HEURSITIC EVALUATION & COGNITIVE WALKTHROUGH FOR

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About

The Application

The application I chose is the desktop version of hulu.com. Hulu is a popular subscription service for streaming television shows and movies online. Hulu provides mobile applications as well, but for the purposes of this project, I chose the desktop version, since that's the version of the site I'm most familiar with. Hulu has a wide variety of shows available, and offers fair prices, which is why they're so popular. However, the site has a bit of a learning curve when it comes to navigation and usability Therefore, I thought a heuristic analysis and cognitive walkthrough would be valuable for this application.

The Users

Hulu users tend to be young, affluent, and comfortable with daily technology and internet use. The average age of a Hulu user is 31 and the average household income is $91,000.[1]

[1] https://muchneeded.com/hulu-statistics/

Heuristic Evaluation

Heuristics List

The following list of heuristics from Nielsen and Norman was used for this evaluation:

Number	*Description*
H1	Visibility of system status
H2	Match between system and real world
H3	User control and freedom
H4	Consistency and standards
H5	Error prevention
H6	Recognition rather than recall
H7	Flexibility and efficiency of use
H8	Aesthetic and minimalist design
H9	Help with errors
H10	Help and documentation

Summary

Number	*Description*	*Violations Found*
H1	Visibility of system status	0
H2	Match between system and real world	1
H3	User control and freedom	3
H4	Consistency and standards	9
H5	Error prevention	1
H6	Recognition rather than recall	1
H7	Flexibility and efficiency of use	4
H8	Aesthetic and minimalist design	1
H9	Help with errors	1
H10	Help and documentation	0
	Total	**22**

Full Evaluation

	Description	Heuristic	Heuristic Violated?
1	Changing subscription levels requires 2-steps to confirm	H5 Error prevention	No
2	Clicking the "X" while in full screen mode does not close the video player.	H3 User control and freedom, H4 Consistency and standards, H2 M	Yes
3	"My Stuff" icon is inconsistent across site	H4 Consistency and standards	Yes
4	User navigation menu is inconsistent.	H4 Consistency and standards	Yes
5	Icon to remove items from My Stuff is inconsistent and unclear	H4 Consistency and standards, H7 Flexibility and efficiency of use, I	Yes
6	Search bar offers suggestions as user types.	H7 Flexibility and efficiency of use	No
7	Page shows load status when loading detail page or video	H1 Visibility of system status	No
8	Search bar does not offer suggestions if user misspells or enters typo.	H9 Help users recognize, diagnose, and recover from errors	Yes
9	Homepage appears cluttered and aesthetically unappealing.	H8 Aesthetic and minimalist design	Yes
10	Inconsistent navigation on help page.	H4 Consistency and standards	Yes
11	Help pages provided with suggested topics.	H10 Help and documentation	No
12	Icons that appear on tiles are confusing and unclear.	H4 Consistency and standards, H7 Flexibility and efficiency of use	Yes
13	"Remove From My Stuff" icon is unintuitive.	H3 User control and freedom, H7 Flexibility and efficiency of use	Yes
14	Action of "Go to Details Page" icon is inconsistent and unuintuitive.	H4 Consistency and standards, H3 User control and freedom	Yes
15	Category pages use clean, minimalist design.	H8 Aesthetic and minimalist design	No
16	Adding or removing an item from My Stuff displays status to user.	H1 Visibility of system status	No
17	Primary action on tiles is different on homepage and category pages.	H4 Consistency and standards, H7 Flexibility and efficiency of use	Yes
18	There is no error prevention when removing or adding an item from My St...	H4 Consistency and standards, H5 Error prevention	Yes
19			

To view the full evaluation, including notes and screenshots, please see Airtable at the following link:[2]

https://airtable.com/invite/l?inviteId=inv81ayJp9pdOF1Oo&inviteToken=2af0a23a31cad409873901edfde2dce6b389e9cd5565296a37f0dfaee69a1a4d

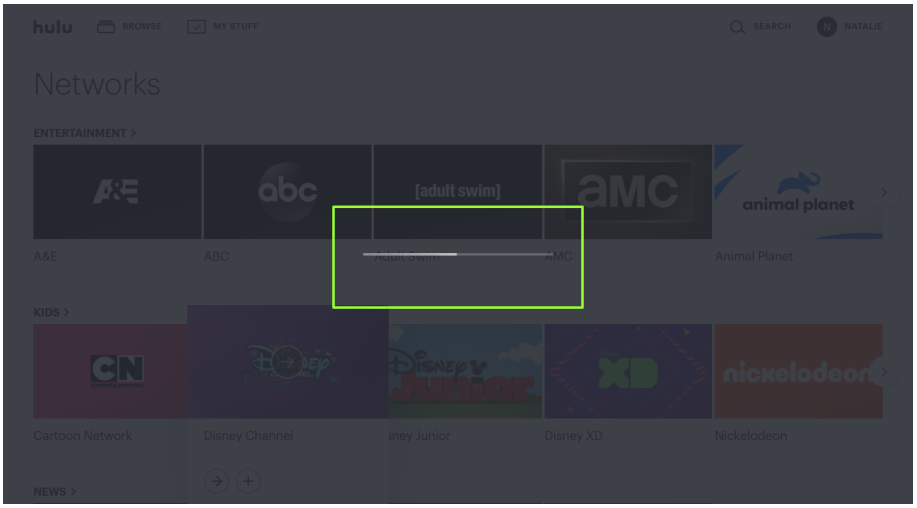
[2] This evaluation was adapted from a template by Lucas Roe.

