

# Think Aloud

**Project 2**

**User-Centered Research & Evaluation**

**Nila Banerjee**

**Spring 2016**

## Executive Summary

Despite having numerous powerful features, a product will not succeed with users if those features are inaccessible. This is exactly the problem faced by WordPress, a popular service to create and manage websites, as determined by the usability test detailed in this report. In this usability test, two participants performed think alouds while executing two relatively simple tasks to modify a WordPress-hosted website. Both users reported frustration and confusion in using WordPress and felt lost between the menus, submenus, and options. The hypotheses that the menu nesting would cause difficulty and that the users would have an unpleasant experience were supported. The findings demonstrated that WordPress currently has a confusing naming scheme for menus and options and a poorly structured system, which lead to numerous usability problems. Recommendations include revamping the naming scheme and reorganizing the features into a more intuitive structure, while keeping in mind that the average user is most likely unfamiliar with web development.

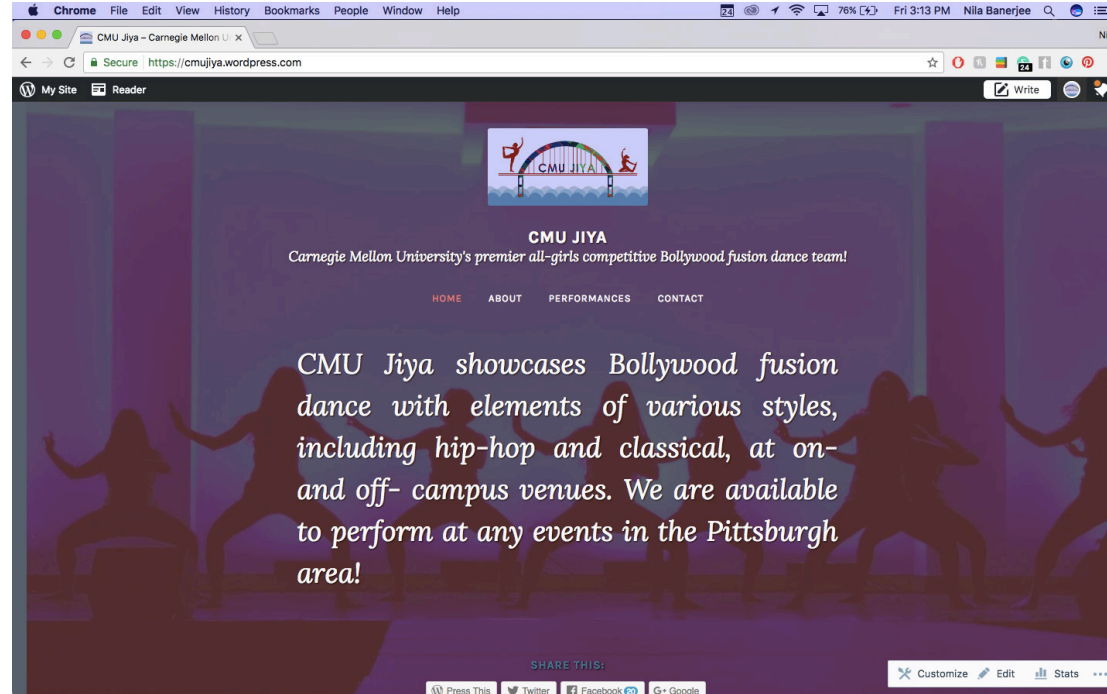
## Background

As we move into an era of ubiquitous technology, the need to create and maintain high-quality websites has become indispensable for most businesses and professionals. WordPress, which describes itself as a “full content management system and so much more through the thousands of plugins and widgets and themes,” is one service that supports this goal by allowing users to establish and customize their own websites. Theoretically, such a service should be designed for users who are unfamiliar with complex coding and technology, but possess basic computer skills- ideally, every local mom-and-pop shop should be able to make their own WordPress. Although practice will make users more proficient and efficient in task completion, there should be a large degree of ‘walk up and use’-ability for a product that helps non-coders create websites. We can assume that the majority of WordPress users do not have a strong web development background, creating the need for services that allow simple creation of websites. Personally, I have had numerous problems with WordPress and have not enjoyed my experience very much. Therefore, I wanted to test a few aspects of WordPress’ user interface on other individuals to understand if they faced similar difficulties and to pinpoint where and how negative experiences can arise.

