



Microsoft SharePoint Page Creation Usability Study

Microsoft SharePoint for Education Usability Study Report

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Executive Summary

As part of the HCDE 517: Usability Studies course at the University of Washington, our team collaborated with Microsoft to evaluate SharePoint for use in educational settings, with the primary goals of identifying problematic issues that users experience, and the functions that would be most beneficial to them for academic use.

Our study utilized a highly structured test design, with a multi-method approach that allowed us to understand participants experience with SharePoint from physical, behavioral, cognitive, social, and emotional perspectives. At a high level this multi-method approach was primarily driven by task analysis, surveys, and participant interviews.

In this process we recruited and tested 10 participants, comprised of six students and four academic administrators. Two participants were defined as experts (individuals with prior website or page creation experience), while the remaining eight were defined as novices (individuals with little or no prior website or page creation experience). Each participant completed a pre-test interview, a series of 10 tasks, and a post-test interview and survey.

In terms of usability principles our finding may be summarized as follows:

- **Efficiency & Effectiveness:** Participants were able to easily create and edit simple content, but struggled with organizing web parts, and web parts that required multiple steps. Users could benefit from more obvious and distinct web part choices, and the simplification of multi-step web parts.
- **Learnability & Intuitiveness:** Participants rated the difficulty of the study objectives as primarily neutral, and were able to complete the tasks at a rate of 90% or higher with a single prompt. Additional improvements may come from more consistent information architecture and enhanced interaction within the application.
- **Usefulness & Satisfaction:** In general users have the functions they need to create a web page, but usefulness and satisfaction may be enhanced by adding additional web parts related specifically to academia.

Additional findings and recommendations are laid out in great detail in the remainder of our report. We strongly believe both the findings and recommendations provided herein will not only help enhance the usability of SharePoint, but will help Microsoft expand its market share in educational settings.

We thank Microsoft and our liaisons there, Marcella Silva and Olivia Harold; our course instructors, Liz Sanocki and Gabby Mehlman; and the HCDE program and the University of Washington in general for the opportunity to collaborate on this usability study, which we hope you will find of value.

Overview

As part of the HCDE 517: Usability Studies course at the University of Washington, our team collaborated with Microsoft to evaluate SharePoint for use in educational settings.

Microsoft SharePoint is a web-based application that can be used to create, store, and distribute information. It allows you to collaborate with others by using content and features in a website-like format. SharePoint is highly customizable and can be used as a platform to build anything from a personal portfolio or department website to an intranet for a larger group or organization.

Research Goals and Questions

Due to the numerous ways SharePoint can be used, we focused our study on initial experience of site and page creation with two primary goals: 1) identify issues that university students and administrators might encounter when creating, editing, and organizing web pages in SharePoint, and 2) discover the functions that are the most beneficial to students and administrators when using SharePoint in an academic setting.

From the framework of usability, these goals helped us formulate the following research questions which drove the planning, moderation, and results of the study:

- **Efficiency & Effectiveness:** How easily and successfully can users create, edit, and organize the web parts in their own communication sites?
- **Learnability & Intuitiveness:** Can users perform common tasks with little or no assistance?
- **Usefulness & Satisfaction:** Does the site provided the functions users need and expect for creating a website/page?

The following section illustrates our methods of participant recruitment, test environment, and test procedures of our usability study. Later, we will discuss our metrics and our process of data analysis. The remainder of this report will start with key findings, all results and recommendations we have for Microsoft that may enhance the use of SharePoint in educational settings. Finally, it will end at our conclusions of the study imitations, reflection as well as conclusion and future research steps.

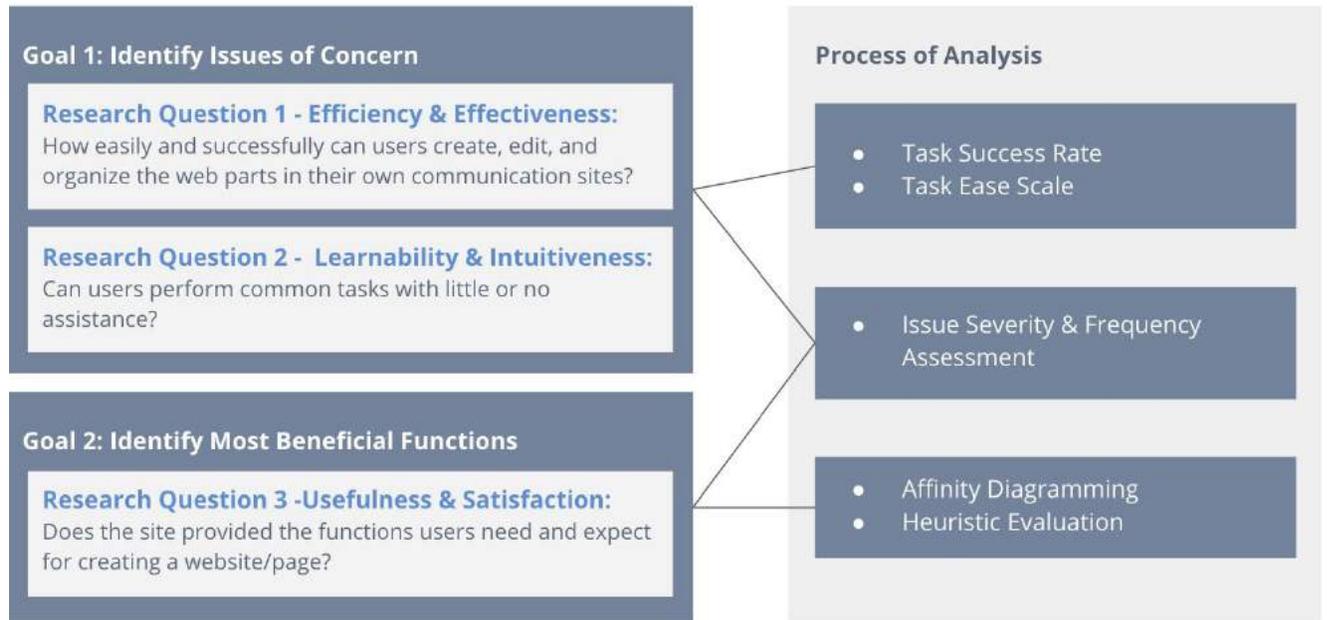


Figure 1. Goals, Research Questions, and Methods of Analysis.

Method

Participants

In an effort to capture the primary target demographic of university students and administrators who might use products like SharePoint, we developed a screening survey which we distributed via Slack, email, social media groups and personal request to students and administrators within the University of Washington community. Our screening survey asked questions that addressed participants experience in website creation or management, and previous applications they may have used for this purpose.

We recruited a total of 10 participants in our usability study based on the following criteria: 1) individual was located close to the UW main campus, 2) they had at least use digital tools that allowed them to create, collaborate & share information, 3) they fell into one of two user groups - administrators or students, and 4) they met our definitions for experience levels with website creation - expert or novice

Although we hoped to get an equal number of students and administrators, as well as that of expert and novice levels, we unfortunately experienced scheduling difficulties which prevented us from getting the desired candidates. Table 1 below, presents a summary of

our participants information. A more complete table of participants' survey information is included in Appendix A: Survey Results.

Role Type	4 UW Admins, 6 UW students
Gender	5 Female, 5 Male
Experience Level of Site and Page Creation	2 Experts, 8 Novices
Prior Use of SharePoint	1 participant once used SharePoint long time ago.
Prior Use of other tools	1 participant once used Wix and Weebly. 1 participant once used Wix. Others haven't used any of other similar tools

Table 1. Participants' Information Summary.

Test Environment

Our test sessions were conducted from Feb. 26th - Mar. 3th, 2019, in various study rooms at either Suzzallo or Odegaard libraries at the University of Washington.

All sessions were conducted using a PC (Dell XPS running Windows 10) or a Mac 2017 laptop to cater to participants' preferences. Participants were notified that they can find all of the necessary information to complete their tasks in a folder on the desktop. We provided participants with a mouse if they did not wish to use the computer's trackpad. There was one moderator and one notetaker for each session. The moderator sat next to the participant at the table and the notetaker sat at a distance behind them to observe the interactions.

Session Procedures

The usability test was set up in the time frame of one hour, with each session lasting approximately 60 to 75 minutes depending on the participants progress through the tasks. The voice and screen actions of each study participant were recorded using Validately (Validately, n.d.), and non-verbal cues or other observations were recorded via handwritten

notes by test administrators. The combination of these two observational methods helped facilitate an accurate analysis of each testing session.

Before arriving at the session, all participants filled out a screening survey which allowed us to gather some demographics and understand relevant skill levels and prior experiences of using SharePoint and other similar tools. At the start of each session, we welcomed the participants, and introduced the product to them briefly. Then, all participants signed a consent form agreeing to the conditions described in the study. The complete consent form is included in Appendix B. Full Test Kit.

A standardized script and protocol was utilized during each usability testing session (The complete script is in Appendix B. Full Test Kit). The testing protocol used was divided into seven primary sections: 1) Introduction; 2) Pre-test Questionnaire; 3) "Think Aloud" Protocol and Practice, 4) Scenario, Objectives, and Tasks; 5) Post-test Questionnaire; 6) Post-test Interview; and 7) Debriefing.

To begin, section 1) Introduction was read to participants by a test administrator, which was followed by section 2) the Pre-test Questionnaire, and section 3) the "Think Aloud" Protocol and Practice.

Next, each participant was direct toward a computer, where they had access to a demonstration version of Microsoft SharePoint, a folder on the computer desktop with the information they would use to complete the usability testing tasks (images, text, links, etc.), and sample pictures the participants are supposed to archive generally as a reference (All sample pictures are included in Appendix B. Full Test Kit). Participants were then asked to read through and complete the tasks in section 4) Scenario, Objectives, and Tasks. During this process participants were allowed to struggle with the tasks and ask questions, while test administrators offered minimal prompts or direction, and only when needed to move the testing forward (e.g., some tasks later in the study were dependent on prior study tasks being completed).

Once participants reached the end of section 4) Scenario, Objectives, and Tasks, they completed section 5) the Post-test Questionnaire on screen, and then completed section 6) the Post-test Interview, and section 7) Debriefing in a person-to-person format with the test administrator. Participant were then compensated with a \$40 gift certificate for their time.

Immediately after each session with a participant, the session's notetaker organized their notes into a data logging Excel form, which highlighted:

- Participants' notable positive/negative behavioral remarks
- Their "Think" ideas and feedback for the use of the product experience
- Their suggestions

Metrics & Quantitative Results

In order to gain a comprehensive understanding of participants experience while using SharePoint, we employed a number of research methods (see Figure 2), including: Task Success Rates, Objective Ease Ratings, Affinity Diagramming, Issue Severity & Frequency Assessment, and Heuristic Evaluation.

Task Success Rates and Objective Ease Ratings we essentially recorded, calculated, and presented as is. However, for participant interviews, observation notes, and survey responses we used a process of Affinity Diagramming, Issue Severity and Frequency Assessment, and Heuristic Evaluation to codify, prioritize, and organize the issues we found and our corresponding recommendations.

Ultimately, this multi-method approach allowed us to understand participants experience from physical, behavioral, cognitive, social, and emotional perspectives, and helped frame our findings and recommendations.

Research Method	Process of Analysis / Calculation	Output / Metric
Tasks Success Rate	(# p's with "x" prompts) / (# p's who attempted task)	Task completion % by prompt level
Objective Ease Rating	(sum of all ratings) / (# responses)	Rating of ease for each objective
Interviews	1. Affinity Diagramming	Codified issues
Task Observation Notes	2. Issue severity & frequency assessment	Issue priority / rank
Surveys	3. Heuristic evaluation	Framework for issue categorization

Figure 2. Research Methods, Calculations, and Metrics.

Task Success Rates

The usability tasks from section 4) Scenario, Objectives, and Tasks were evaluated using a task success rate based on a modified version of task completion rates (Sauro, 2011). The task success rate was calculated as the (number of participants who completed the task with “x” amount of prompts) / (total number of participants). This measured how successful participants were able to complete specific tasks based on the number of prompts that were provided to them. In terms of usability modalities this measure relates to intuitive design, ease of learning, and error frequency and severity.

For most tasks the first attempt success rates averaged below 78%, which has been suggested as an acceptable average (Sauro, 2011). It should be noted however, that after a single prompt most task success rates increase to approximately 90%. This may speak to the study design or moderation, but would also likely relate directly to the learnability and intuitiveness of SharePoint. For additional details on overall tasks success rates please see Figure 3 below.