Notable Findings

H1: Visibility of System Status

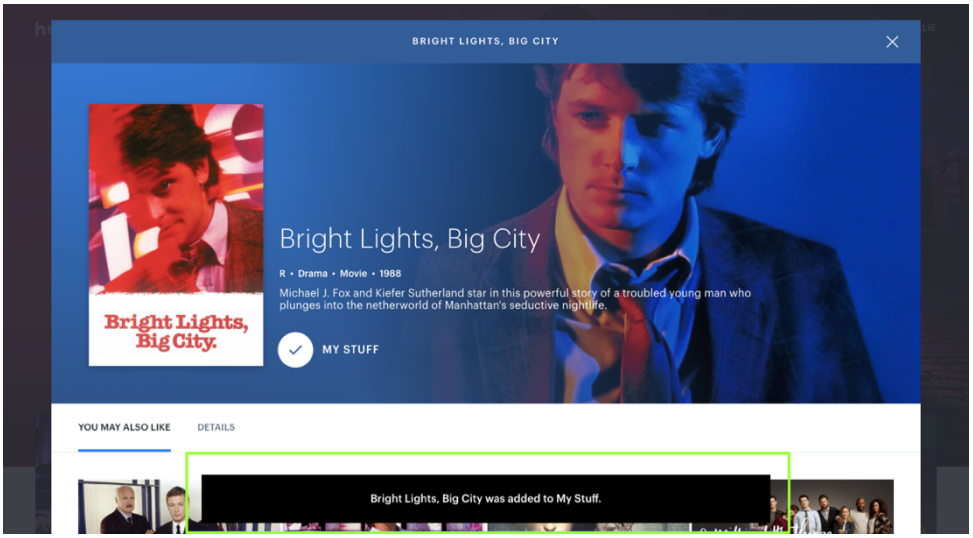
Pages show a status bar when loading a details page or video.

Heuristic violated? No



Adding or Removing an Item from My Stuff alerts the user of successful action completion.

Heuristic violated? No

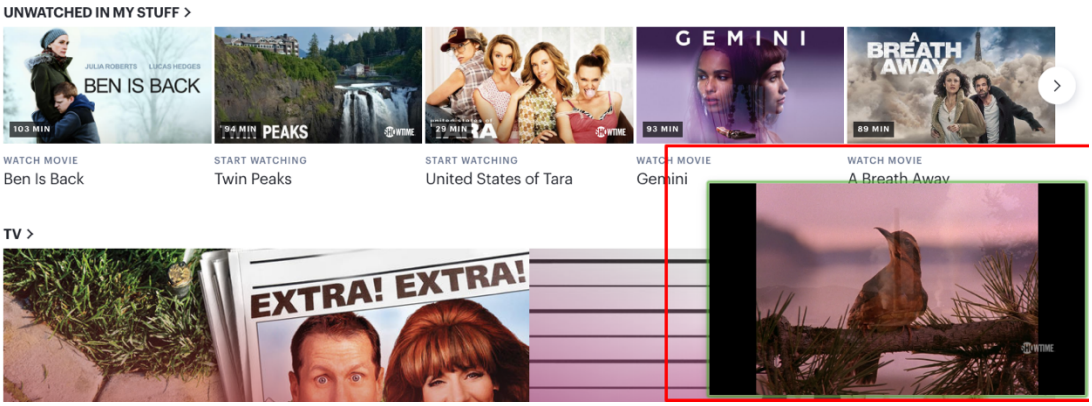


H2: Match between system and real world

When watching a video in full screen mode, clicking on the X does not immediately close the video player.

Instead the video is minimized into a smaller window in the lower right of the page. X has become a universal symbol for closing or removing an item, so this action does not meet the user's expectations.