## Method

My method mainly tested the learnability and user satisfaction of the WordPress UI. After introducing the purpose and procedure, I had my users participate in a think aloud in conducting the following tasks, while a screen capture recorded their narration and the screen. The correct steps to accomplish each task are listed below the name of the task. The consent form used in this study was taken from the template provided by Usability.gov. I was more interested in the actual usability of WordPress rather than the onboarding process, so I had my two users conduct the tasks on a website that I currently manage. I assumed that the two tasks focused on fairly basic items that any given user would want to easily manipulate (the site's tagline and header font). I was already logged in before the study began, so users were presented with the following screen at the start of the study.

There are numerous advantages of conducting a think aloud to understand the problems with an interface. Not only do think alouds help pinpoint the specific strengths and weaknesses of a particular problem, but they also make the designer more familiar with the user. As users work through a task and narrate their journey, the researcher gains a better understanding of what the users are actually thinking and feeling. Think alouds are also quite successful as a large majority (around 80%) of usability problems can be identified with less than 10 tests. Finally, think alouds are usually relatively fast and low-budget, making them a flexible option to test many products and services. Moreover, I had the added benefit of conducting the study in-person, which gave me more direct access to and allowed for a better rapport with the participants.



## Hypotheses:

The user will not be able to or will have significant trouble completing the task because the features are nested in a non-intuitive manner.

The user will not have a pleasant experience in completing (or attempting to complete) the tasks.

## Steps:

- 1) Introduce the experiment
  - 1a) Encourage them to look for problems
  - 1b) Sign the consent form
- 2) Demonstrate what a think aloud is
- 3) Ask background questions
- 4) Introduce the tasks
- 5) Have them perform the tasks
- 6) Ask post-experiment questions
- 7) Thank the participants

## Tasks:

1) Change the tagline (Currently: "Carnegie Mellon University's premier all-girls competitive Bollywood fusion dance team!")

'My Site'

'Settings'

'Site Tagline' [Change text in field]

'Save Settings'

2) Change the font of headings

'My Site'

'Themes Customize'

'Fonts'

[Choose any font under "Headings"]

'Save & Publish'

The correct steps are outlined below the task.

## Background Questions:

- 1) Do you know what WordPress is? If yes, can you briefly describe it?
- 2) Have you ever created or edited a WordPress site before?
- 3) Are you familiar with any other website-creating service (not code-based)?
- 4) Do you have any other questions before we begin?



Participant 1 completing the study.

## Posttest Questions:

(follow-up questions asked as needed)

- 1) What did you love about that?
- 2) What did you hate about that?
- 3) What were the toughest or most annoying aspects?
- 4) What were the easiest or most fun aspects?
- 5) Is there anything else you would like to add?

# Participant 1

## Consent Form

I agree to participate in the study conducted by Nilanjana Banerjee. All of the data will be for class usage only. Any identifiable information will be omitted if and when anything related to this project is used outside the classroom.

I understand that participation in this usability study is voluntary and I agree to immediately raise any concerns or areas of discomfort during the session with the study administrator.

Please sign below to indicate that you have read and you understand the information on this form and that any questions you might have about the session have been answered. Your electronic signature here constitutes an agreement equivalent to a written signature.

Thank You!

Date: 3/24/17

Please sign your name: Nidhi Patel

## Background Questions:

1) Do you know what WordPress is? If yes, can you briefly describe it?

Yes. It's used for designing websites.

2) Have you ever created or edited a WordPress site before?

No.

3) Are you familiar with any other website-creating service (not code-based)?

No, only HTML.

4) Do you have any other questions?

No.

