loss-camps/

6.7.2 New Types of Camps Page - 1

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The screenshot shows a web browser window for the Camp Leaders website. The URL is www.campleaders.com/gb/summer-camps/types-of-camps/. A cookie consent banner at the top left says 'Cookies on the Camp Leaders site'. It includes a link to 'Find out more' and two buttons: 'Continue' (with a checkmark) and 'Find out more'. The main header features the 'camp leaders' logo with a star and three wavy lines. The navigation bar includes links for 'Summer Camps', 'Travel America', 'Help', 'Returners', 'Blog', 'Reviews', 'Login', 'Apply Now', and a 'GB' button. The main content area has a large background image of a campsite with green trees and a blue sky. The title 'Types of Camps' is centered in white text. Below the title, a text block reads: 'At Camp Leaders there is a huge variety in the types of summer camp that you can work at. If you're unsure of which camp is for you, have a look at the different types and see which ones best suit your beliefs, hobbies or interests. During your application you can add your type of camp preference and we'll work to match you with the right camp. If you're enthusiastic, fun and up for adventure then you will fit right in at any summer camp in America. If you still can't decide, have a look at the types of skills you will need for the different activities and see which one suits you most.' To the right of this text are eight thumbnail images, each with a green button below it labeled with a camp type: 'Private Camps', 'Agency Camps', 'Special Needs Camps', 'Jewish Camps', 'Christian Camps', 'Girl Scouts Camps', 'Sports Camps', and 'Day Camps'. The bottom of the screen shows the Windows taskbar with icons for File Explorer, Google Chrome, Spotify, and Microsoft Word, along with system status icons like battery level and signal strength. The date and time in the bottom right corner are 03/01/2017 and 16:18.

Types of Camps

Each Image on this page is a different type of Summer Camp. Have a browse and Click on one to Find out More!

At Camp Leaders there is a huge variety in the types of summer camp that you can work at. If you're unsure of which camp is for you, have a look at the different types and see which ones best suit your beliefs, hobbies or interests. During your application you can add your type of camp preference and we'll work to match you with the right camp. If you're enthusiastic, fun and up for adventure then you will fit right in at any summer camp in America. If you still can't decide, have a look at the types of skills you will need for the different activities and see which one suits you most.

Private Camps

Agency Camps

Special Needs Camps

Jewish Camps

Christian Camps

Girl Scouts Camps

Sports Camps

Day Camps

6.7.3 New Types of Camps Page - 2



Each Image on this page is a different type of Summer Camp. Have a browse and Click on one to Find out More!

At Camp Leaders there is a huge variety in the types of summer camp that you can work at. If you're unsure of which camp is for you, have a look at the different types and see which ones best suit your beliefs, hobbies or interests. During your application you can add your type of camp preference and we'll work to match you with the right camp. If you're enthusiastic, fun and up for adventure then you will fit right in at any summer camp in America. If you still can't decide, have a look at the types of skills you will need for the different activities and see which one suits you most.



6.7.4 New Types of Camps Page - One Image Link Hovered Over

Each Image on this page is a different type of Summer Camp. Have a browse and Click on one to Find out More!

At Camp Leaders there is a huge variety in the types of summer camp that you can work at. If you're unsure of which camp is for you, have a look at the different types and see which ones best suit your beliefs, hobbies or interests. During your application you can add your type of camp preference and we'll work to match you with the right camp. If you're enthusiastic, fun and up for adventure then you will fit right in at any summer camp in America. If you still can't decide, have a look at the types of skills you will need for the different activities and see which one suits you most.