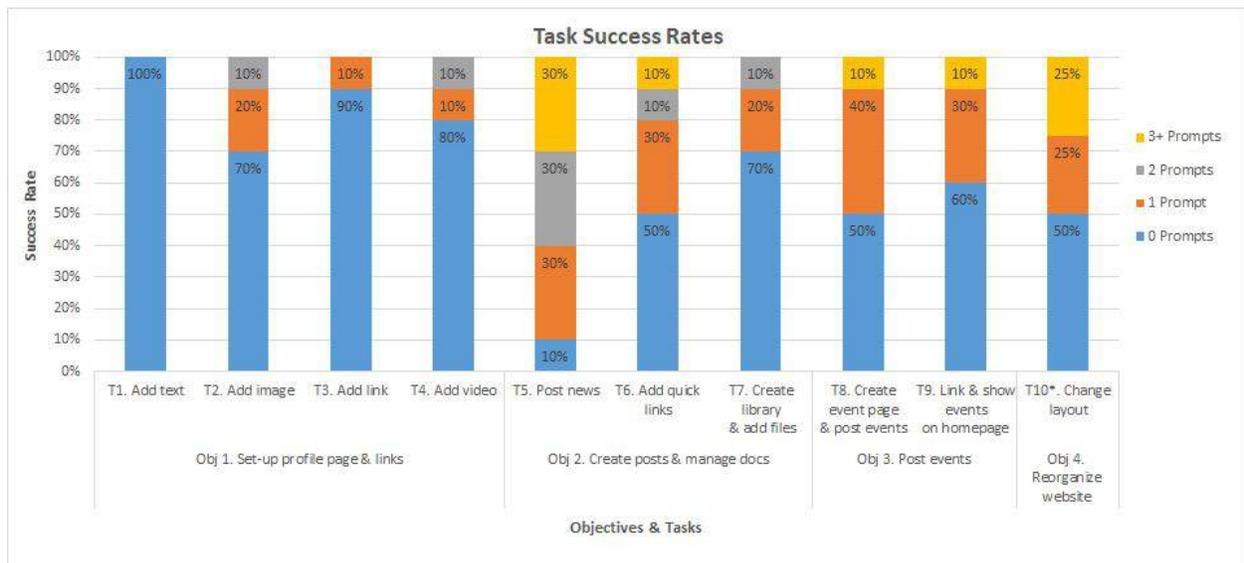


Figure 3. Overall Task Success Rates.

When we evaluated task success rates by level of expertise, we found Novice and Expert participants compared fairly evenly on easy tasks (T1 - T4), but Experts seem to require more help than Novice participants on difficult tasks (T5 - T10). Our initial assumption is that this may relate to Experts relying on more ingrained mental models and/or past practices that make them less flexible and exploratory than Novice participants when using

SharePoint (see Figures 4 & 5). We found no significant difference in task success rates when we parsed the data by the participants role (administrators vs students).

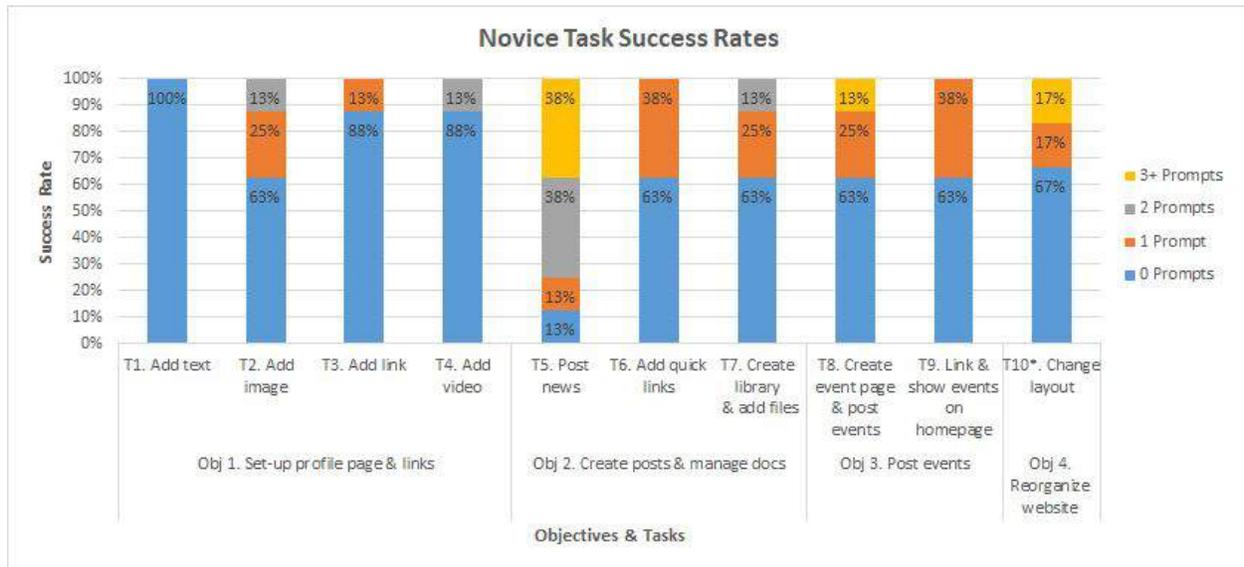


Figure 4. Novice Task Success Rates.

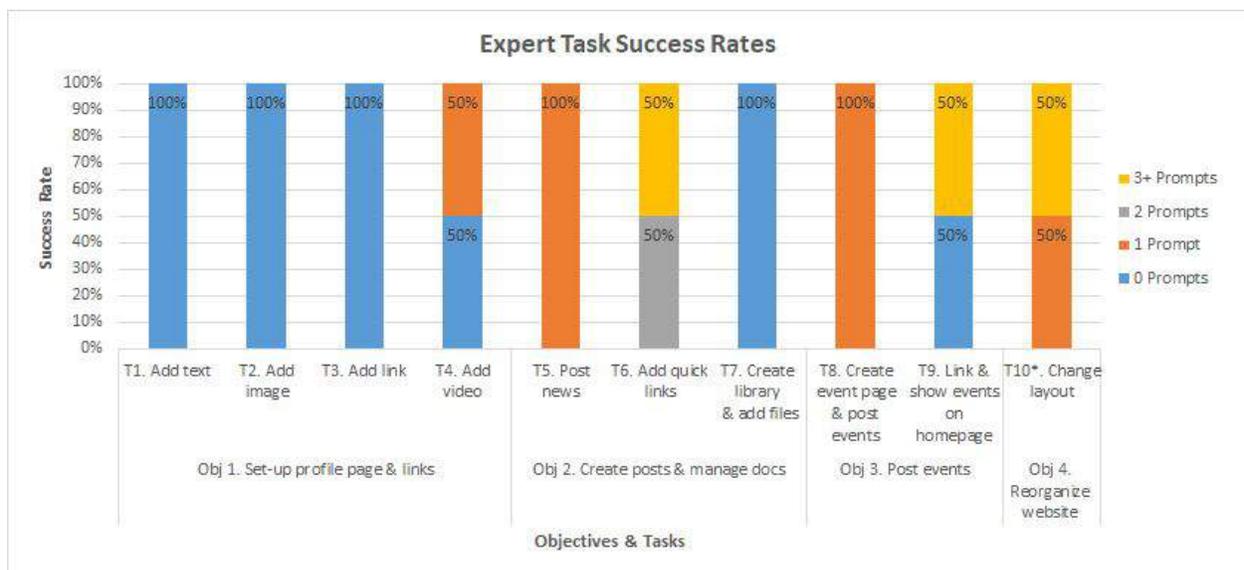


Figure 5. Expert Task Success Rates.

Objective Ease Rating

To gain insight into the subjective feelings of study participants, we asked them to rate the level of effort required to completed each objective on a scale of 1 very difficult - 5 very easy. As illustrated in Figure 6, most participants were fairly neutral in their responses.

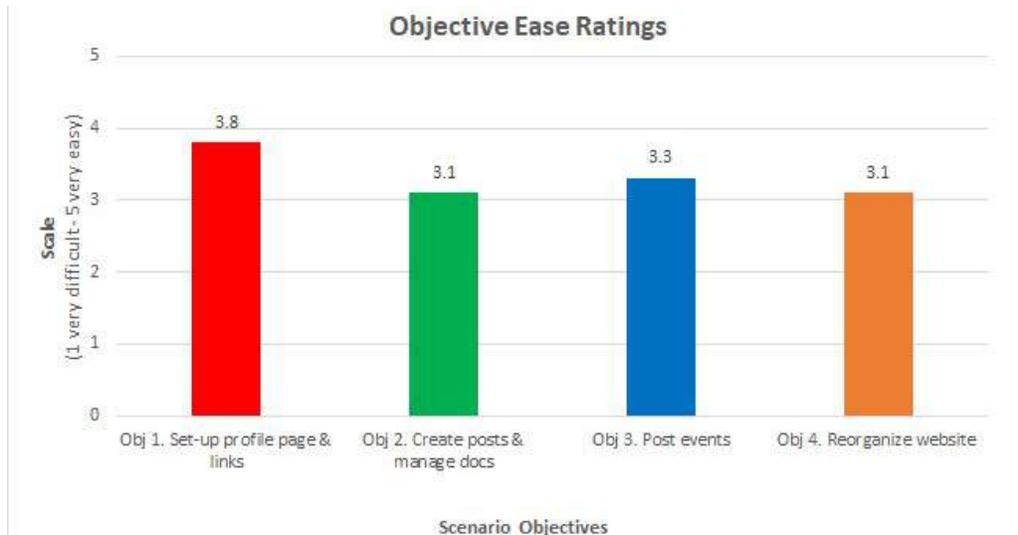


Figure 6. Objective Ease Ratings.

Affinity Diagramming

We used a form affinity diagramming to group participant comments from each post-test interview into themes of good, bad, and expectations of SharePoint web page creation functions, which fed directly into our User Insights. Not as graphically, but in a similar fashion we grouped and coded our test observation notes and survey responses, which began to define the issues we later identify in the Findings section of this report (Figure 8).



Figure 7. Affinity Diagramming - Post-test Interviews.

Scenario	Subtask	Number of Hints	Hints	Issue Type	Revised Issue Type	Severity	Issue/fact Interpretation
1	T1. Add Text	1	Try other web parts/ try other functions	Learn	Learnability		Types the text in image caption first
1	T2. Add Image			Missing Function	Functionality - missing		Think the image could be uploaded through "drag and drop"
1	T4. Add a video from YouTube			Feedback	Visibility of System Status		No status showing "saved" and would like to save
4	T10. Change layout			Interaction	Interaction		Everything is in two column and don't know how to separate sections.
1	T2. Add Image			Interaction	Interaction		Images are not selectable except the top right "v" area, in "recent images" folder
1	T1. Add Text			Perception	Info-Transparency		Confused about "link" and "embed"
1	T3. Add Links			Button Bug	Functionality - button		Button doesn't work - "Add Embed Code"
1	T4. Add a video from YouTube			Perception	Info-Misdirection		Think "edit" button of the web part could be used to adjust column
4	T10. Change layout	1	Try adding a new section	Interaction	Interaction		Everything is in two column and don't know how to separate sections.
4	T10. Change layout			Interaction	Interaction		Cannot drag section to web part
4	T10. Change layout			Go back	Page Backward Navigation		Feel it's hard to discard one step of change
1	T2. Add Image	1	Try "editing"	Learn	Learnability		Don't know what to do first
1	T2. Add Image			Perception	Info-Transparency		Confused about "+" new section and "+" new web part buttons
1	T2. Add Image			Missing Function	Functionality - missing		Think the image could be uploaded through "drag and drop"

Figure 8. Affinity Diagramming - Test Observation Notes & Survey Responses.

Issue Severity & Frequency Assessment

As previously described we used an Issue Severity & Frequency Assessment in order to prioritize our findings, and in possibly the order in which the issues should be addressed. We adapted our severity rating scale from Molich and Jefferies (see Sauro, 2013), and modified the labels to low, medium, and high severity. Frequency was simply quantified as the number of times a codified issue occurred. An example of the initial process can be seen in Figure 9).

Task	Issue Type	Frequency	Severity	Concluded Issue	Findings & Evidence	Recommendations & Fixes
Usability issues: Table 1. The following are usability issues, sorted by severity and frequency. Issues are derived from participant statements, direct observations and quantitative data.						
Severity 1: prevents user from completing their task Severity 2: delays user significantly but eventually allows them to complete the tasks Severity 3: delays user briefly						
4	T5. Post news on the homepage	9/10	1	Users cannot add new news post directly after they add the news part unless they publish the site first	The "+add new" buttons right below the section title of News and Events don't work until users publish the site and be back to click the buttons again (but the button works in "Quick links" section)	
5	T5. Post news on the homepage	5/10	1	Users cannot understand and/or recognize the right web part (news) to add from the add menu	The "News" in the add menu isn't straightforward to users' cognitions. 3 ppts don't know how to create news part and 2 use "Link" at first	
6	T5. Post news on the homepage	3/10	2	Users can't differentiate "New page", "News post" and "News link" in the left-up add button menu	2 ppt respectively uses "new page" or "new link" at first. 1 ppt can't differentiate "new page" and "news post"	
7	T5. Post news on the homepage	3/10	1	Confused about the left-up "+add news post" with the "News" web part (the unclear multiple overlapping user flow)	3 ppts add "news post" directly and don't know how to add news for the news web part on home. 1 ppt add "new page", publish it but don't know how to display it on home	
8	T5. Post news on the homepage	1/10	2	Users get lost in page navigation and can't find unposted but saved internal pages	1 ppt struggled to find the news page back: goes to news page under pages but have no idea	
	T5. Post news on the homepage			Confused about the "+add new section" and "+add new web part" buttons	2 ppts use "+" new section first rather than "+" new web part	

Figure 9. Issue Severity & Frequency Assessment (initial process).