## Post-experiment Questions:

1) What did you love about that?

Nothing.

2) What did you hate about that?

There aren't descriptive titles for things you're trying to find. There should be one main menu instead of trying to click into different submenus.

3) What were the toughest or most annoying aspects?

You get misled, like you think it'll be in "Settings" but it's somewhere else.

3a) Do you think you would have been able to complete the task without a hint?

It would have taken more time on the first task if I hadn't gotten a hint, but the second task was more straightforward to accomplish.

4) What were the easiest or most fun aspects?

I liked picking fonts, but that's not specific to this.

5) Is there anything you would like to add?

Designing websites is hard.

## Participant 2

### Consent Form

I agree to participate in the study conducted by Nilanjana Banerjee. All of the data will be for class usage only. Any identifiable information will be omitted if and when anything related to this project is used outside the classroom.

I understand that participation in this usability study is voluntary and I agree to immediately raise any concerns or areas of discomfort during the session with the study administrator.

Please sign below to indicate that you have read and you understand the information on this form and that any questions you might have about the session have been answered. Your electronic signature here constitutes an agreement equivalent to a written signature.

Thank You!

Date: 3/25/17

Please sign your name: Anuradha Srikanth

### Background Questions:

1) Do you know what WordPress is? If yes, can you briefly describe it?

Yes, it's a website that allows you to customize to create your own website.

2) Have you ever created or edited a WordPress site before?

Yes.

3) Are you familiar with any other website-creating service (not code-based)?

Yes, Wix.

4) Do you have any other questions?

No.

### Post-experiment Questions:

1) What did you love about that?

I like that there's a lot of things you can customize, once you find it. The technical aspects are good, but they're organized really badly and non-intuitively.

2) What did you hate about that?

Things aren't on the same page or menu. You're editing everything on the same page, but they're not distinguished in useful ways. If the main point is to customize templates, there should be a separate menu for if you want to customize versus edit how you send info/sharing/domain names. If I can't find basic things like fonts, it's not useful to have options to change things like privacy settings.

3) What were the toughest or most annoying aspects?

Words that mean the same thing (like Customize & Edit) serve different functions so if you're not familiar then you won't know what to do. They give equal importance to all the functionalities they have but that's not useful to most users.

3a) Do you think you would have been able to complete the task without a hint?

It would have taken me so much longer if I hadn't gotten hints. I was completely guessing.

4) What were the easiest or most fun aspects?

Nothing really.

5) Is there anything you would like to add?

No.



# Findings

## Severity Rating

- 1** – The user momentarily experienced a low level of discomfort and/or confusion; these problems are the lowest priority.
- 2** – The user experienced moderate discomfort and/or confusion but was able to recover from the problem fairly quickly.
- 3** – The user was quite uncomfortable and/or confused to the point where it interfered with completion of the task and it took a significant amount of time to understand how to proceed; these problems can deter users from building accurate mental models of the system and using it well/correctly.
- 4** – The user was unable to complete the task and was totally unsure of how to proceed; these problems are the highest priority and may cause users to unsubscribe from the product.

My severity ratings are based on the degree to which the feature interfered with task completion. The ratings are organized in order of priority with 1 representing the lowest priority and, therefore, deserving the smallest proportion of resources, and 4 representing the most critical problems that should be addressed immediately.