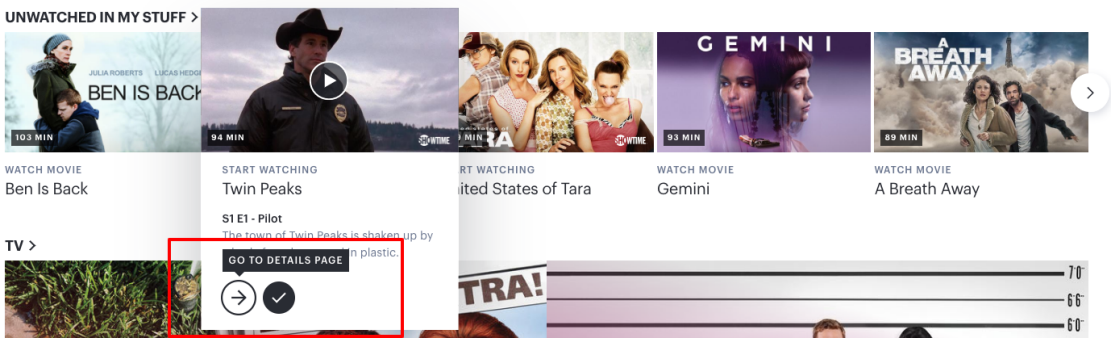
Heuristic Violated: Yes

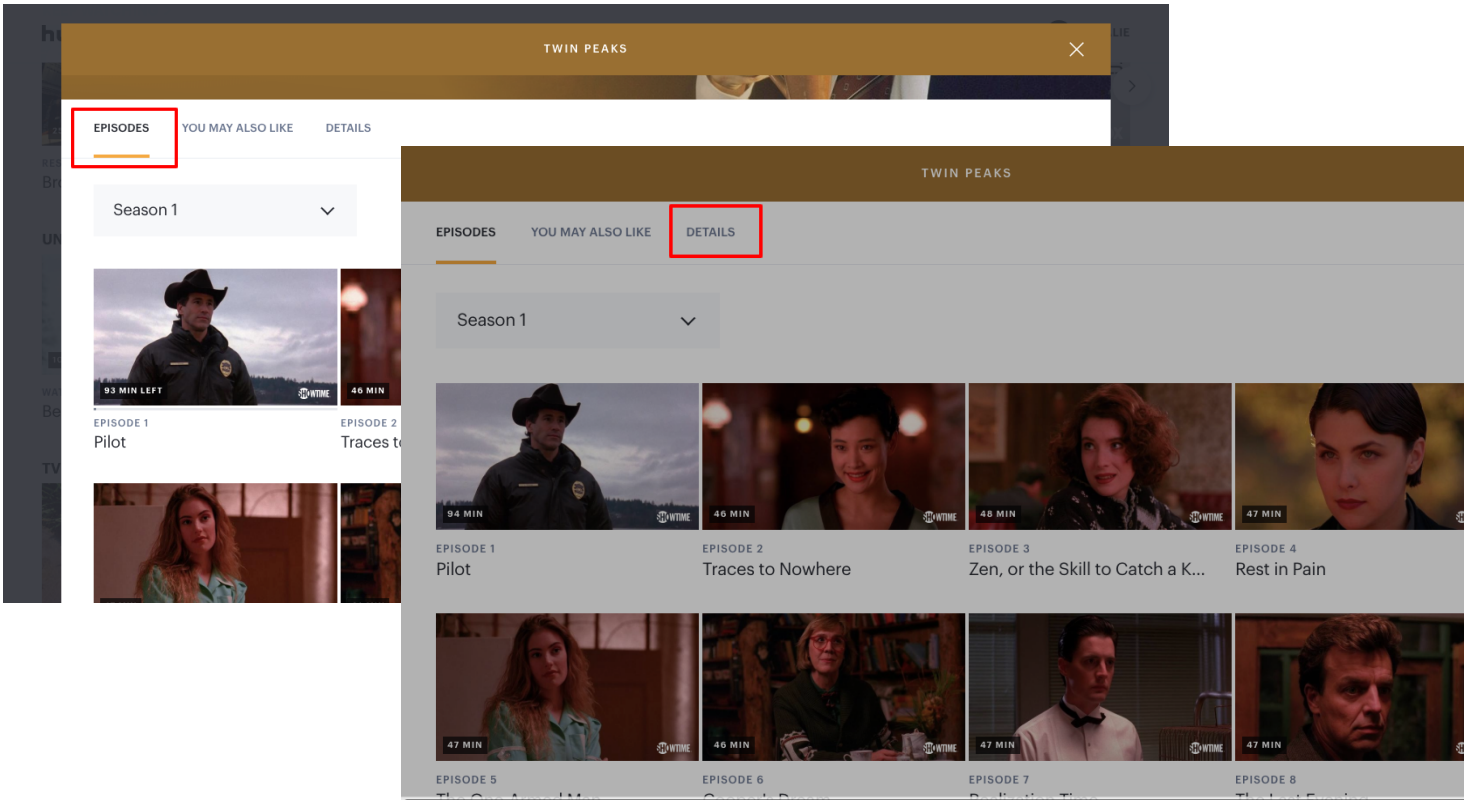


H3: User Control and Freedom

When hovering on a show tile, an arrow icon appears in the lower left side of the tile. It is not clear what action this icon preforms (does it play the video? Does it take the user to a new page?). The user is only able to know the action by hovering on the icon. Then, a tooltip appears, letting the user know this icon takes them to the details page. However, when the icon is clicked, the user is taken to the Episodes page. To reach the details page, the user must click on a tab interaction. The user has no control over what page they are being take to, which leads to a confusing experience.