Private Camps

Agency Camps

Special Needs Camps

Jewish Camps

Christian Camps

Girl Scouts Camps

Sports Camps

Day Camps

Weight Loss Camps

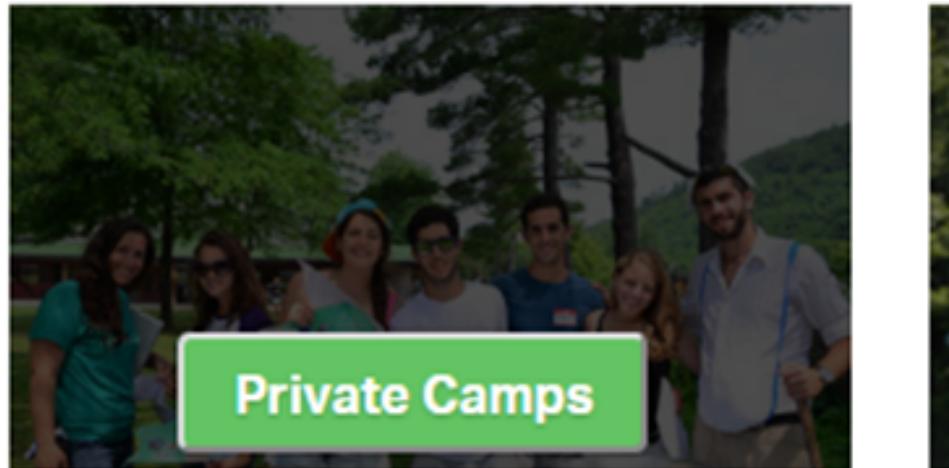


6.7.5 New AboTypes of Campst Page: Enhancement 1 - Added Text

82



6.7.6 New Types of Camps Page: Enhancement 2 - Hover Difference



38

6.7.7 New About Page: Code Changes - New Styling

```
1 <!--  
-->  
2 <!-- NEW STYLE BELOW -->  
3 <!--  
-->  
4  
5 <style>  
6         /*Make new Instructional Text Clear and  
           Readable*/  
7         #instruction {  
8             font-size: 20px;  
9             font-weight: bold;  
10            color: #000000;  
11        }  
12  
13         /*Lower the Buttons*/  
14         .r_card_title {  
15             padding-top: 5em;  
16         }  
17  
18         /*Make the Images Lighter before hovering to help  
           Buttons Stand Out */  
19         .overlay_bla {  
20             background-color: rgba(0, 0, 0, 0.25);  
21         }  
22  
23         /*Make Buttons Darker Shade of Green*/  
24         .r-btn-green {  
25             background-color: #62c462 !important;  
26         }  
27     </style>
```

6.7.8 New About Page: Code Changes - New Buttons

```
1 !
2 <!-- CHANGES MADE: -->
3 <!-- -Changed Text within each image to button.
     -->
4 <!-- -Applied 'r-btn r-btn-green r_apply' class to
     buttons. -->
5 <!--
     -->
6
7
8 <div class="r_cards_landing2">
9   <p id="instruction">Each Image on this page is a
     different type of Summer Camp. Have a browse and
     Click on one to Find out More!</p>
10  <div class="r_card_text_double">
11
12 At Camp Leaders there is a huge variety in the
    types of summer camp that you can work at. If
    you are unsure of which camp is for you, have a
    look at the different types and see which ones
    best suit your beliefs, hobbies or interests.
    During your application you can add your type of
    camp preference and we will work to match you
    with the right camp. If you are enthusiastic,
    fun and up for adventure then you will fit right
    in at any summer camp in America. If you still
    can not decide, have a look at the types of
    skills you will need for the different
    activities and see which one suits you most.
13
14
15  </div>
16
17
18
```

```

19      <div class="r_card r_card_s">
20          <a href="/gb/summer-camps/types-of-camps/
21              private-summer-camps">
22                  <div class="overlay_black"></div>
23                  
25                  <div class="r_card_wrap">
26                      <div class="r_card_title">
27                          <button class="r-btn
28                              r-btn-green r_apply">Private
29                                  Camps</button>
30                  </div>
31          </a>
32      </div>
33
34      <div class="r_card r_card_s">
35          <a href="/gb/summer-camps/types-of-camps/
36              agency-camps">
37              <div class="overlay_black"></div>
38              
41              <div class="r_card_wrap">
42                  <div class="r_card_title">
43                      <button class="r-btn r-btn-green r_apply"
44                          >Agency Camps</button>
45                  </div>
46          </a>
47      </div>
48
49      <div class="r_card r_card_s">
50          <a href="/gb/summer-camps/types-of-camps/
51              special-needs-summer-camps">
52              <div class="overlay_black"></div>
53              
49    <div class="r_card_wrap">
50        <div class="r_card_title">
51            <button class="r-btn r-btn-green r_apply">
52                Special Needs Camps</button>
53            </div>
54        </div>
55    </a>
56 </div>
57
58 <div class="r_card r_card_s">
59     <a href="/gb/summer-camps/types-of-camps/
jewish-summer-camps">
60         <div class="overlay_black"></div>
61         
62         <div class="r_card_wrap">
63             <div class="r_card_title">
64                 <button class="r-btn r-btn-green r_apply">
65                     Jewish Camps</button>
66                 </div>
67             </div>
68         </a>
69     </div>
70
71     <div class="r_card r_card_s">
72         <a href="/gb/summer-camps/christian-camps">
73             <div class="overlay_black"></div>
74             
75             <div class="r_card_wrap">
76                 <div class="r_card_title">
77                     <button class="r-btn r-btn-green r_apply">
78                         Christian Camps</button>
79                 </div>
80             </div>
81         </a>