## Aspects

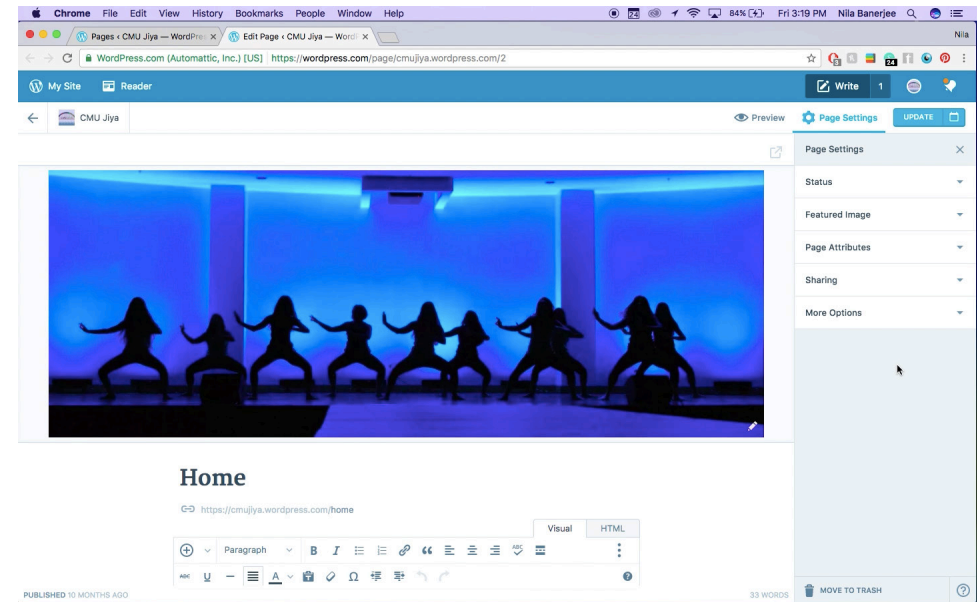
- 'Edit' Button
- 'My Site' Menu
- 'Themes' Menu
- 'Save & Publish' Button

## 'Edit' Button | Problem

This is a button on the bottom right corner visible when logged into WordPress and viewing any given page on one's site that leads to the pictured page.

**Evidence:** Both users clicked on this button first when trying to change the site's tagline. However, this button only allows one to edit the currently viewed page rather than elements that are constant site-wide. Both users spent quite a bit of time analyzing the presented page before realizing that they would not be able to accomplish the task from here. Participant 2 reasoned that since the tagline was placed on top of the home page's featured picture, they may be related, and clicked on the picture. However, they were presented with a picture selection menu, which was not useful.

**Explanation:** My belief is that users clicked on this button as it was the first one they noticed that would allow them to edit the website. If not the exact item they were interested in, it would at least allow them to access other menus and options that may be useful. However, the users did not find strong indication that only page-specific elements could be changed here and continued to explore this page to try to find helpful elements. Furthermore, they did not notice the elements that would have allowed them to go to the main 'My Site' menu. This left them feeling confused and frustrated with no way to recover from their error.



### Severity: 3

Users spent a considerable amount of time on this page and did not respond to the cues guiding them to other menus. Clicking this button was a critical incident as both users began the study feeling confident about the prescribed tasks, but became increasingly frustrated as they could not find anything seemingly helpful on this page.

### Possible Solutions:

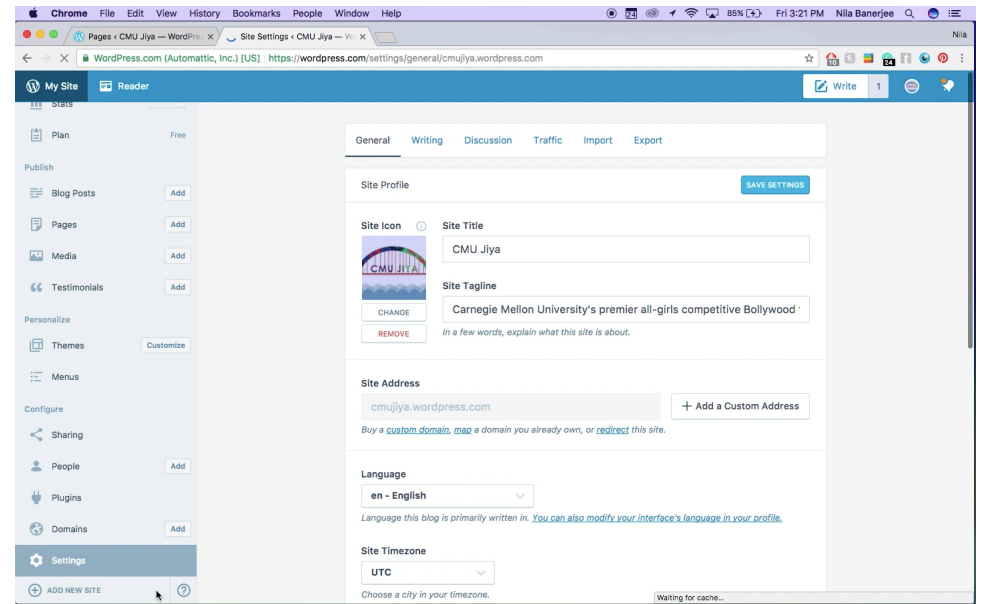
- 1) Change the button to say 'Edit This Page' to indicate that only page-specific elements can be edited here.
- 2) Provide better cues on how to exit this page and navigate to the main menu.