Heuristic violated? Yes

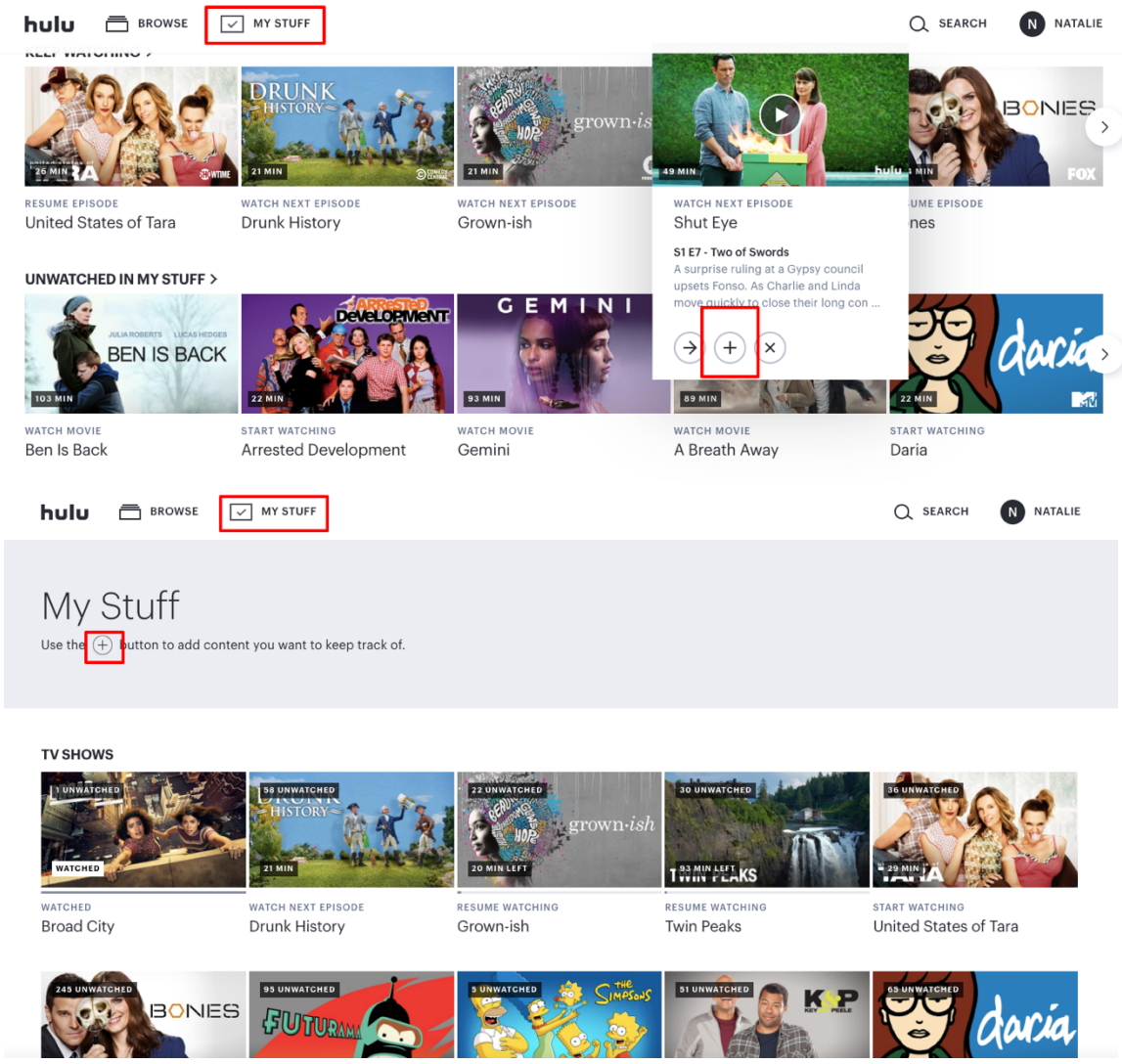




H4: Consistency and Standards

The My Stuff icon used throughout the site is inconsistent and confusing. In the navigation menu, My Stuff is represented by a checkmark icon. To add an item to My Stuff, a user must select a + icon which appears on the show tiles. However, unless the user hovers on the + icon, it is not obvious that this icon corresponds to the My Stuff concept. The user isn't informed of this unless they navigate to the My Stuff page. On the My Stuff page, text at the top of the page informs the user that the + icon adds items to My Stuff. However, a user isn't likely to navigate to this page until after they have already added items to My Stuff. Further, the + icon appears nowhere on the My Stuff page—a user can't add stuff from this page, since all the items on the page are *already* in My Stuff.

