

Drexel University  
College of Computing and Informatics  
INFO-608 Human-Computer Interaction

# HEURISTIC EVALUATION



MINT MOBILE

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Mint Mobile Service

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INTRODUCTION

In this study, it will be using the heuristic evaluation based on Nielsen's 10 Usability Heuristics for User Interface Design. Team evaluators will individually create a table that presents their findings on issues of Mint's Mobile website according to a severity scale and Nielsen's 10 heuristic.


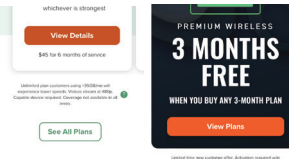
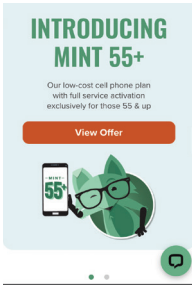
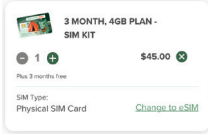
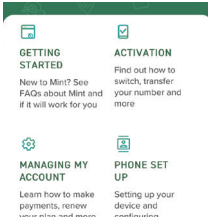
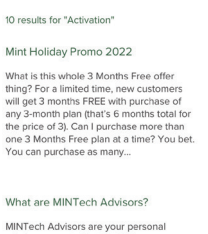
This will be followed by comparing each team evaluators' outcomes to the given heuristics and prioritizing on issues that require immediate intervention. We also provide comprehensive recommendations on the areas that must be fixed to aid in a better user experience of the website.

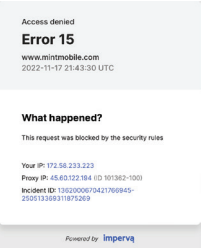
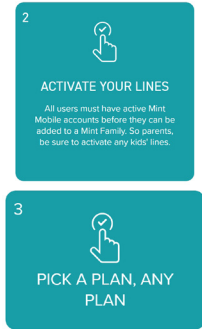
METHOD DESCRIPTION

A heuristic is a fast and practical way to find/solve problems or make decisions. We have used a heuristic evaluation method to systematically determine Mint's Mobile website system's usability by going through a checklist of criteria to find flaws which design teams have initially overlooked.

First, we individually looked at the mobile website and found problems pertaining to the usability heuristic evaluation method. The problems that we found individually were categorized based on the 10 principles of interaction design and the severity of problems that they could cause to the users.

Later, as a team, we evaluated all the problems together, out of which, the most severe issues are prioritized and detailed here in this report. This helped the team measure the usability of user interfaces and report issues from our findings. During this process, several insights were extracted, which can also help design teams enhance product/service usability from early in development and optimize usability by minimizing design deficiencies.

Location of problem	Description of problem	Heuristics identified	Severity
All over the website	Presentation of information is different on every page of the website 	4	4
Homepage	There is a lot of duplication and overlap of the same information on the same page 	6	3
Homepage & Plan details	The banners do not swipe automatically and there is no indication of swiping it either 	8	2
Shopping cart	The 'cancel button' and the 'no. of items button' look very similar and can be mistaken for one another 	3	3
Help & Support	The help section under the search bar doesn't seem like it's clickable but it is actually clickable 	10	4
Search keywords	There are some broad keywords that do not yield necessary results, only some specific keywords give results 	10	2

Location of problem	Description of problem	Heuristics identified	Severity
Help & Support	<p>Once you click on one of the help questions on the Help section, it denies access and there is an error code but users are knowledgeable enough to understand</p> 	9	4
Homepage & plan details	<p>Same icons are used to represent different meanings</p> 	6,4	3

## FINDINGS

Mint Mobile is new in the market, it attracts a large user base involving especially students due to the affordable prices. Based on the evaluation of the Mint's mobile website, their biggest issue is inconsistency. All their pages have a different look and feel to it. The information presented on the 'Shop Plan' navigation bar is different from that of the 'Family plan' page or the 'Buy a new phone' page. It feels as if we were transitioning through different sites but on the same site.

They are also inconsistent with the icons they use. The same icons are used to explain and present two different sets of information sections. It makes it difficult for users to recognize and recall the icon for its sole meaning the next time they want to use the website. Along with that, there is a lot of duplication of information on the same page which becomes unnecessary since it takes up a lot of space on the page and overloads the user with a lot of unnecessary and extra information.

Since Mint Mobile is a new concept for a lot of users and some of its audience is middle-aged, the Help and support becomes very essential for them to rely on. However, the help center has sections that do not seem clickable but are actually clickable, making it difficult for the users to get access to the information that is right in front of them. This would also make it difficult for novice users since they are relying on the information provided on the website due to no physical stores concept of the service provider. Even if one manages to click on one of the help tabs in the help center, it navigates to an error page with no indication or solution to the problem. This overwhelms the user since they are not knowledgeable to understand the technicalities of the system.