## 'My Site' Menu | Problem

This is the main menu on the left of the screen used to edit a WordPress-hosted website and contains the large majority of the options a user has.

**Evidence:** Both users navigated to this menu later than they ideally should have. Once they arrived there, they clicked through numerous items before reaching the desired sub-menus. At one point, Participant 2 even admitted that they were guessing and clicked through each item before being nudged towards the correct element. Both users expressed confusion over the naming of the items and understanding what features they could manipulate from each item on this menu.

**Explanation:** Neither user seemed to initially realize that this was even a menu. Even when they were within the menu, they did not seem to understand what most of the items meant and how the desired elements could be reached. The structure of this menu and its submenus, as well as the naming scheme of the items, can be extremely confusing for the novice user and can foster inaccurate mental models. For example, changing the tagline requires navigating to the 'Settings' submenu and changing the header font requires clicking on the 'Customize' button in the 'Themes' item, which does not seem to make much sense to users. Someone may feel that 'Settings,' 'Customize,' and 'Edit' are synonymous or serve similar functionalities when, in fact, these buttons signal quite distinct functions. Post-test interviews revealed that the organization of this menu was quite confusing and unnavigable, supporting my hypothesis.



### Severity: 4

A user who feels that they have no way to recover from their mistake may simply stop using the site completely if they do not seek out help and/or documentation. Moreover, this menu cultivates an inaccurate mental model of website structure by giving inordinate access to different features, as one user commented.

### Possible Solutions:

Change the name to 'Main Menu' or something similar to signal that this is the resource users to employ to manage their site.

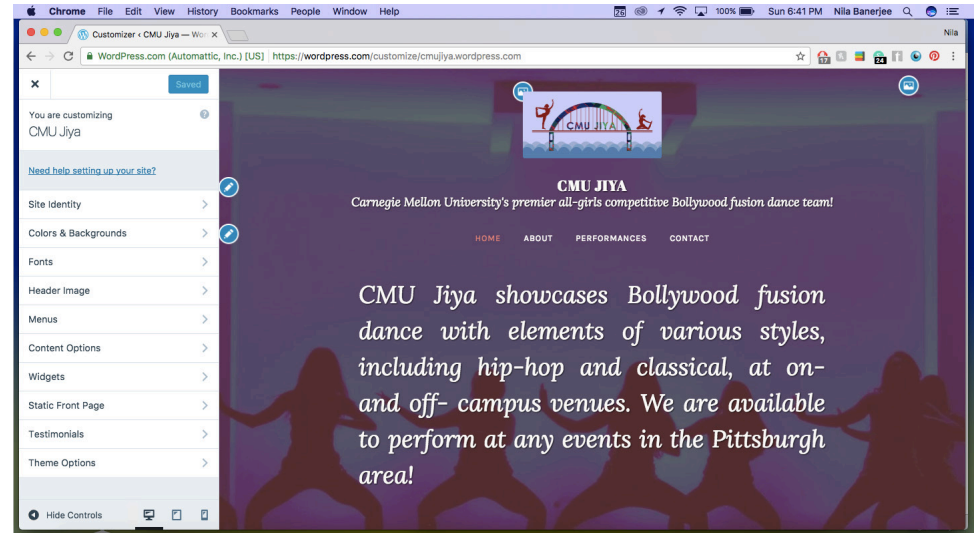
Use more intuitive structure and item names such that users can glance at the menu and understand where something is located. For example, going to 'Settings' allows one to control many site-wide functionalities; changing the name to 'Site-Wide Settings' may better indicate this.