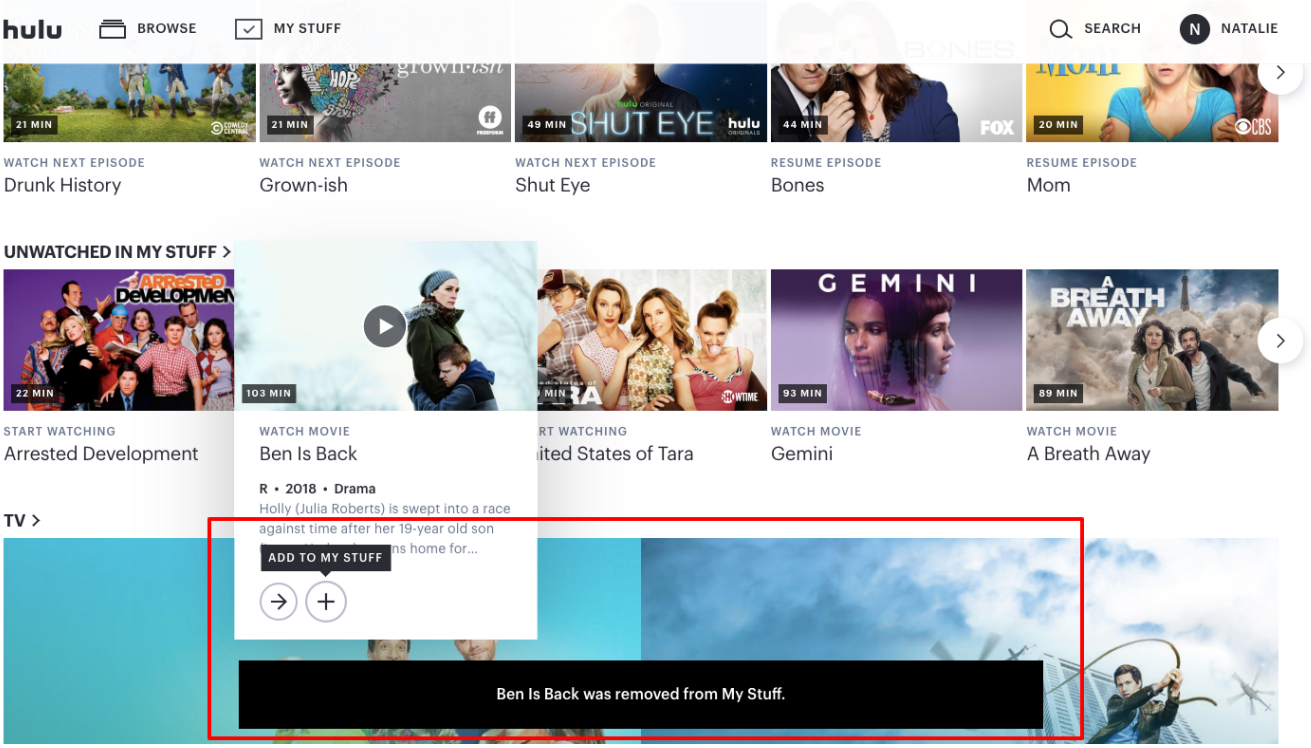
Heuristic violated? Yes



H5: Error Prevention

When removing an item from My Stuff via the homepage, the user is shown a confirmation message that the item has been removed. However, the user is not asked to confirm the action, which can easily lead to unintentionally removing an item if a user is distracted or clicks the wrong icon.

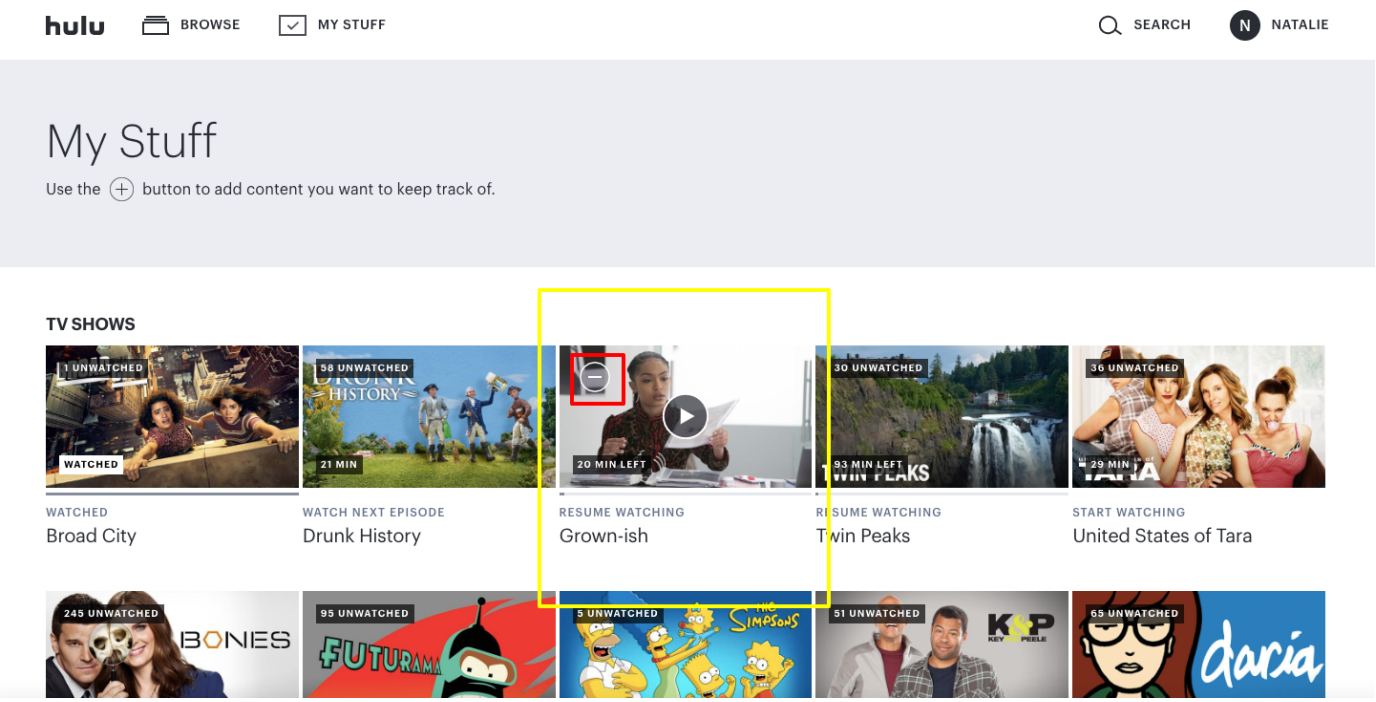
Heuristic violated? Yes



H6: Recognition Rather than Recall

To remove an item from My Stuff on the My Stuff page, the user must click a bar icon. This icon does not follow the conventions followed on the homepage, where an X is used to remove from My Stuff. Therefore, the user is forced to remember what action they came to perform—they probably navigated to My Stuff to either watch or remove a show, and must remember that, for whatever reason, on this page, the icon to perform the action differs from icons used elsewhere on the site.