## RECOMMENDATIONS

1. It confuses and misleads users when the website uses the same icon with different meanings in many places. There are at least two icons that are found to be used multiple times with different definitions on different pages, and they should be replaced or changed.
2. Addressing inconsistency is a vital issue for websites. The colours, name of plan, menu appearance, banner position and layout on every page needs to remain exactly the same across all web content in order to present the brand's identification and consistency. It is important to identify the most important brand appearance/strategy goals, and update the website to match the brand identity as well.
3. An error page appears when clicking the information image/icon and that is not appropriate as it confuses users and the confused users are likely to leave the website and most probably won't return anytime soon. The section of help-centre with essential help guidelines has some information that is clickable, but it directs the user to an error page. It should be removed or let the users know what to do next and navigate them to the right page.
4. On the homepage and the help center, there is more information in the section that introduces the Mint Mobile, but it's unclear which of these links are clickable. It should have a clear indication that leads users to click on it to read more information.

## CONCLUSION

Heuristic evaluation is a flexible inspection and it is simple to perform and offers a good cost/benefit ratio. It is also the solution for moving more quickly to the production cycle and anticipating potential errors that may arise during development.

This assignment also shows us that heuristic evaluation is usually conducted by a group of evaluators and one should not rely on the results of having a single person to mark issues of usability. A healthy critical discussion with multiple perspectives is necessary to decide the severity of the issues and if it is the cause of a failed user experience and needs immediate attention. The results of a heuristic evaluation obtained from an evaluation are greatly improved if multiple evaluators are involved, and the team should also do it independently of each other.

## Heuristics

#	Name
1	Visibility of system status
2	Match between system and the real world
3	User control and freedom
4	Consistency and standards
5	Error prevention
6	Recognition rather than recall
7	Flexibility and efficiency of use
8	Aesthetic and minimalist design
9	Help users recognize, diagnose, and recover from errors
10	Help and documentation

## Severity Ratings

Rating Level	Description
0	No problem
1	Cosmetic problem
2	Minor problem
3	Major problem
4	Severe problem

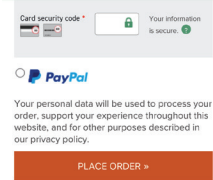
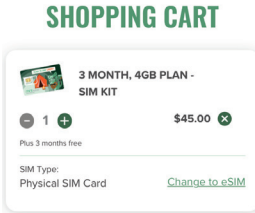
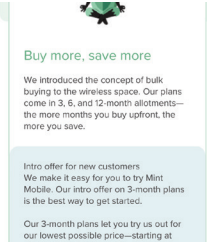
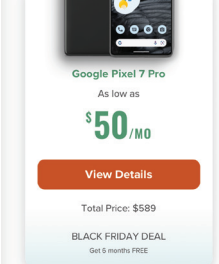
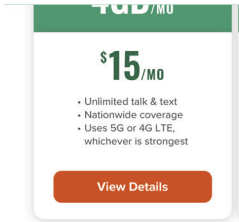
## Issues

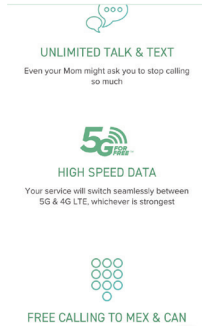
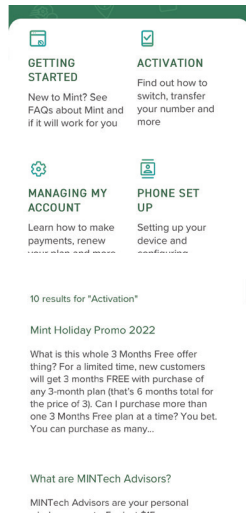
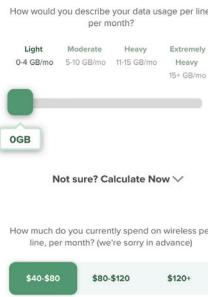
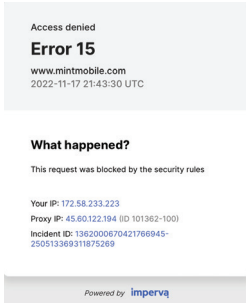
Heuristic	Severity	Location	Issue
4	4	Homepage	Show the same section twice - search for ZIP code. (Makes user get confused and overlapping information.)
4	2	Homepage	Overlap information on the menu bar and the homepage body.
4	3	Homepage	Same icon used twice but not with the same meanings on homepage. Device with heart icon
1	3	Homepage	Display two Review sections, which is overlapping information
7	2	Chatbot	Navigate users to the page, not answering and didn't ask if the user need more help
4	4	Homepage & Family plan page	Same icon used twice but with completely different meanings on homepage and modern family plan page. Hand point a checked mark icon
5	1	Homepage - 55+plan section	Unclear swipe button, only display the dot but not arrow, which makes it hard to see another banner
8	3	Family plan page	Difficult to read the contexts, easy to lose absorption. Info section with images
5	4	Homepage & Shop plan page	Doesn't show the 55+ plan when clicking shop plans button on menu. 55+ plan only display on homepage
5	4	Phone buy a new one	The menu bar font color/display layout change once click in Buy a new one under Phones
2	3	Plan details	Unclear image swipe button. Doesn't swipe automatically and the colour of button is blurry in light green background.
1	2	Plan details	No way to see more reviews. The review section is unclickable, they are just images.
1	1	Family plan	It has two names that navigating to the same page, which is unclear. Modern family plan & Family plan