## 'Themes' Menu | Problem

This submenu allows the user to change the overall theme of their page; users must click on 'Customize' to change their own theme.

**Evidence:** Users firstly did not realize that this menu would give them access to elements, such as the font, and did not initially think to click on this. They both clicked on 'Themes,' saw the list of possible themes, and exited to another menu. Later on, they clicked on 'Customize,' which is pictured here, and were able to change the font choices. However, neither user seemed confident that either 'Themes' or 'Customize' would lead them closer to their goal.

**Explanation:** Users did not seem to understand that the font would be a part of the theme's settings. This may be due to the fact that they did not set up the website and were mostly unfamiliar with the purpose of a website theme. However, it seems unintuitive that changing your current theme's settings should be a submenu of picking an entirely new theme. Perhaps, users may have felt that the 'Customize' button would lead them to something code-based (as some other buttons do), when it actually leads to a menu of options.



### Severity: 2

This is an easy problem to fix and seems to be more of a wording than functionality issue. It created some confusing amongst my participants, but they were able to eventually achieve their desired outcome. The focus just needs to be shifted to editing the current design rather than completely redesigning the site.

### Possible Solution:

Change the name to 'Theme' or 'Customize Theme' and present an option on the subsequent menu to access more themes

## 'Save & Publish' Button Positive Feature

Located at the top of the theme customizer, this button allows the user to view, in context, the theme-related changes they make to their site. It says 'Saved' when the page is up-to-date, as in the picture.

**Evidence:** Both users immediately clicked this button after choosing a new font and seemed glad that the change they had made was being correctly executed on the page.

**Explanation:** Both users noticed and utilized this button with minimal effort and no visible confusion, indicating that it is easily visible, accessible, and intuitive. Furthermore, this feature allows for almost immediate feedback to changes a user makes, which supports their knowledge of their progress on a task and gives them a greater sense of control over their site (than if they had to navigate to another link/tab/window).

**Benefit:** Presenting the site to the side of the menu allows the user to quickly toggle between changes and assess their impact on the overall page, as Participant 1 did by evaluating how multiple fonts looked on the page. It also immediately publishes changes to the live site, minimizing the amount of effort users must expend. Furthermore, switching between 'Save & Publish' and 'Saved' provides strong visibility of the system's status.



## Conclusion

Overall, WordPress equips users with a relatively powerful content management system with numerous useful features and ways to customize one's own site. However, the service would benefit from an overhaul of their user interface, especially the way options and features are structured and presented to the users. In both of my tests, users had clearly defined goals that they wished to accomplish, yet were thoroughly confused as to how to achieve those goals. The numerous menus are not labeled or organized intuitively and users often found themselves confused as to how to proceed, greatly hindering both the learnability of the product and satisfaction of the user. Due to the confusing structure of the service, error recovery is sometimes also not supported, such as when users click through to a page but are unsure of how to return to the main menu. Participant 1 commented that 'designing websites is hard;' users should never leave a product feeling as though it made their day more difficult.

I would recommend that the WordPress team focus on restructuring their user interface to organize options in a more intuitive and easily discoverable manner. The fact that most users will likely be novices unfamiliar with web development or those looking to quickly build a website should be kept at the forefront of the design team's mind. Menu and feature names should also be changed to be more representative of their functions and where users will go by clicking on them. However, a drastic overall may disrupt current users who have grown accustomed to WordPress; these changes should be rolled out slowly to give users time to learn them little by little, instead of being overwhelmed at once. All in all, these changes will help both old and new users cultivate better mental models and will make them more successful at using WordPress.