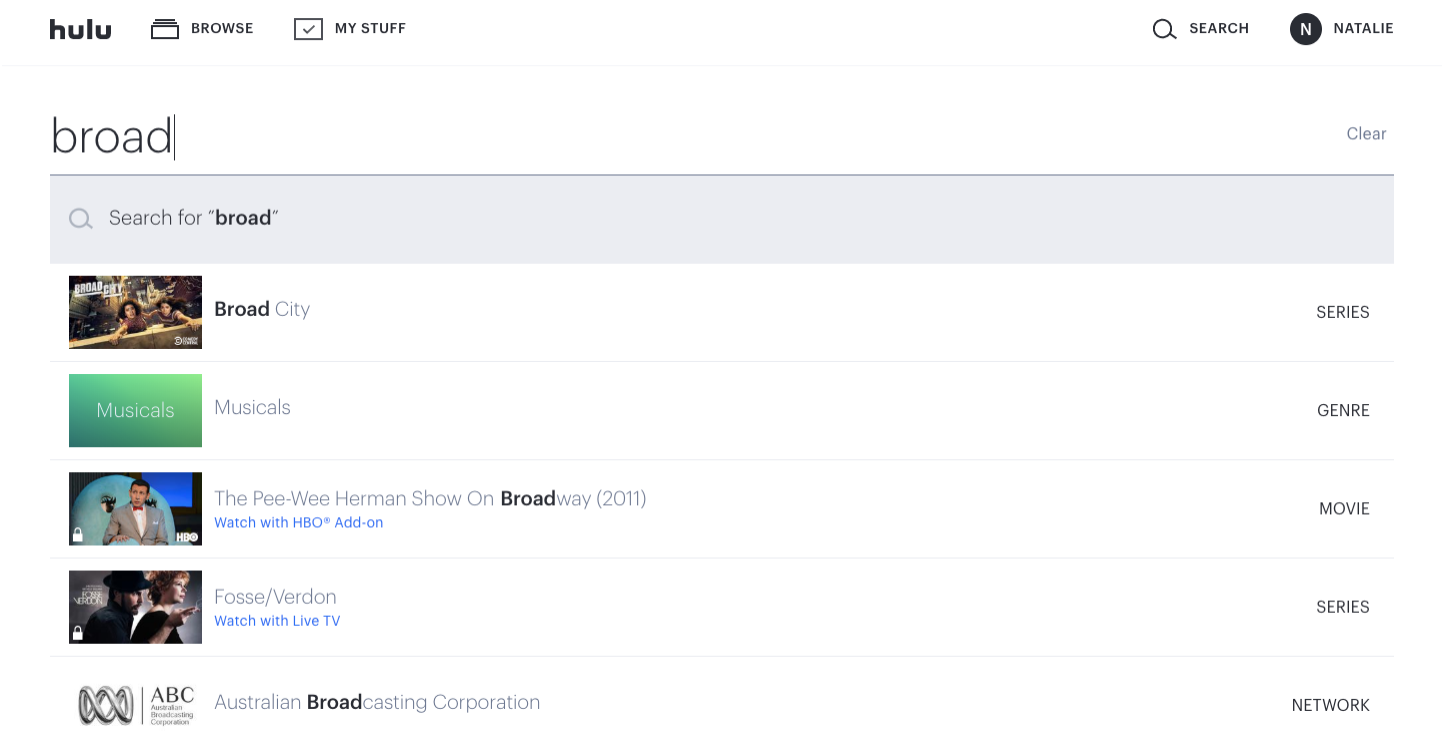
Heuristic violated? Yes



H7: Flexibility and Efficiency of Use

Search bar offers users suggestions as they type, which allows user to quickly find the show they're looking for.