Heuristic Evaluation

We categorized our coded and prioritized issues by Jakob Nielsen's 10 Usability Heuristics for User Interface Design (Nielsen,1994). This helped us further identify the major and minor issues we should address, and helped frame the recommendations we present with our Findings.

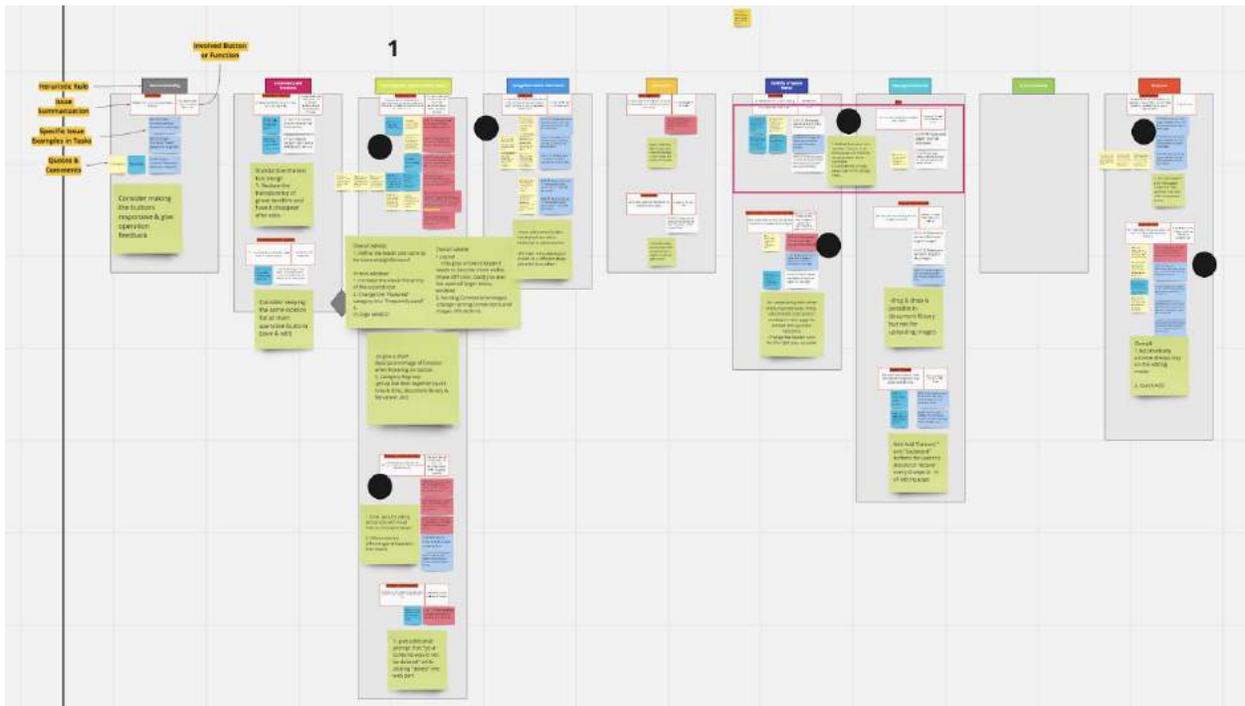


Figure 10. Heuristic Evaluation.

Issues

Overall Insights

Through our usability study interviews we have found that both administrative staff and students have found the events calendar and news page features most valuable to use and enjoy customizing the webpage layout. Students found SharePoint to be a powerful tool that is quick to learn and were open to using it in the future if it was free for them. Some additional features they would like to see are the ability to further customize their webpages (colors, backgrounds, etc.) so that their websites could feel more personal, and were hoping for more integration with social media applications. Administrative staff on the other hand, enjoyed using SharePoint in terms of ease. They found the it to be similar to Canvas but easier to use and felt that it integrated well with their previous knowledge of other Microsoft applications. One participant even mentioned that she felt empowered when using SharePoint since she could directly make changes to her department's homepage without help from IT services. The administrative staff noted that they often use older computers at their workplace and wanted to make sure that any hover functions within the application will have the appropriate sensitivity level to fit in with older systems.

Student Insights

1. *"SharePoint is really good for creating resume, portfolio and something like this (website creation)"*
-Participant 5 (novice user)
2. *"I love the autonomy of site creation. It's easier to customize than some templates."*
-Participant 8 (novice user)
3. *"Overall I really do like SharePoint, I think there is a lot to do with it, but there are some drawbacks[...]"*
-Participant 4 (novice user)
4. *"I think this is actually better than Wix; I didn't play around with Wix a whole lot but I didn't like their templates"*
-Participant 10 (novice user)

Administrative Staff Insights

1. *"Once you know it (SharePoint), it will be quite easy to use as a tool."*
-Participant 3 (expert user)
2. *"In terms of ease it was kinda similar but easier to use than Canvas, and looks better."*

- Participant 6 (novice user)
- 3. *"(SharePoint) wouldn't be that much of a challenge to pick up."*
-Participant 2 (novice user)
- 4. *"I can do this myself and don't have to rely on outside department!"*
-Participant 6 (novice user)

Severity Ratings

We developed severity ratings to prioritize important findings that we believe should be addressed. The following severity ratings were assigned to each finding based on their impact on SharePoint's site contents creation tasks.

High severity	prevents user from completing their task
Medium severity	delays user significantly but finally allows them to complete the tasks
Low severity	delays user briefly

Table 2. Severity Rating Standard.

Key Findings

Through our study, we uncovered the following most important findings, listed in order of severity. A complete and detailed list of all findings follows in the Results section.

High Severity Findings

Participants did not know how to add content to their website when starting their objectives on a blank homepage. SharePoint struggled to give participants enough clues to which button they should use to add content to their page. Only **1 out of 10** participants was able to embark on the correct user flow and select the Edit button to add content to

the homepage. **Most** of the participants selected the +New button to add content on their blank homepage.

Participants had trouble recognizing the function differences between content creation button labels and icons. Most participant slips occurred between the add web parts links vs. quick links, file viewer vs. document library, and events and group calendar buttons. **None** of our participants expanded the web parts menu which provides categories for similar functions and noted that they felt overwhelmed when seeing the full function list. Only **a few** users noticed the variations between the hover description feature (hovering over the title vs the image) which allows users to know what the content button does.

Participants have issues differentiating between the add web parts icon and the add section layout icons. Participants tend to experience slips when having to choose between one of the buttons. We noticed that **5 out of 8** of participants experienced confusion when having to use one of the icons during their tasks.

Medium Severity Findings

SharePoint's navigation bar options overwhelm novice users with complex and overlapping information. Five out of ten participants could not find the unposted news page. We found that the relationship between the homepage and some of the sub-pages (e.g. news content and events pages) is not very clear to the participants. **Five out of ten** participants did not understand that the web page information stored in the contents page from the navigation bar shares types of web pages (e.g. news page, events page) across all of the pages.

Participants do not notice SharePoint autosave function and are unsure about the saving status of the webpage they are editing. Additionally, the "Save as draft" button is not very noticeable to the participants as well. **Five out of ten** participants were not sure their work was saved and asked the moderator where to find the save button. Most users also wanted to know if there is a preview mode in the website builder to see how their website will appear live. They did not feel comfortable using the publish button since they were uncertain if their webpage would be public to all or only to them.

Most participants do not notice the edit panels or buttons on the right hand side when they try functions such as embedding content or adding a youtube videos. Six out of ten participants did not notice the right pop-up panel for adding embedded code due to low visual hierarchy of the pop up animation or lacking noticeable changes when the right edit panel is already open.

All Major Findings

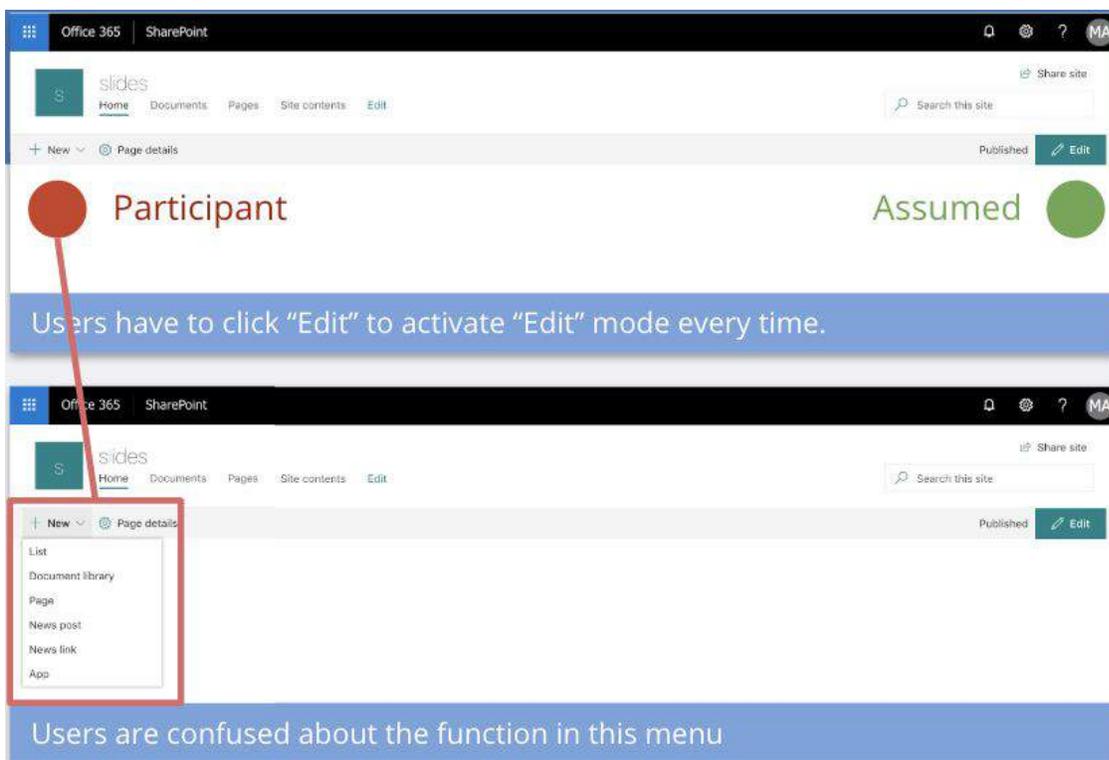
The following are usability issues, sorted by severity and heuristic principles. Since we there several issues that are not fit with any heuristics, we added two categorizations; structure (complex and confusing information structure) and missing functions (functions that should exist). Issues are derived from participant statements, direct observations and quantitative data. The severity scale is adapted from Molich and Jefferies (see Sauro, 2013).

Finding 1: Confused About How to Get Started Without a Tutorial

Severity: High

Heuristics: Match Between System and Real World

Description: Most participants were confused about how to start adding content to their website when starting their objectives on a blank homepage. Only one out of ten participants were able to embark on the correct user flow and select the Edit button to add content to the homepage. Most of the other participants selected the +New button to add content on their blank homepage.



Evidence:

- **P1:** (Clicks +New button, then goes to Edit button);
 - *"It took me a couple seconds to hover and see the plus buttons."*
- **P2:** (Finds Edit button right away)
- **P3:** (Went to + New first before getting clarification)
 - *"I don't know if I need to make a new page or if I'm on the homepage?"*
- **P4:** (Clicked +New button, then goes to Edit button);
 - *"I don't think this is what I'm supposed to do."*
- **P5:** (Clicked Edit button first but quickly forgot that he did and became lost in the navigation bar. When prompted back to the homepage he tried to use +New button to edit page and needed another prompt to use Edit button)
- **P6:** *"I'm tempted to click +New"*
- **P7:** (Gets lost in page details before finding Edit button)
- **P8:** (Goes to + New, then finds Edit button)
- **P9:** (Doesn't notice the Edit button, keeps searching in the navigation bar. Receives prompt to find correct Edit button)
- **P10:** (Goes to navigation bar to try to edit, then finds correct Edit button)

Recommendation:

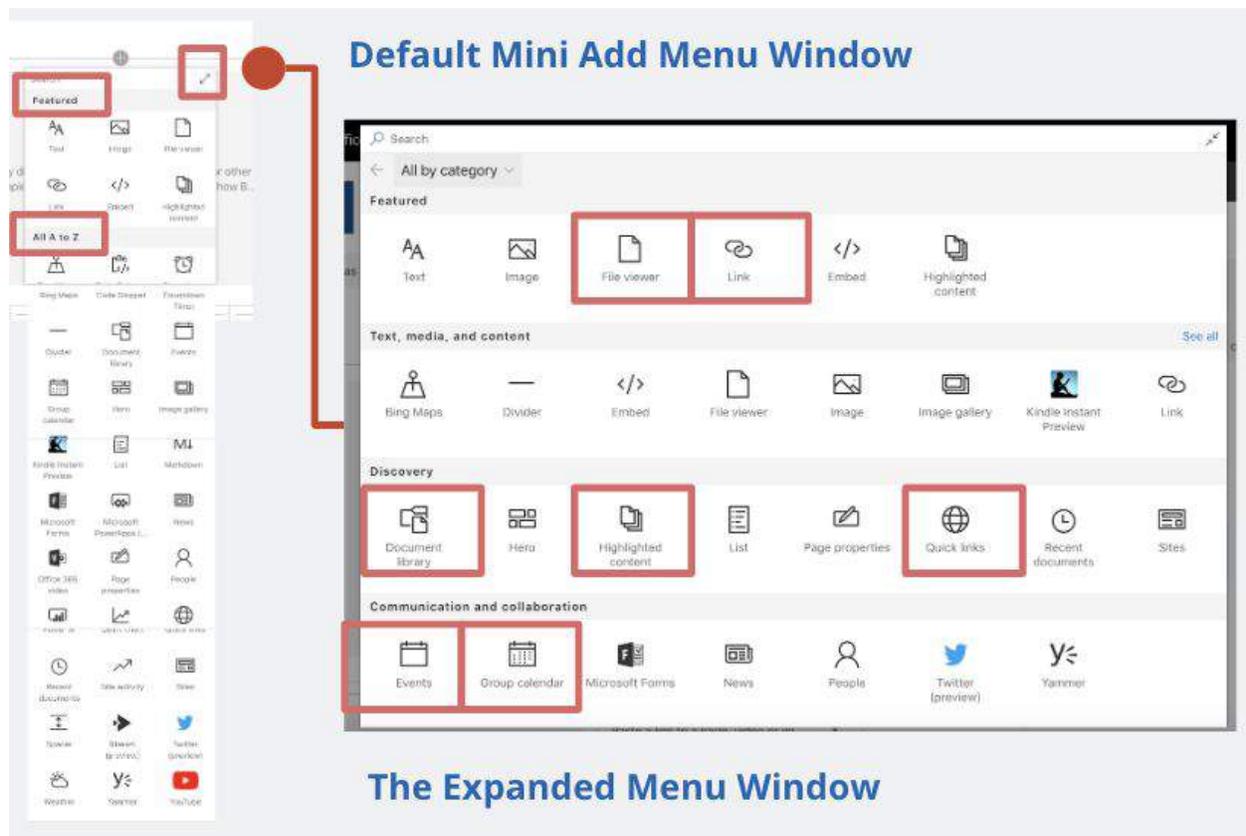
1. Automatically activate editing status when working within the web application and stay in editing mode. This convention follows the standards of similar web applications such as Wix and Squarespace and allows users to immediately get started on editing their webpage without including extra steps.

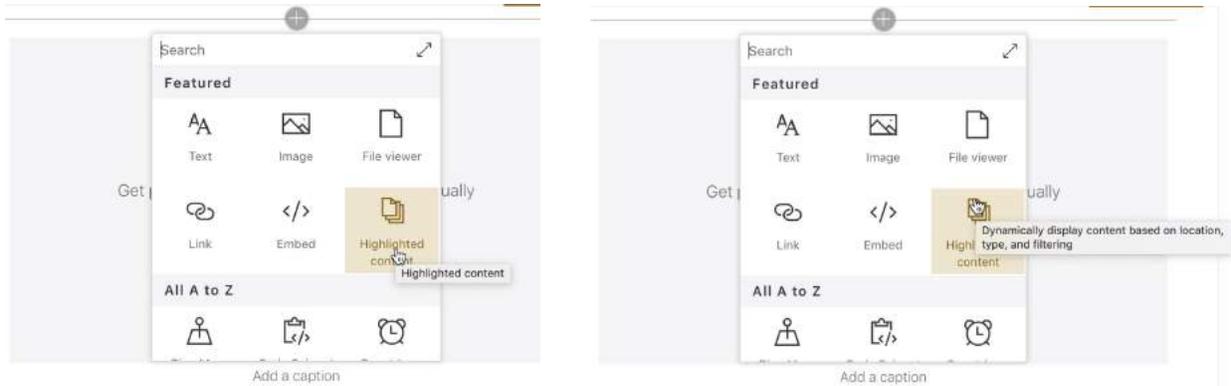
Finding 2: Unclear Web Part Names & Icons

Severity: High

Heuristics: Match Between System and the Real World

Description: Through our study we found that most participants were confused about the web parts naming conventions. We found that most participant slips occurred between the links vs. quick links, file viewer vs. document library, and events and group calendar. Participants also felt that there was a slight disconnect between the icons and labels as well. For example, the document library, file viewer and highlighted content buttons all have an icon that depicts a image of a paper, however, only two of those features are related. We also noticed that none of our participants expanded the web parts menu which provides categories for similar functions and noted that they felt overwhelmed when seeing the full function list. During our test only few users noticed the variations between the hover description feature (hovering over the title vs the image), which allows users to know what the content button does. When your mouse hovers over the title of the web part, the title name pops up, however when you hover over anywhere else on the icon the web part description pops up.





Evidence

- **P2:** (Did not notice hover descriptions; did not expand web parts menu)
 - *“Some of the naming conventions could use a little bit of work.”*
 - *“Some of the icons also could be a little more descriptive...like why does quick links have a globe”*
- **P3:** (Used links instead of quick links; used search bar to find it; did not expand web parts menu)
- **P4:** (Used links instead of quick links; used search bar to find it; chooses sites over quick links then chooses file viewer instead of document library; did not expand web parts menu)
 - *“Not intuitive in the beginning to see the different ways to display the links”*
 - *“(The process) might be more streamlined when you added the links to give you an option to see right there how it displays”*
 - *“I think quick links is a little confusing because, I don’t know, you can’t just know by the word quick it means a different display”*
 - *“I had trouble with where do I go to populate these things, what do these things mean? For example, for links vs. quick links it wasn’t very easy to know where that was.”*
- **P5:** (Uses links not quick links; cannot find document viewer for a while and uses search bar to find it; did not expand web parts menu)
 - *“If I knew the difference between links and quick links I would know exactly what I need but I don’t know what the difference between quick links and links is...to me it’s a little bit confusing.”*

- *"There was maybe too many buttons, maybe simplify...like grouped."*
- *"I would group some things instead of having a full list."*
- **P6:** (Can't find quick links tries news, then finds quick links button; did not expand web parts menu)
- **P7:** (Has trouble finding document library and uses file viewer; does not expand web parts menu)
 - *"Through trial and error it makes sense (to figure out the difference)."*
- **P8:** (Went to file viewer instead of document library; did not expand web parts menu)
 - *"The name is a little bit confusing, the title of the tool or widget."*
 - *"There is a lot types to look for (web parts buttons)."*
 - *"Maybe if you group them into similar categories."*
- **P9:** (did not expand web parts menu)
 - *"The menu itself is fine but I did not know what the buttons did off the bat."*
 - *"Going through it (menu) quickly, it wasn't super intuitive."*
 - *"Had to add stuff was sometimes hard."*
- **P10:** (Took more time to find the document library; did not expand web parts menu.)

Recommendation

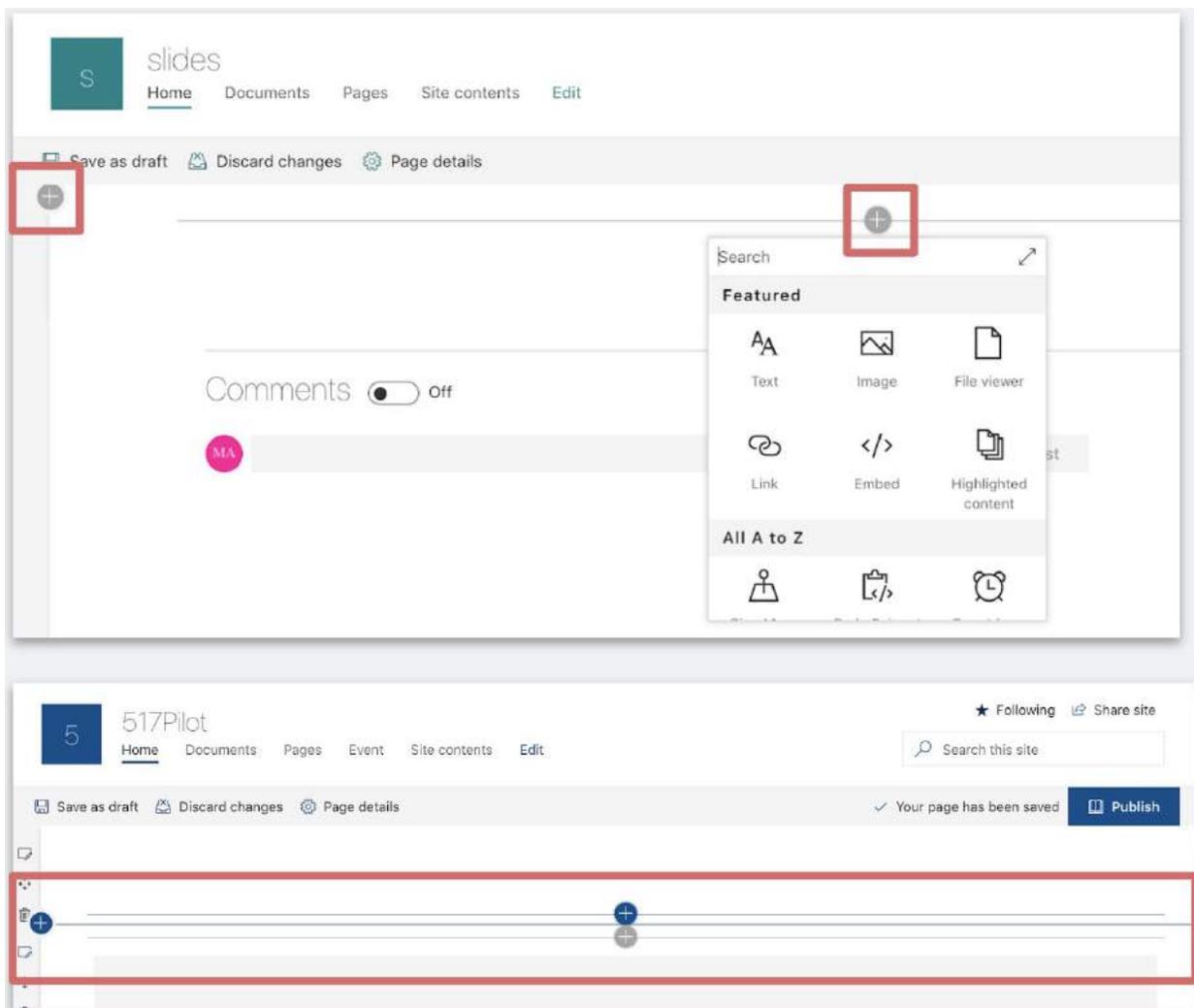
1. Refine labels and icons to match the user's vocabulary and mental models. Additionally it might be beneficial to create a more responsive label hover description so that users can better understand what each web part accomplishes.
2. Increase the visual hierarchy of the expand web parts icon so that users can open the expanded web part menu and see the different categories.
3. Regroup and rename categories so that like functions can be grouped together such as links & quick links, file viewer & document library, and events & group calendar. Also it might be helpful to display content categories within the mini web parts menu.

Finding 3: Confused about Which Add Icon to Use

Severity: Medium

Heuristics: Recognition Rather than Recall

Description: Through our usability test we have found that participants have issues differentiating between the add web parts icon and the section layout icon. Participants tend to experience slips when having to choose between one of the buttons. We noticed that five out of eight of our participants experienced confusion when having to use one of the icons.



Evidence

- **P1:** finds left + button and then goes to menu one; (Points to layout section icon then to add web parts icon)
 - *"This is a section, this is a web part, why are they not one thing?"*
 - *"They feel like the same (web part vs section)."*
- **P2:** (Finds add web parts button right away)
- **P3:** (Clicks left add section layout icon)
 - *"Oh, not that one."*
 - *"I want to blame the color scheme on why I can't find things."*
- **P4:** (Clicked left edit & ignored it because it did not look right; unsure where to click; needed a prompt)
- **P5:** *"I am not sure if I need to add section or ...[web part], what do I do?"*
- **P6:** (Did not have enough time to start objective)
- **P7:** (Cant find which button to press)
 - *"Not super intuitive, I was clicking that button and that was wrong (add section button), those buttons look the same but they have very different functions."*
 - *"I kept trying to add content from the left one when I actually needed to be doing it from the middle."*
- **P8:** (Did not have enough time to start objective)
- **P9:** *"It took me a second to see the little plus signs because there was no symbol for add here."*
- **P10:** *"Clicking this one over here? Or no..."* (clicks layout first)
 - *"I figured it out but it wasn't intuitive or anything."*
 - *"It's like a little logic puzzle almost."*
 - *"I sorta assumed they were the same button."*

Recommendation:

1. To mitigate these issues we propose that the add section layout button be moved to a more fitting location, perhaps with like functions such as the edit, add and delete sections buttons. If this cannot be achieved we propose to change the visual appearance of one of the two icons so that they can be visually distinct.