```

```
82     </div>
83
84     <div class="r_card r_card_s">
85         <a href="/gb/summer-camps/types-of-camps/
86             girl-scouts-summer-camps">
87             <div class="overlay_black"></div>
88             
91             <div class="r_card_wrap">
92                 <div class="r_card_title">
93                     <button class="r-btn r-btn-green r_apply">
94                         Girl Scouts Camps</button>
95                 </div>
96
97             </div>
98         </a>
99     </div>
100
101     <div class="r_card r_card_s">
102         <a href="/gb/summer-camps/types-of-camps/
103             sports-summer-camps">
104             <div class="overlay_black"></div>
105             
108             <div class="r_card_wrap">
109                 <div class="r_card_title">
110                     <button class="r-btn r-btn-green r_apply">
111                         Sports Camps</button>
112                 </div>
113
114             </div>
115         </a>
116     </div>
117
118     <div class="r_card r_card_s">
119         <a href="/gb/summer-camps/types-of-camps/
120             day-camps/">
121             <div class="overlay_black"></div>
```

```
113      
115      <div class="r_card_wrap">
116          <div class="r_card_title">
117              <button class="r-btn r-btn-green r_apply">
118                  Day Camps</button>
119          </div>
120      </a>
121  </div>
122
123  <div class="r_card r_card_s">
124      <a href="/gb/summer-camps/types-of-camps/
125          weight-loss-camps/">
126          
129          <div class="r_card_wrap">
130              <div class="r_card_title">
131                  <button class="r-btn r-btn-green r_apply">
132                      Weight Loss Camps</button>
133              </div>
134          </a>
135      </div>
136  <div class="cf"></div>
137 </div>
```

6.8 Prototype Testing

6.8.1 Prototype: Cognitive Walkthrough Notes

The following is an attached PDF document of the Cognitive Walkthrough findings using the 'Types of Camps' page prototype.

Cognitive Walkthrough Prototype Test Findings (Desktop)

'I want to find out more about the Special Needs Camps'

- Types of Camps
 - Looked straight at the selection of images, each one has a green button. (Quite a lot of green!)
 - Text above them explains what they are. Need to find 'Special Needs Camps'.
 - Hovering over image for 'Special Needs Camps', image darkens almost completely and button highlights.
 - Clicks Button.
- Special Needs Camp Page
 - Made it!
 - Done

Original Notes from previous Test:

- Types of Camps
 - Looked straight to selection of images each with text.
 - Are they links?
 - Hovered over some and notices they darken.
 - Must be links?
 - Clicked on 'Sports Camps'.

6.8.2 Prototype: Heuristic Walkthrough Notes

The following is an attached PDF document of the Heuristic Evaluation findings using the 'Types of Camps' page prototype.

Heuristic Evaluation Prototype Findings (Desktop)

- Types of Camps Page
 - Visibility of system status: Users can see that they need to choose a type of camp from the selection provided. Overlay buttons and hover feedback shows the images as interactive. Clearly they can be clicked.
 - Match between system and the real world: Same recognisable design from other sites with top navigation bar and structured content.
 - Consistency and standards: Consistent design with rest of page (all image links match new ones).
 - User control and freedom: No exit provided but users can understand exactly how they can interact with the page.
 - Error prevention: N/A
 - Recognition rather than recall: Recognisable button design suggests images are links.
 - Help and documentation: Same issue as found in previous tests.
 - Flexibility and efficiency of use: No additional flexibility other than the static navigation bar that can be used by those who are aware of the different pages on the site.
 - Aesthetic and minimalist design: Design is simplistic, new buttons on images could arguably make it a bit too 'busy' or overcrowded. However this is a trade off between aesthetics and usability.
 - Help users recognize, diagnose, and recover from errors: No errors possible other than navigational so N/A.

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