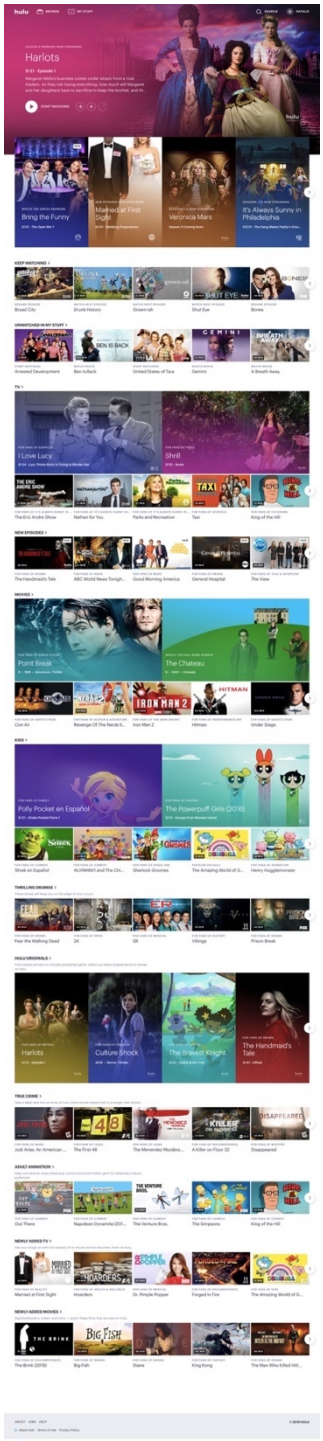
Heuristic violated?: No



H8: Aesthetic and Minimalist Design

The homepage uses many different colors and tiles of various sizes—however, it's not clear why some tiles are larger than others, which is confusing for users and make the page appear cluttered and cognitively overwhelming.

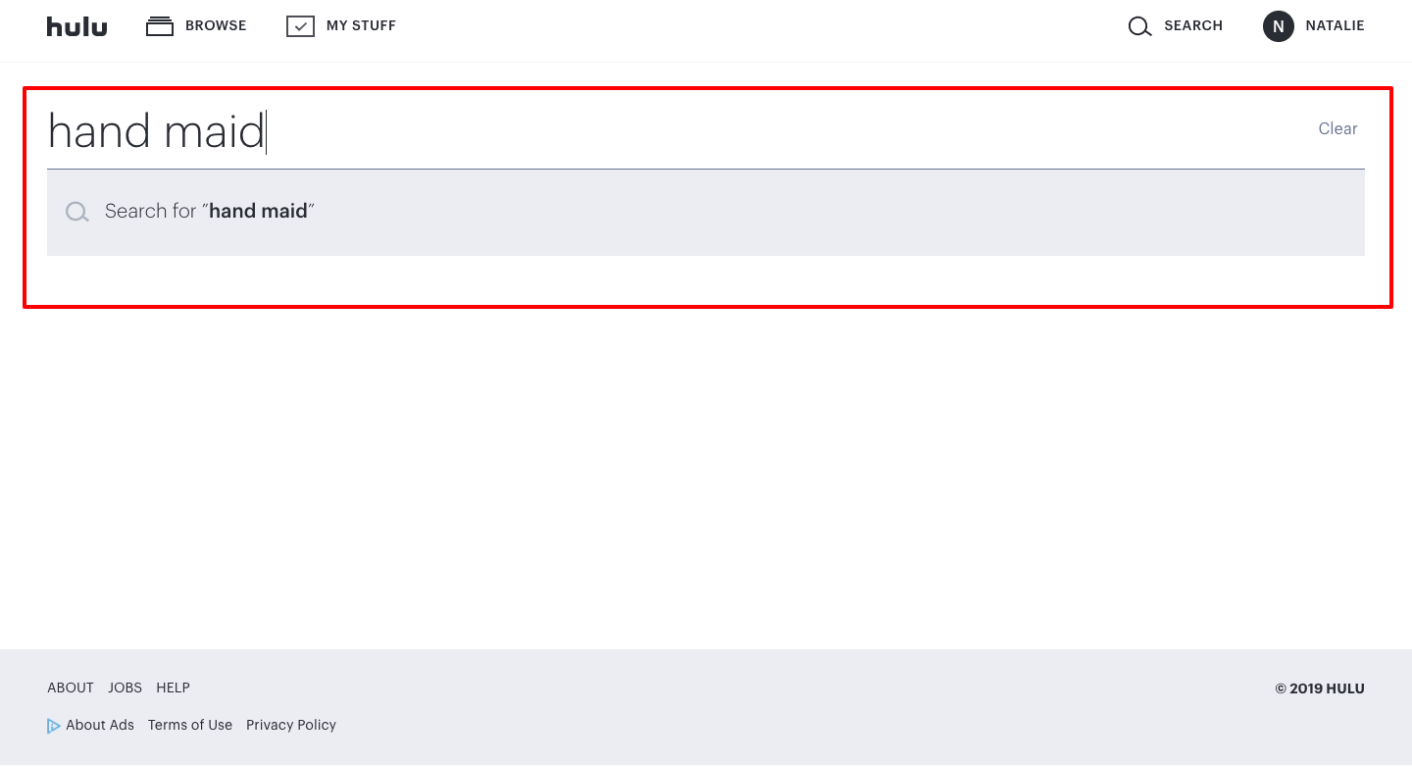
Heuristic violated? Yes



H9: Help users recover from errors

If a user misspells the name of a show or makes a typo, the search bar is not able to offer corrective suggestions, which could make it difficult for a user to find a show for a simple reason (such as a space in the wrong place).