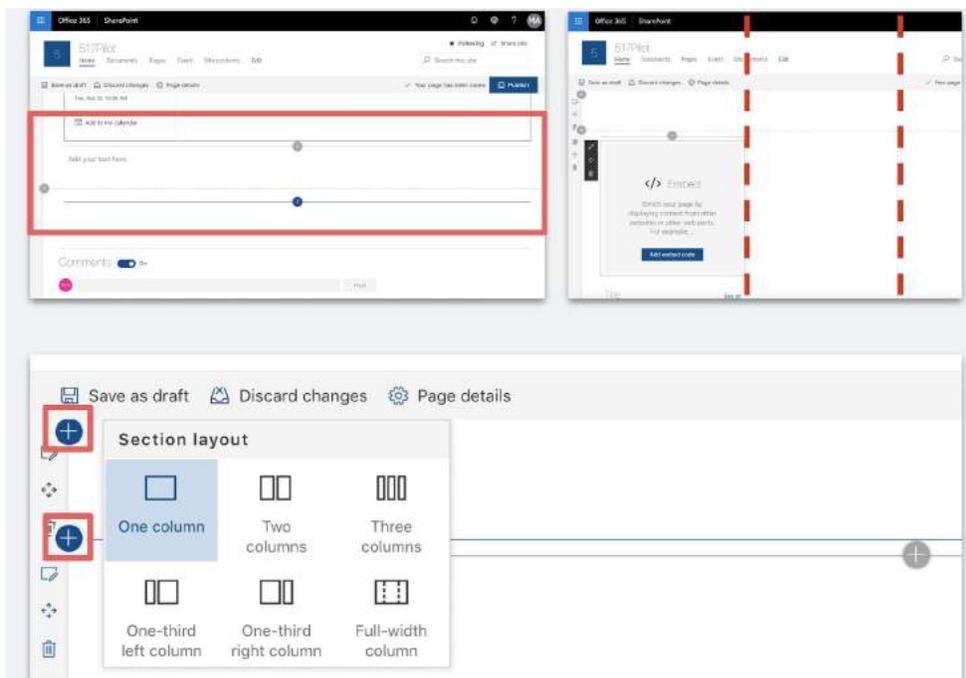
Finding 4: Unclear Web Part - Section Structure

Severity: High

Heuristics: Match Between System and Real World

Description: Participants don't seem to understand the relationship between "adding web part", "adding a new section" and "adding web part in a new section". Some participants unconsciously added a web part in a new section but they didn't realize that and they could not figure out adding a new section to change the web page layout according to the sample.

Besides, participants also feel confused about "adding section" above or below. One reason is that the "add section" button only appears while the cursor is hovering over it. Another reason is that the "add section" button for the first section hides in the top left corner, where is very hard for the participants to click.



Evidence

5 out of 8 participants make the whole layout into two columns and don't understand sections. One participant kept trying edit button in web part to adjust the layout.

Recommendation

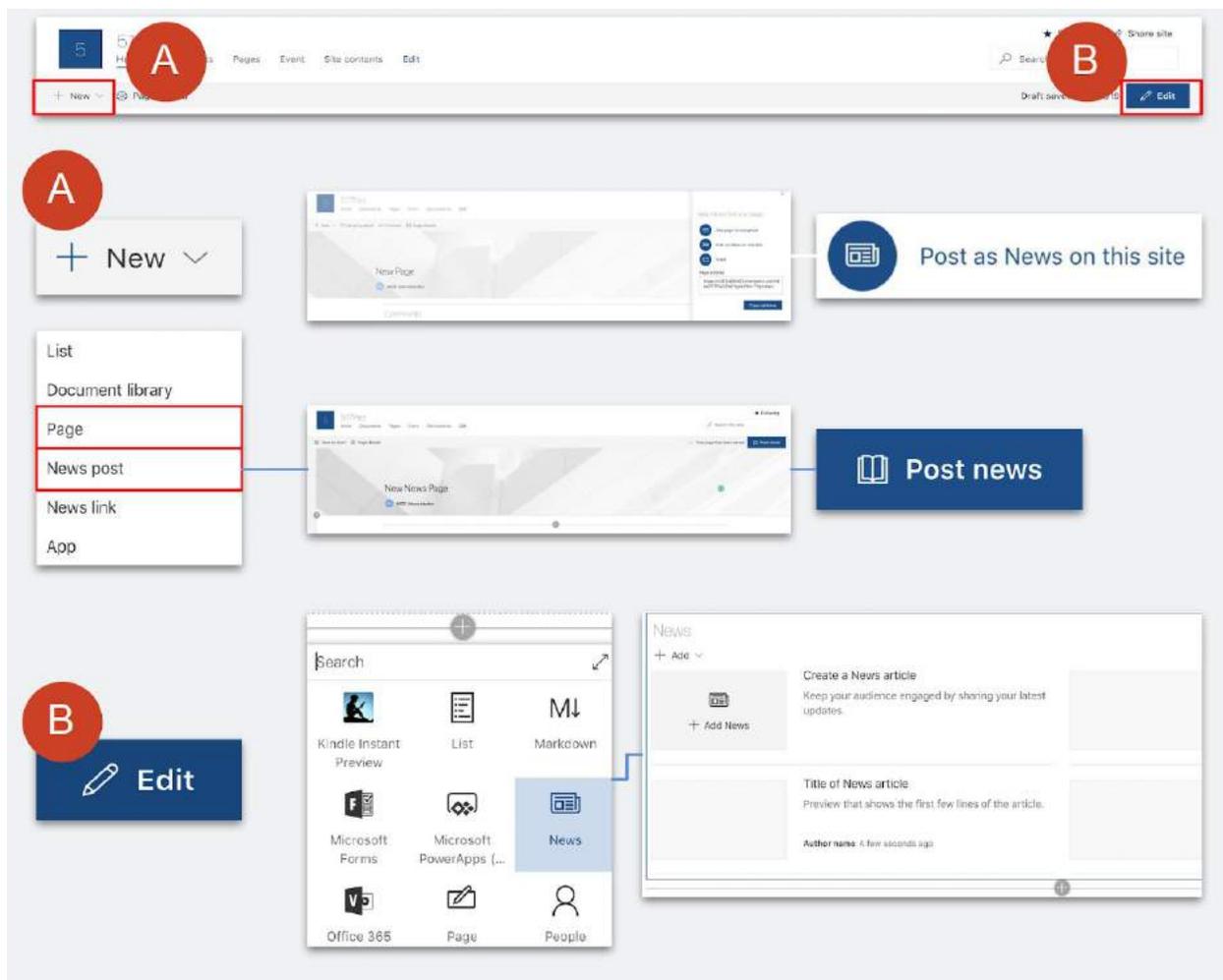
1. Offer prompts when adding the web part in a new section.
2. Accentuate the section boundary lines when doing edits in one section.

Finding 5: Overlapping User Flows

Severity: High

Heuristics: Flexibility and Efficiency of Use; Structure

Description: Participants don't seem to understand the relationship between "Page", "News post", "News link", with the web part "News", and it's hard for the novice to figure out different ways to post a news, which is a really important function for SharePoint. Besides, participants are confused about multiple ways to "Post news" or create "Events". Some of them jumped back and forth between "News" web part and "Events" web part and they don't understand the difference between the two functions.



Evidence

3 out of 10 participants are confused about “Page”, “News post”, and “News link”

3 out of 10 participants are confused about “News post” and “News” web part

3 out of 10 participants are confused about different ways to “post news” and add “Events”

P3: *“Should I create a new page for the news page? I also notice News post and News link. Is that coincidence?”*

Recommendation

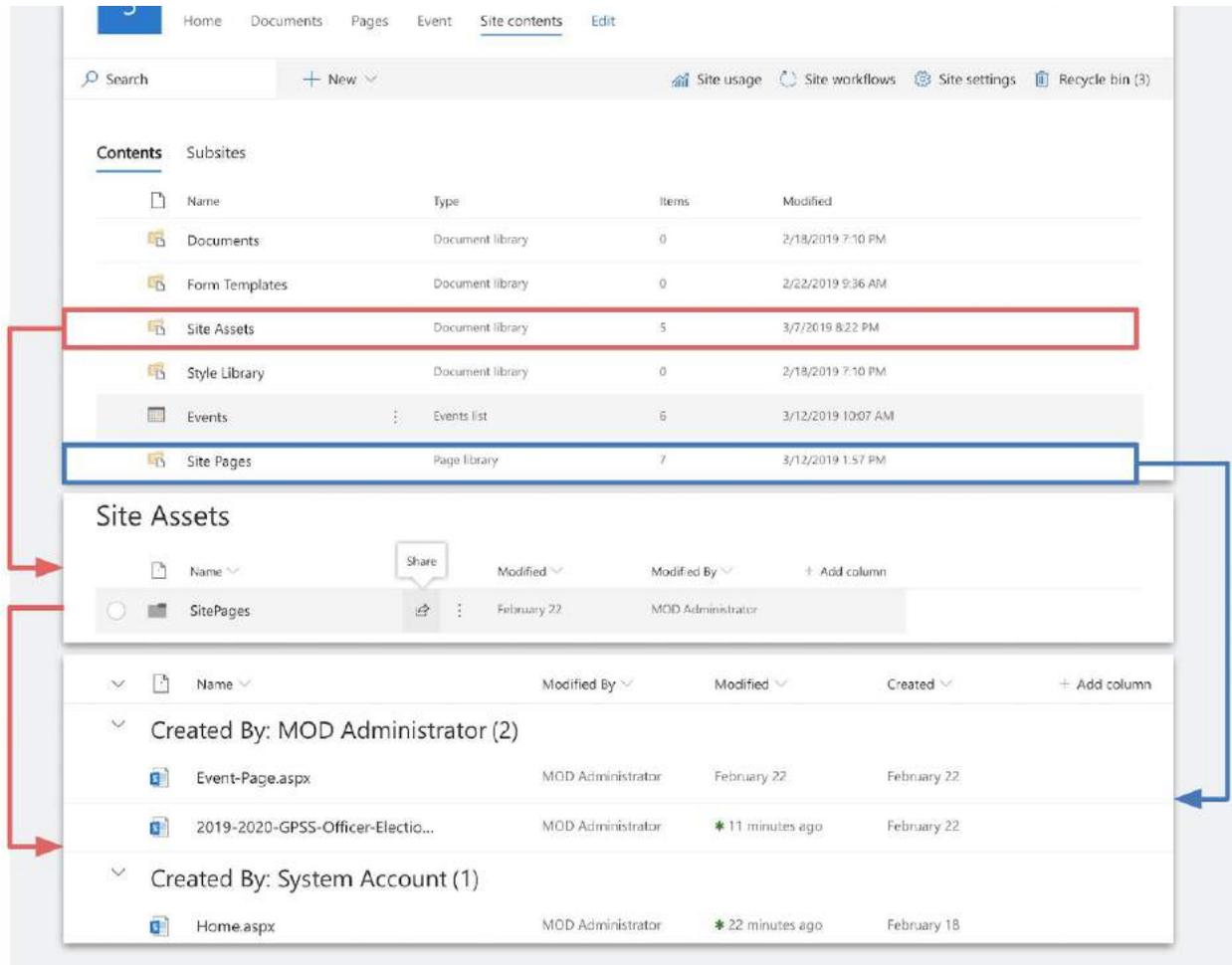
1. Simplify the “+ New” menu at the starting point.
2. Clarify about the difference between “posting news” and create “events” to make it more intuitive.

Finding 6: Unclear Site Management Structure

Severity: Medium

Heuristics: Structure

Description: Navigation bar doesn't relate its contents very clearly, so it's hard for the novice to find the page back. Also, the relationship between homepage and some sub-pages, for example, news content page is not very clear to the participant. Besides, participants don't seem to recognize the difference between web parts and pages. Some of them think deleting the web part will delete the contents simultaneously.



Evidence

5 out of 10 participants lost in navigation within the pages and cannot find the unposted news pages back.

P4: *"News post for me is something that would be posted on the front page, not an external separate page."*

5 out of 10 participants don't understand the contents (eg: news, events) are shared across the pages.

P10: *"I'm afraid if I delete this group (web part), I will delete all the contents."*

Recommendation

1. Consider making the site contents more discoverable.
2. Simplify the navigation bar at start.
3. Remove multiple entrances to the same function.