## RECOMMENDATIONS

1. Overlapping information should be removed from the website, and reconsider the information hierarchy. Such as the ZIP code searching, it shows twice on the homepage and other pages too. This not only makes users confused but also keeps them away from the important information.
2. It confuses and misleads users when the website uses the same icon but different meanings in many places. There are at least two icons that are found to be used multiple times with different definitions on different pages, and they should be replaced or changed.
3. When displaying more than one picture of product/Ads graphic on the page, and using a bullet icon on the bottom, it should be displayed automatically and users are able to swipe them easily/clearly as well.
  - Homepage of the 55+ plan section has 2 bullets on the bottom of the image, and it is not showing automatically, 2 bullets are too close to each one as well.
  - Plan detail page that shows the sim card images are not displaying automatically, there are 4 bullets on the bottom of the image and the color of bullets are unclear to see in the light green background.
4. Users should be able to click the review section and see more reviews if they'd like to when they're looking at the product detail. The page should provide a link to navigate users to the review page. There is no way/link to see more reviews on the Plan details page, which has a chance to lose some potential customers.



Location of problem	Description of problem	Heuristics identified	Severity
Payment section	<p>The button of "Place order" does not match the consistency of the other call-to-action buttons</p> 	4	2
Payment section	<p>There is no visibility of status during checkout for the user to know how many steps are left to make the payment</p> <p>The plus and cross sign look very similar and therefore there is less visible to the users if they want to cancel the plan</p> 	1,5	4
Homepage	<p>The main aim of the service is at the very bottom and has a lot of text written making it difficult for users to absorb the information</p> 	1,6	3
Shop Phones	<p>The components in the "Phones" section do not match with the other pages on the website. This has a gradient and a lot of shadow while the others are solid colours with minimal shadow</p> 	4	2
View Plans	<p>The user's control and freedom over viewing "fewer plans" is not very easily visible since it hasn't been highlighted enough to catch the user's attention</p> 	3	2

Location of problem	Description of problem	Heuristics identified	Severity
Homepage	<p>There is too much white space making it difficult to read it all cohesively as a unit, when these are the major aspects of the plan</p> 	8	3
Help & Support	<p>It is difficult to understand if these are clickable links or just static text.</p> <p>The search results of "activation" do not answer the user's doubts and give unnecessary information</p> 	10	4
Homepage	<p>There is too much put into one box to fit it all however that diminishes their visibility and makes it harder to read. The "Not sure?" call to action does not follow the button format making it inconsistent</p> 	4,8	3
Help & Support	<p>Once you click on one of the help questions on the Help section, it denies access and there is an error code but users are not shown what to do</p> 	9	4

## RECOMMENDATIONS

1. Reduce the amount of white space and make it look cohesive as a unit to make it easier for the user to read and grasp information better. Currently, the alignment is off and the information seems to be all over the place.
2. The users should be able to control the “cross” buttons and “see/view more” and therefore these links should be bold and clear to give users freedom to press on them since currently, they are displayed in a small font size and blend in with the background text.
3. All the call-to-action buttons should look consistent with the text being in bold. Some call-to-actions which don't have a button component should be highlighted in a way that makes the users understand that it is clickable.
4. The information hierarchy needs to be redesigned and worked on since the very important and essential information is displayed at the very bottom of the page making it difficult for users to recall it and get a chance to view the services Mint has to offer.
5. The visibility of text and information should not be compromised for the sake of the aesthetics and minimalist design of the page. At some places, the fonts are big and clear, while at some places, they are small and difficult to read.

## References

Mint Mobile Service

10 Usability Heuristics/Neilsen Norman:

<https://www.nngroup.com/articles/ten-usability-heuristics/>

Mint Mobile website: <https://www.mintmobile.com/>

Team evaluators: Khushali Parekh, Yuwei Wu