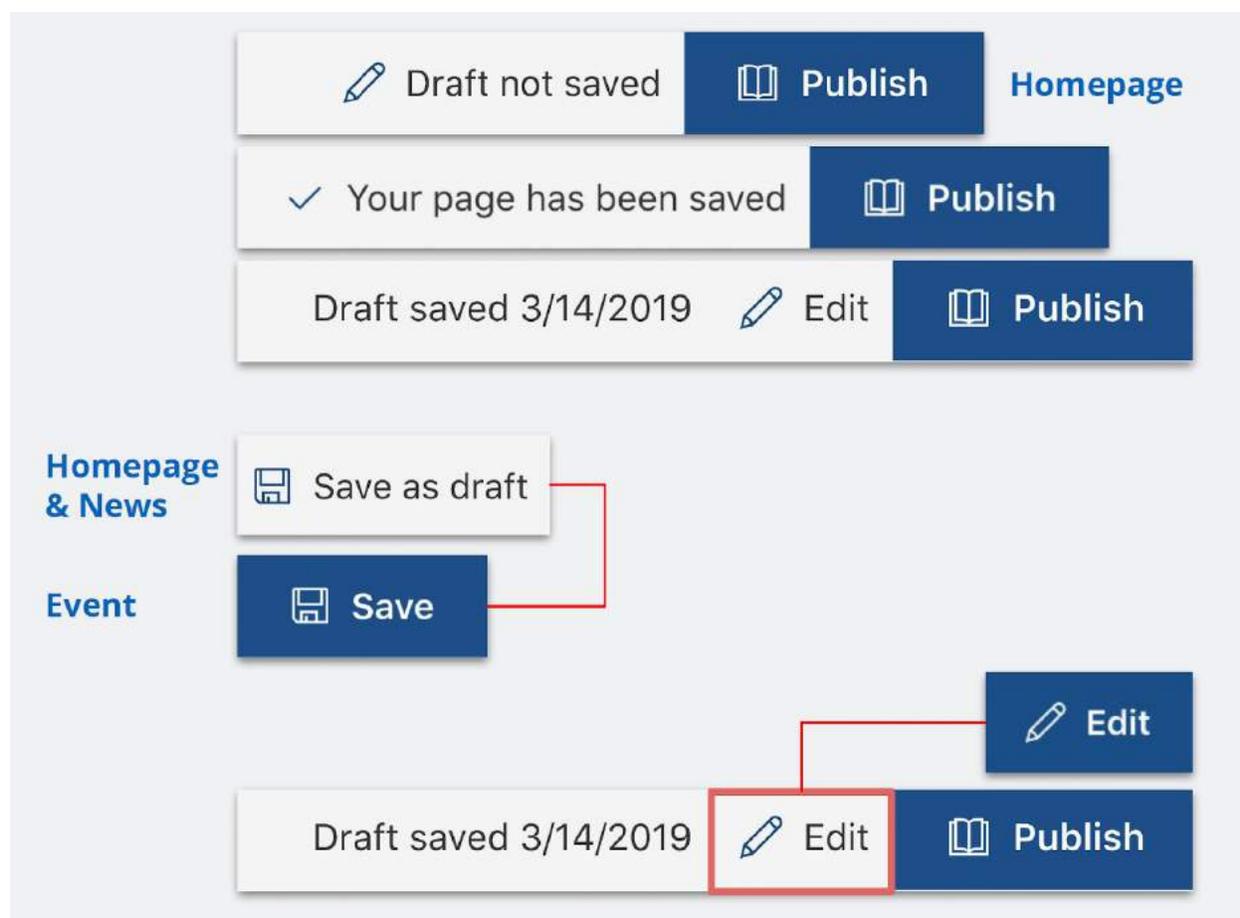
4. Distinguish the difference between creating a web part and adding it to homepage.

Finding 7: Unclear Save Status

Severity: Medium

Heuristics: Visibility of System Status

Description: Participants don't seem to understand or unsure about the saving status of the editing page. It seems hard for them to notice the save button "Save as draft" and it's desirable to have a "Preview" button to exit the editing mode.



Evidence

5 out of 10 participants are not sure whether the page is saved and asking for “save” button.

P8: *“Does it automatically saved? I hope it does.”*

P9: *“I don’t know if I like that I don’t need to hit the Enter.”*

P9: *“I’m wondering without publishing, instead just a save”, can I see how it’s gonna look for other people.”*

Recommendation

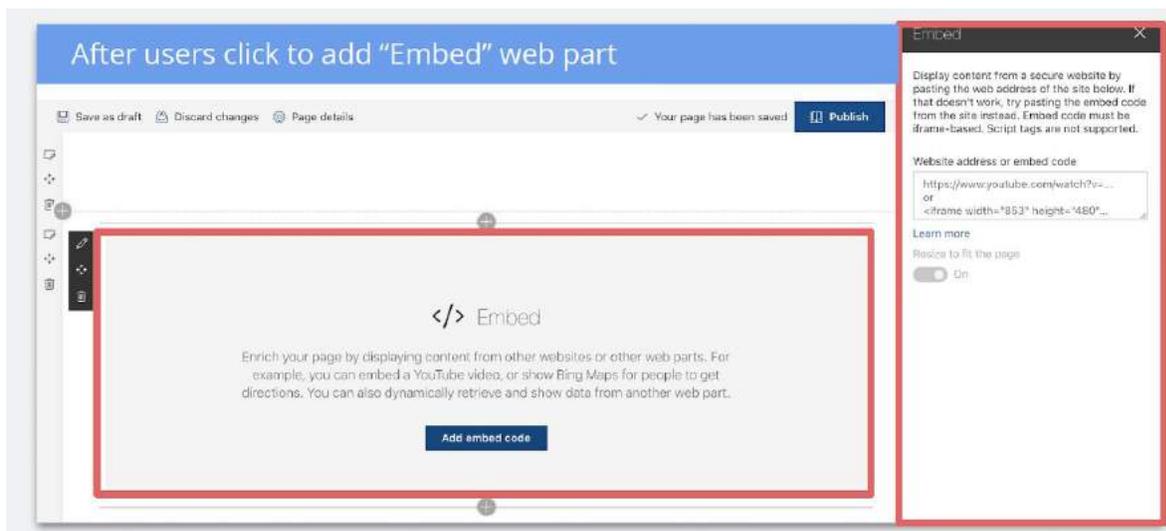
1. Group and standardize all operation buttons for page status.
2. Make the changing saving status more noticeable.
3. Change “Save as draft” to “Save and preview” function

Finding 8: Hardly Noticeable “Edit Panel”

Severity: Medium

Heuristics: Visibility of System Status

Description: It’s hard for the participants to notice the pop-up buttons or panel on the right when it pops up naturally without connecting with the user’s interaction or it’s already open before.





Evidence

6 out of 10 participants cannot notice the right edit panel for adding “embed” code.

Recommendation

1. Make the “Edit Panel” more visible with animation or color.
2. To align with other functions (eg: links), let the participants configure web parts on the canvas.

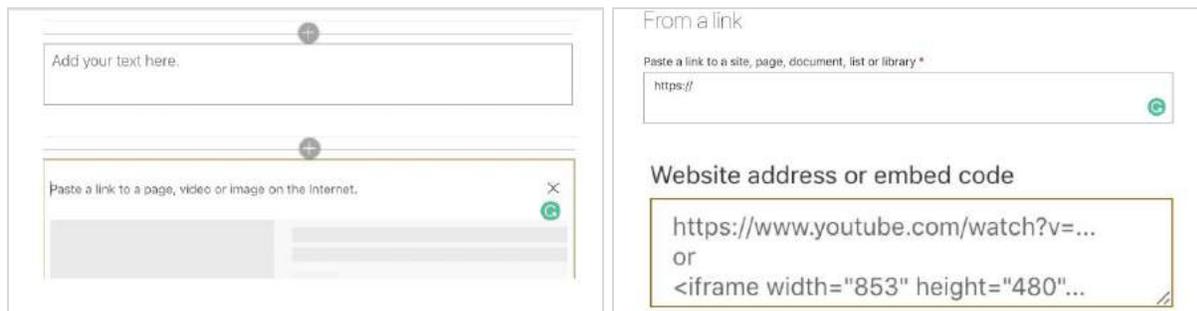
Other Minor Findings

Finding 1: Inconsistent Text Box Status

Severity: Low

Heuristics: Consistency & Standards

Description: The starting status for the text boxes is not same for “Add text”, “Add link”, “Add quick links”, and “Add embed” web part. Some of them provide default text, which would disappear with one click, some of them provide hint text which won’t disappear with one click and is not selectable, while some of them provide “Http://” header which is selectable but not desirable for most of our participants.



Recommendation

1. Standardize the starting status for all the text box, changing them to default text which would disappear with one click.

Finding 2: Inconsistent Button Location

Severity: Low

Heuristics: Consistency & Standards

Description: Buttons with similar functions don't stay at the same location on the page, which makes the participants feel difficult to find the button.



Recommendation

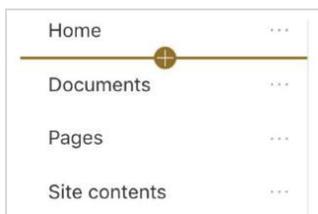
1. Keep the buttons with similar functions at the same location.

Finding 3: Unnoticeable Button Appearing while Hovering

Severity: Low

Heuristics: Interaction

Description: It's hard for the participants to notice the "Add new navigation tab" button, which only appears while the mouse is hovering over the boundary line between navigation tabs.



Recommendation

Add a "Add new tab" button and allow using drag to rearrange the order of the tabs.

Finding 4: Small Images' Selectable Area

Severity: Low

Heuristics: Interaction

Description: From “Recent file”, the image is only selectable from the top right corner, which makes some of our participants give up uploading images from “Recent file”.



Recommendation

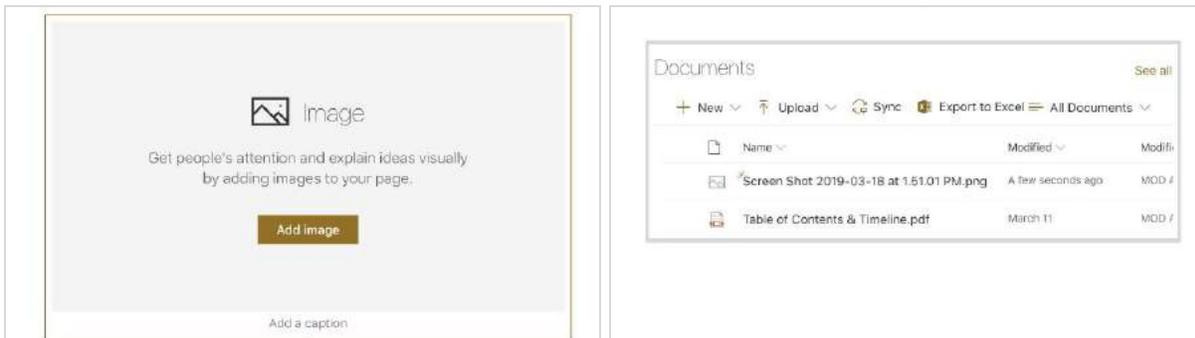
1. Make the whole image area selectable.

Finding 5: Missing “Drag and Drop” Function for Uploading Images

Severity: Low

Heuristics: Missing Functionality

Description: No “drag and drop” option for uploading an image although it allows the user to drag and drop to upload a file to “document library”.



Recommendation

1. Offer “drag and drop” option for user to upload an image to the image gallery.

Finding 6: Missing “Discard One Step” Function

Severity: Low

Heuristics: Missing Functionality

Description: No “discard one step of change” option for user to go back one step and the user can only use the “back” button on the browser, which is problematic sometimes, losing all the changes.



Recommendation

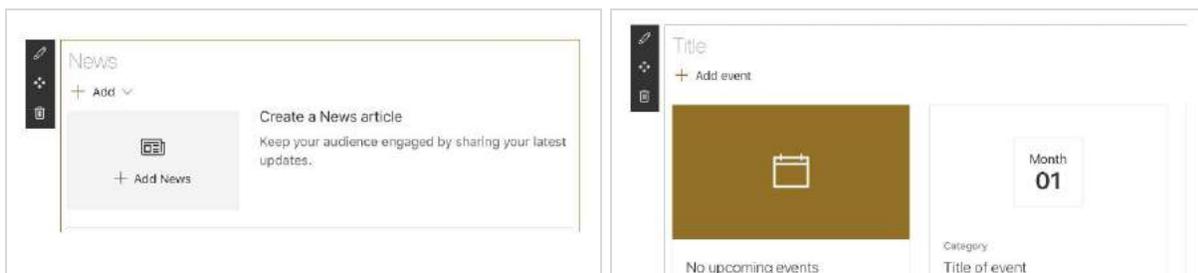
1. Offer “undo” and “redo” button for the user to go back or forward one step while editing the page.

Finding 7: Unresponsive Button

Severity: Low

Heuristics: Non-Functionality

Description: “+ Add” button in News web part and “Add event” button in Event web part are not responsive under editing mode.



Recommendation

1. Consider making these buttons responsive and offer operational feedback.

Discussion

Study Limitations & Reflection

As with nearly all usability studies, we recognize there are a number of limitations and challenges in our study. Some of these include our screener, study duration, study timeline, and study design. We address each of these below with a brief description of the limitation/challenge, and short reflection of how we would address that issue in the future.

Screener. Our screener allowed people to self-identify as an administrator without clarifying the role and automatically barring those who didn't fit our specific definition from continuing with the screener. This allowed variance in our conceptualization of the administrator role, and required us to expand our definition to fit the prospective participant pool we had collected, in order to meet our project timeline. In the future we would be more explicit in the use of our terminology, and would also try to automate these processes more.

Study duration. Our study duration was set for an hour, but we had two participants who were not able to complete the study within that time frame. This resulted in missing data for two participants on the last task. Going forward we would pilot the study a few more times in order to get a better grasp of the possible range in the duration of the study.

Study timeline. Due to our 10 week quarters, and the time it took for us to set the study up, our timeline for testing was somewhat truncated. This made it difficult for us recruit and test new, more, and/or participants who were a better fit. We realize it is not always possible, but in the future we would hope to utilize more appropriate timelines.

Study design. Our study was designed for a lab setting with a high level of structure and many predefined constructs, such as motives, tasks, and material artefacts. While this design is probably ideal for this particular scenario, it did limit our ability to gather data in a more natural setting. If we were to perform additional usability testing with SharePoint in the future, we would likely strive to assess different components of the application, and would use different scenarios and/or study methodologies as well.

Conclusion

In order to bring our SharePoint usability study to a conclusion, we would summarize the details of our findings and recommendations in response to our research questions in the following manner:

- **Efficiency & Effectiveness:** How easily and successfully can users create, edit, and organize the web parts in their own communication sites?
 - Participants were able to easily create and edit simple content, but struggled with organizing web parts, and web parts that required multiple steps. Users could benefit from more obvious and distinct web part choices, and the simplification of multi-step web parts.
- **Learnability & Intuitiveness:** Can users perform common tasks with little or no assistance?
 - Participants rated the difficulty of the study objectives as primarily neutral, and were able to complete the tasks at a rate of 90% or higher with a single prompt (which we related primarily to learnability). Additional improvements may come from more consistent information architecture and enhanced interaction within the application.
- **Usefulness & Satisfaction:** Does the site provide the functions users need and expect for creating a website/page?
 - In general yes, however, users could benefit from increased functionality through additional web parts related specifically to academia.

Appendix A. Survey Results

Screening Survey

Participant	P1	P2	P3	P4	P5
Demographics					
PPT Role Type	Student	Admin: TA: Intro to 3D Modeling	Admin: Academic Advisor Master's level HCDE	Student	Student
Gender	Female	Male	Female	Male	Male
Experience of Site and Page Creation					
Experience Level	Novice	Novice	Expert	Expert	Novice
Once used SharePoint	No	No	No	Yes	No
once created a website without coding	No	No	Yes	No	No
once managed a website (created, edited or posted content)	Yes (through coding)	No	Yes	Yes	No *
the tool once used			Wix, Weebly	Wix	
					* manage her department's website only in the sense of creating and approving content

Participant	P6	P7	P8	P9	P10
Demographics					
PPT Role Type	Admin: Dean of Student/Career Services in Law School	Admin	Student	Student	Student
Gender	Female	Male	Female	Female	Male
Experience of Site and Page Creation					
Experience Level	Novice	Novice	novice	novice	novice
Once used SharePoint	No	No	No	No	No
once created a website without coding	No	No	No	No	No
once managed a website (created, edited or posted content)	No	No	No	No	No
the tool once used					

Post-Objective Survey

Objective Ease Rating

Participant	Obj 1. Set-up profile page & links	Obj 2. Create posts & manage docs	Obj 3. Post events	Obj 4. Reorganize website
1	4	1	3	1
2	5	3	4	5
3	3	2	4	4
4	4	2	4	3
5	5	4	4	4
6	4	2	3	3
7	4	4	3	3
8	2	4	2	3
9	3	4	3	2
10	4	5	3	3
AVERAGE	3.8	3.1	3.3	3.1

Appendix B. Full Test Kit

Microsoft SharePoint Page Creation Usability Study Kit

Fengyi Xu, Mia Zhu, Stefanie Gueorguieva, Tyson Florence

HCDE 517, 2019.03

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Description

Microsoft SharePoint is a web-based application that can be used to create, store, and distribute information. It allows you to collaborate with others by using content and features in a website-like format. SharePoint is highly customizable and can be used as a platform to build anything from a personal portfolio or department website to an intranet for a group or organization.

Research Questions

The following are the key research questions we will investigate through our study:

Efficiency & Effectiveness:

How easily and successfully can users create, edit, and organize different types of SharePoint web parts on their own communication sites?

Are users able to successfully edit each section's layout and appearance

Success Rate:

What issues do they encounter in the creation process of each type of web parts respectively?

Learnability & Intuitiveness:

Can users fully comprehend the use of all provided types of web parts and select the suitable ones for some certain tasks without difficulty?

Can users perform some common tasks with established benchmarks?

Usefulness & Satisfaction:

Does the site provided the functions users need and expect for creating a website/page?

Are users able to successfully edit each section's layout and appearance

Facilitation Guide

Before the participant comes

- Participant Connection Check Participation Survey Result Room Booking
Materials Printed Laptop Checked Page Setup

Participant Connection - Send confirmation message or calendar invite once a participant is scheduled with time and location. Contact the participant one day before the scheduled test with a reminder message.

Check Participation Survey Result - Make sure being familiar with the participant self-report experience of web-creation or managing.

Room Booking - Book the testing location in advance.

Materials Printed - Print out more than needed study scripts and scenario materials in advance.

Laptop Checked - Bring two laptops in case one is broken during the test. Make sure clear off all other windows or notifications. Stay plugged in during the test. Check the laptop webcam and microphone as well set up Morae in advance.

Page Setup - Set up the laptop to the correct starting status of the first task before the whole testing session starts.

After the participant comes

Before the test starts, ask a few friendly questions to build rapport with the participant.

Sit close enough to the user that you can watch them use the app, but not so close they feel uncomfortable to use the app freely.

Remember to take notes of impressions you have or observations that may not be captured by Morae or the video camera.

Pay attention to the user and remember to ask probing questions if they stop talking or your notice behavior that may indicate a significant thought they didn't verbalize.

Screening questionnaire

Hello, everyone! We are a UW graduate student team conducting a usability study for Microsoft SharePoint. We are currently looking for UW administrator participants to test one of their programs. The study will only take an hour of your time and Microsoft will provide a \$40 gift card for your participation. Please fill out this survey if you're interested, and we appreciate your participation so much!

1. Please add your name

3. Are you currently living in the Seattle area?

Yes No

4. Have you ever created a website that did not require coding it?

Yes No

5. Have you ever managed a website (created, edited or posted content)?

Yes No

6. If you have any experience creating or managing a website, what program did you use?

Wix

Weebly

Squarespace

Wordpress

Google sites

Other

7. Would it be okay for us to contact you for additional information after the test? If yes, please enter your email address.

Consent Form

Title of Project: Microsoft SharePoint Usability Study

Please check all boxes

1. I confirm that I understand the details for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.
3. I understand that data will be collected during the interview in the forms of audio and video recordings.
4. I am of 18 years or older.
5. I agree to take part in the above study.

Name of Participant

Date

Signature

Test Moderator

Date

Signature

Introduction Script

“As part of our Human Centered Design and Engineering class we are evaluating the Microsoft SharePoint web application. Thank you so much for taking the time to participate in our study. We would like to determine the program is intuitive and we would appreciate your feedback.

In the first section of this study, we will provide you a scenario that you will use to complete several tasks within the application. As you complete these tasks, we may ask a number of questions to help us understand your use and perception of the application. We would like to iterate that we are not testing you but only the program itself so there are no right or wrong answers to the questions or tasks. As you work through the tasks, we would encourage you to “think aloud” to help us gain a clear understanding of what you are thinking and experiencing. In the end of the study we hope that Microsoft will use your feedback from this session to improve upon the program.

[Moderator walks participants through think aloud practice in advance if the participant asks. Example: “When I walk into the house the first thing I see is a window to my left...”]

In the second portion of this study, we will ask you to rate several items related to your use of the application. This will help us evaluate how satisfying different components of the application are.

Our study is expected to last approximately an hour. If you have any questions, concerns, or feel discomfort of a kind please feel free to ask or notify us. You can also take a break or discontinue the study at any time if you need to.

We would like to use a video camera to record your use of the application, as well as your verbal and nonverbal responses. This will aid us in reviewing your responses accurately later on. No identifying information will be used or retained in the final results of this process. We may also take a few handwritten notes.

If this process sounds ok, please read and sign this consent form, which essentially indicates you will not share the details of the study with others and give us permission to record you.”

[Hand the consent form]

“Do you have any questions before we move on to the next step?” *[Answer the question]*

Facilitation Script

- Start Morae Explain Morae Hand the hard copy of participant scenario

Pretest Questionnaire

“First, I will ask you some questions to learn about you as our participant.”

[Read the pre-test questionnaire]

Think Aloud Practice

“ Through today’s session, I will be asking you to think aloud. To give you a better understanding of thinking aloud, let us do a quick practice. Please walk me through how many windows there are in your house. ”

Task Scenario

[Hand the Participant Scenario 1 and read the general task background for them]

“Imagine that you are tasked with managing the University of Washington Graduate & Professional Student Senate (GPSS) website. You just created a new site, and you are on your completely blank homepage now. Below is our first scenario with a few subtasks that you may have to complete to successfully build the webpage, please try to work through them one by one. Refer to the materials provided in the Testing Materials folder on the desktop. We have also provided a picture of website sample as a reference.

Please read the scenario provided and move through the tasks. A sample of the webpage is also available for you. You could use it as a reference for the scenario but you don’t need to be exactly the same with it. As a reminder, we are testing the application not you, and we would love to hear both positive and negative feedback that will help us understand what your thinking and feeling as you use the application. Also, please let me know when you feel the task is accomplished.”

[Hand the Participant next Scenario when they finish the previous one]

Post-task Questionnaire

“You have completed task X. please fill in the form after the scenario.”

Post-test Questionnaire

“Thank you for completing the tasks in our study. Now, we would like you to take a post-test questionnaire on the computer. This will help us gather information on your

experience using SharePoint during our study. I will read the questions aloud, and you can walk me through your answers. Your answers won't hurt us, so please be honest. "

[Hand the participant the Post-test Form]

Post-Test Interview

"Thank you, again. Before we finish, I will be asking you a few questions about the tasks you did during your study."

[Ask Post-task Interview questions]

Closing

"Thank you again for your time. We appreciate your thoughts and experience in helping us improve Microsoft SharePoint, and we will keep your responses confidential. Here is a small compensation for your time."

[Hand them the gift card]

"Please feel free to contact us if you have any questions or concerns, or would like to add something you have thought of after you leave today. Thanks again for participating in our study."

Pre-test Questionnaire

These questions will be asked verbally to participants before the testing will begin. The designated note taker will record all answers.

1. If student: What is your class standing (undergraduate, master's, Ph.D.)? What are you studying?

1. If administrator: What is your administrator position title? Which department do you work in?

2. Have you ever used SharePoint before? If yes, for what purpose?

3. If the participant has website creation or management experience

1. From our survey we have noticed that you have created/ managed a website in (name of website builder before) can you tell us more about that experience?
 - a. What do you usually use the website for?
 - b. What kinds of content do you post on the website? (Publish news, events, send newsletters, etc) Can you list the most common activities associated with the website creation or management?
 - c. What did you like about the program? Dislike? Any features that you found very helpful or features that you felt were missing that could have made your experience better?
2. How often do you manage content on your website or the website that you manage?
 - a. Once a month
 - b. 2-4 times a month
 - c. Once a week
 - d. 2-4 times a week
 - e. More than 4 times a week

Post-task Questionnaire

Participants will be asked to fill out the following form after each of the five scenarios. Each scenario description will be written on its own page with a post-task questionnaire added below it. All participants will receive a packet of this information and a pen to complete it.

Post-Task Form (print for participant)

1. How easy was it to complete the tasks in this scenario?

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

2. How understandable was the process of completing the tasks in this scenario? (To elaborate, did the process of creating all of the elements for the scenario needed flow logically in your mind?)

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

Post-Task Questions

These questions will be asked verbally after the participant has completed the form. The note taker will take note of the participant's response.

1. What made the tasks easy or difficult to complete?

2. What made the tasks confusing?

Verbally ask for more specific feelings based on the tasks to understand why the participants gave the ratings in the post-task form

Post -Test Questionnaire

These questions will be asked verbally after the participant has completed the form. The note taker will take note of the participant's response.

Post-test Form (print for participant)

Instructions: Please complete each scaled or free form answer question based on your experience with the SharePoint today.

1. On a scale of 1 – 5, 1 being very poor and 5 being great, how would you rate the content functionality of the application (meaning the ability to add subject matter and details)?

Very Poor	Poor	Neutral	good	Great
1	2	3	4	5

2. On a scale of 1 – 5, 1 being very poor and 5 being great, how would you rate the structure functions of the application (meaning the ability to change the layout of the information, and the organization of the menus, tabs, and pages)?

Very Poor	Poor	Neutral	good	Great
1	2	3	4	5

3. On a scale of 1 – 5, 1 being very poor and 5 being great, how would you rate the interaction functionality of the application (meaning the behavior of the cursor, links, tabs, buttons, videos, etc.)?

Very Poor	Poor	Neutral	good	Great
1	2	3	4	5

4. On a scale of 1 - 5, 1 being definitely no and 5 being definitely, how likely would you be to use this application to create, share, and collaborate with your educational needs?

Definitely No	Not Likely	Maybe	Very Likely	Definitely
1	2	3	4	5

Post-test Interview

After completing the questionnaire, we will verbally ask our participants to indicate what they liked and did not like about the design, content, structure and interaction functionality. This will allow us to get a better understanding of the results given on the Likert scale.

1. Which parts of this application do you believe are of the most valuable to your work? In other words, what would you highlight to recommend the application to others?
2. Which part of the application did you enjoy using the most?
3. Which tool was the most difficult to use for you?
4. What content (meaning the subject matter, subject details, and length of information) would you want or expect to find on this application?
5. What features would you want or expect to find on this application?

Moderator/Observer Task Scenarios

General Scenario:

Imagine that you are tasked with managing the University of Washington Graduate & Professional Student Senate (GPSS) website. You just created a new site, and you are on your completely blank homepage now. Below are some of the tasks you may have to complete to successfully build the webpage. Please refer to the materials provided in the Testing Materials folder on the desktop. We have also provided a picture of website sample as a reference.

Level 1: Create and Edit Direct Web part

Objective 1- Set up Profile Page & Links	
<i>T1. Add Texts, T2. Add an image, T3. Add links, T4. Add a video from YouTube</i>	
Starting state	Blank homepage
Objective Script	<p>GPSS wishes to update their home page, please</p> <ul style="list-style-type: none"> • <u>Add a picture</u> as the heading and provide <u>a brief introduction</u> of the organization with the information given. • Next, please provide an <u>external link to UW homepage</u> and upload a <u>Youtube video</u> about the University of Washington on your homepage.
Prompts	Could you please check the task list?

Level 2: Create Subpage Content and Show Abstracts on Homepage

Objective 2 - Create & Publish News Posts and Attach Related Files & Documents	
<i>T5. Post news on the homepage, T6. Add quick links, T7. Create document library and add files</i>	
Starting state	Homepage saved after L1
Objective Script	<p>The GPSS yearly officer election is coming up next week, please</p> <ul style="list-style-type: none"> • <u>Post this news</u> on the homepage and <u>give a brief description</u>. • <u>add some relative links including the homepage</u> you worked on in scenario 1 • Finally, let's <u>attached files</u> as supporting information.
Prompts	Maybe try to save now?

Objective 3 - Post Events and show the subpage in navigation bar	
<i>T8. Create a new event page and post events, T9. Link event page to the homepage and show some events on the homepage.</i>	
Starting state	Homepage saved after L1
Objective Script	<p>GPSS hosts many events every week. Please</p> <ul style="list-style-type: none"> • <u>Create a new event page</u> and <u>post an event calendar</u> which shows the events information. • Also, please <u>show this page in the navigation bar</u> so that you could find it later, and <u>display the events on the homepage</u>.
Prompts	Which web parts would you need if you want to display the events?

Level 4: Organize Homepage

Objective 4- Reorganize the Website	
<i>T10. Change layout in specific ways</i>	
Starting state	Homepage saved after L2
Objective Script	<p>You've already created all of the desired web parts on your homepage, but you've found that viewers respond better to a <u>two column layout</u> for some contents.</p> <ul style="list-style-type: none"> • Can you please take the sample as a reference and improve the homepage layout?
Prompts	Can you look closely between the sections?

General Scenario:

Imagine that you are tasked with managing the University of Washington Graduate & Professional Student Senate (GPSS) website, which is a student government organization on campus. You just created a new site, and you are on your completely blank homepage now. Below are some of the tasks you may have to complete to successfully build the webpage. Please refer to the materials provided in the Testing Materials folder on the desktop. We have also provided a picture of website sample as a reference.

Participant Task Objective 1

Participant _____

GPSS wishes to update their home page, please

- Add a picture as the heading and provide a brief introduction of the organization with the information given.
- Next, please provide an external link to the UW Website and add a Youtube video about the University of Washington on your homepage. (it is located on the next browser tab)

1. How easy was it to complete the tasks in this task group?

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

2. How understandable was the process of completing this task group?

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

Participant Task Objective 2

Participant _____

The GPSS yearly officer election is coming up next week, please

- Post this news on the homepage and give a brief description about how the process works
- Create a group of 3 links on the news page. Two of them can be found in the material folder, and one is the link to the homepage you created in scenario 1. (please refer to the picture provided)
- Finally, attach three files as supporting information.

1. How easy was it to complete the tasks in this task group?

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

2. How understandable was the process of completing this task group?

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

Participant Task Objective 3

Participant _____

GPSS hosts many events every week. Please

- Create a new event page and post a group of events that are coming up in the next few weeks (please refer to the material folder).
- Please show the events page in the navigation bar so that you could find it later, and display the events on the homepage.

1. How easy was it to complete the tasks in this task group?

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

2. How understandable was the process of completing this task group?

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

Participant Task Objective 4

Participant _____

You've already created all of the desired web parts on your homepage, but you've found that viewers respond better to a two-column layout for some contents. Can you please refer to the sample and improve the homepage layout?

1. How easy was it to complete the tasks in this task group?

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

2. How understandable was the process of completing the tasks in this task group?

Very Difficult	Difficult	Neutral	Easy	Very Easy
1	2	3	4	5

Data-logging Form

(* small scale example of data-logging form*)

Session	Time	Participant	Scenario	Sub-task	Task Success	Task Failure	Number of Hints	Comments*

Comments*

To differentiate different types of comments, we define different comments codes here, followed by an example:

Normal comments

eg: goes to the sub-menu

“Comment maken directly by the user”

eg: “this is too confusing”

COMMENTS GUESSED BY THE OBSERVER / OBSERVER’S ACTIVITY

eg: THINKS SHE IS ALREADY ON THE HOMEPAGE / GIVE HINT TO GO BACK HOMEPAGE

Attachment: Webpage Sample

Objective 1 Homepage

Office 365 | SharePoint

517TestPage-L1

Home Documents Pages Site contents Edit

Search this site

New Page details

Draft saved 2/24/2019 Edit Publish

GRADUATE & PROFESSIONAL STUDENT SENATE

About GPSS

The Graduate and Professional Student Senate (GPSS) is the official student government representing the 15,000 graduate and professional students at the University of Washington. GPSS provides and advocates for the tools needed to enhance personal and professional development, and safeguards the interests of the students it represents.

GPSS actively supports graduate and professional students and builds community among them with regular communications and opportunities for involvement, as well as social events throughout the year. GPSS represents students to the University and the Legislature, funds graduate programming, and hosts regular social events.

<https://www.washington.edu/>

UW Homepage

www.washington.edu

Honors and Awards UW is a top producer of Fulbright recipients: Fifteen graduate and undergraduate students from the University were awarded Fulbright grants for 2018-2019 — among the leading research schools in the country and more than any other...

University of Washington Campus Tour

Watch later Share

Comments

Add a comment. Type @ to mention someone Post

Get the mobile app Feedback

Objective 2 Homepage

Office 365 | SharePoint

517TestPage-L2

Home Documents Pages GPSS Event Page Site contents Edit

Search this site

+ New Page details

Draft saved 2/24/2019 Edit Publish

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Big News

+ Add

2019-2020 GPSS Officer Elections

The approved Elections Guide for the 2019-2020 GPSS Officer Elections is now available. Nominations will be accepted until Monday, April 22, 2019, at 5:30 p.m. a...

MOD Administrator 2 days ago
6 views

<https://www.washington.edu/>

LW Homepage

www.washington.edu

Honors and Awards UW is a top producer of Fulbright recipients. Fifteen graduate and undergraduate students from the University were awarded Fulbright grants for 2018-2019 — among the leading research schools in the country and more than any other U...

University of Washington Campus Tour

Watch later Share

Comments

MA Add a comment. Type @ to mention someone Post

Get the mobile app Feedback

Objective 2 News Page

The screenshot shows a SharePoint news page titled "2019-2020 GPSS Officer Elections" by MOD Administrator. The page features a main announcement, a "Relative Links" section with three links, a "Documents" section with a table of files, and a "Comments" section with a text input and a "Post" button. The top navigation bar includes "Office 365", "SharePoint", and a search bar. The page is published on 2/24/2019.

2019-2020 GPSS Officer Elections
MOD Administrator

The approved Elections Guide for the 2019-2020 GPSS Officer Elections is now available. Nominations will be accepted until **Monday, April 22, 2019, at 5:30 p.m.** and elections will be held **Wednesday, May 1, 2019 at 5:30 PM at the HUB**. All current and incoming graduate students are eligible to run for a position, but only currently registered GPSS Senators may vote in the GPSS Officer Elections.

For any questions or concerns about this guide, please contact the Elections Committee Chair, Frances Chu, at chuf@uw.edu.

Relative Links

- GPSS Homepage
- GPSS Official Website
- 2019-2020 GPSS Officer Elections | Graduate & P...

Documents

Name	Modified	Modified By
GPSS Officer Election	2 days ago	MOD Administrator
GPSS-Goals_85801.pdf	2 days ago	MOD Administrator

Comments

Add a comment. Type @ to mention someone

Like Comment 5 Views Save for later

Objective 3 Homepage

Office 365 | SharePoint

5L 517TestPage-L2

Home Documents Pages GPSS Event Page Site contents Edit

Search this site

New Page details Draft saved 2/24/2019 Edit Publish

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Big News

+ Add

2019-2020 GPSS Officer Elections

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MDD Administrator 2 days ago
4 views

Upcoming Events

+ Add event

MAR 16 Get-together GPSS and the Sorcerer's Social Sat, Mar 16, All day Center for Urban Horticulture, 3501 NE 41... Add to my calendar	MAR 15 Meeting Executive Committee Meeting Fri, Mar 15, 5:30 PM Hub 303, 3244 Ruprechtsholen, Austria Add to my calendar
--	---

<https://www.washington.edu/>

UW Homepage

www.washington.edu

Honors and Awards UW is a top producer of Fulbright recipients. Fifteen graduate and undergraduate students from the University were awarded Fulbright grants for 2018-2019 — among the leading research schools in the country and more than any other...

University of Washington Campus Tour

Watch later Share

Objective 3 Event Page

The screenshot shows a SharePoint page for an event. At the top, the Office 365 and SharePoint logos are visible. The page title is '517TestPage-L2' and the current page is 'GPSS Event Page'. A search bar is located in the top right corner. Below the header, there are navigation options: '+ New', 'Send by email', 'Promote', and 'Page details'. The page is published on 2/24/2019 and has an 'Edit' button. The main content area features a large banner with the title 'GPSS Event Page' and the user 'MOD Administrator'. Below the banner is an 'Event Calendar' section with a '+ Add event' button and a 'See all' link. Two event cards are displayed: one for 'MAR 16' titled 'Get-together: GPSS and the Sorcerer's Social' and another for 'MAR 15' titled 'Meeting: Executive Committee Meeting'. Each card includes the date, time, and location, along with an 'Add to my calendar' button. Below the events is a 'Comments' section with a text input field and a 'Post' button. At the bottom, there are social sharing options: 'Like', 'Comment', '3 Views', and 'Save for later', along with a 'Feedback' button.

Objective 4 Homepage

Office 365 | SharePoint

5L 517TestPage-L3

Home Documents Pages GPSS Event Page Site contents Edit

Following Share site

Search this site

New Page details Draft saved 2/24/2019 Edit Publish

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Big News

+ Add



2019-2020 GPSS Officer Elections
The approved Elections Guide for...
MOD Administrator 2 days ago
1 view

Upcoming Events

+ Add event

MAR 16	GPSS and the Sorcerer's Social Sat, Mar 16, All day
MAR 15	Executive Committee Meeting Fri, Mar 15, 5:30 PM

See all

University of Washington Campus Tour

Watch later Share

<https://www.washington.edu/>

UW Homepage

www.washington.edu

Honors and Awards UW is a top producer of Fulbright recipients. Fifteen graduate and undergraduate students from the University were awarded Fulbright grants for 2018-2019 — among the leading research schools in the country and more than any other U...

Comments

Add a comment. Type @ to mention someone

Post

Get the mobile app Feedback

Attachment: Materials Folder

Objective 1 Folder

1. About GPSS text file

About GPSS

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2. GPSS Heading image



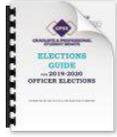
3. Links

UW Homepage

<https://www.washington.edu/>

4. Youtube Video Page (https://www.youtube.com/watch?v=gOmiwd2HS_c) Open for Participant

Objective 2 Folder



news file-1.pdf



news file-2.pdf



news file-3.pdf



links



news

1. News text file

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For any questions or concerns about this guide, please contact the Elections Committee Chair, Frances Chu, at chuf@uw.edu.

2. Relative links

GPSS yearly officer election

<http://depts.washington.edu/gpss/gpss-officers-election/>

GPSS Official Website

<http://depts.washington.edu/gpss/>

3. News files. pdf provided

Objective 3 Folder

1. Upcoming events text file

Executive Committee Meeting



Upcoming Events

When: Fri, Mar 15, 5:30 pm – 6:30 pm

Where: HUB 303

The Graduate and Professional Student Senate (GPSS) is the official student government for all graduate and professional students at UW-Seattle. GPSS represents students to the UW administration and state and federal governments and puts on regular social events. Each UW department sends two Senators to a meeting every other week on Wednesday evenings at 5:30 PM in HUB 303.

GPSS and the Sorcerer's Social

When: Sat, Mar 16, 2019

Where: UW Center for Urban Horticulture

Facebook Link: <https://www.facebook.com/events/283853175624440/>

Join your fellow graduate and professional students for a glass of butterbeer or pumpkin juice and a ridiculously fun evening at our winter social! GPSS will be hosting a Harry Potter themed social for all graduate and professional students! Dress as your favorite character, sport your house colors, or just come as you are to mingle with other students and enjoy a night of Harry Potter frivolity.

References

- Nielson, J. (1994, April 24). *10 usability heuristics for interface design*. Retrieved from <https://www.nngroup.com/articles/ten-usability-heuristics/>
- Sauro, J. (2013, July 30). *Rating the severity of usability problems*. Retrieved from <https://measuringu.com/rating-severity/>
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