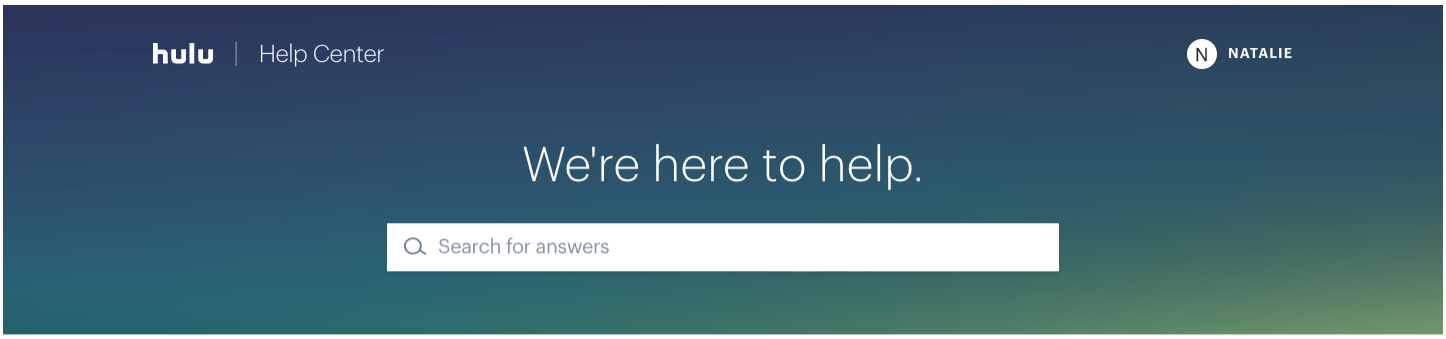
Heuristic violated? Yes



H10: Help and documentation

A help page with a list of suggested help topics is provided for the user. The help page also includes a search bar, which is convenient.

Heuristic violated? No



Suggested topics for Natalie

ACCOUNT & BILLING

Manage my Hulu plan

Hulu plans and prices

Update my billing info

I'm having trouble logging in to Hulu

WHAT'S ON HULU

Watch live TV away from home

Live sports events on Hulu

MLB baseball live on Hulu

New this month on Hulu

Cognitive Walkthrough

User
Daily internet users ages in their 20s and 30s who primarily watch tv shows online.

Core Task
Add a show to My Stuff from the homepage. Then, remove a show from My Stuff.

Paths
Add a Show to My Stuff
1. Visit www.hulu.com
2. Scroll through homepage to find a show you're interested in.
3. Hover over tile.
4. Select the add icon.

Removing from My Stuff

Option 1
1. Visit www.hulu.com
2. Click on "My Stuff" in the navigation menu
3. Find show you want to remove.
4. Hover over tile.
5. Select the remove icon.
6. Confirm action.

Option 2
1. Visit www.hulu.com
2. Scroll through the homepage to find a show that is already in My Stuff.
3. Hover over tile.
4. Select the remove icon.

Analysis

Summary

	Key Questions	*Adding to My Stuff*	*Removing from My Stuff (Path 1)*	*Removing from My Stuff (Path 2)*
1	Will the user try to achieve the right effect?	With Difficulty	With Difficulty	With Difficulty
2	Will the user notice that the correct action is available?	With Difficulty	With Difficulty	With Difficulty
3	Will the user associate the correct action with the effect that the user is trying to achieve?	With Difficulty	Yes	Yes
4	If the correct action is performed, will the user see that progress is being made toward the solution of the task?	Yes	Yes	Yes

Detailed

Adding to My Stuff

	Key Questions	*Notes*
1	Will the user try to achieve the right effect?	A user may be confused about which icon to choose to remove the item from My Stuff. There are three icons that appear when the user hovers on a tile. However, the actions of the icons aren't apparent until the user hovers over the individual icon and a tooltip appears. This could lead to errors if the user accidentally presses an icon they didn't intend to.
2	Will the user notice that the correct action is available?	It may be difficult for the user to notice that the action is available. The icon to add an item doesn't appear until the user hovers over the tile. Then, the user has to hover over each of the icons to see a tooltip that explains what each of the icons does. This requires a lot of attention from the user. A distracted user may not notice the correction action.
3	Will the user associate the correct action with the effect that the user is trying to achieve?	This may be difficult for a user who is distracted or trying to achieve the action quickly. After clicking on the add icon, a status message appears at the bottom of the screen and quickly disappears. This can be difficult to notice if not paying attention. The only other way to confirm that the item has been successfully added is to go to the My Stuff page.
4	If the correct action is performed, will the user see that progress is being made toward the solution of the task?	Yes, a status message appears briefly at the bottom of the screen after the user clicks the add icon.

Removing from My Stuff

Option 1

	Key Questions	*Notes*
1	Will the user try to achieve the right effect?	A user may be confused about how to remove a show. Text at the top of the page reads, “Use the + button to add content you want to keep track of.” However, if the user is on the My Stuff page, all of the items on the page have already been added to My Stuff. Instructions on how to **remove** the items would be helpful to have.
2	Will the user notice that the correct action is available?	A user may not notice that the action is available. The user must hover on a tile to see the remove icon appear. Also, the icon used isn’t a standard remove icon, which is usually an X. Instead, the icon is a line, which most users are likely to associate with minimizing instead of removing.
3	Will the user associate the correct action with the effect that the user is trying to achieve?	Yes, the two-step confirmation process for removing a show makes it clear the user is accomplishing the task.
4	If the correct action is performed, will the user see that progress is being made toward the solution of the task?	Yes, the system displays a success message after removal has been successfully confirmed, and the show is also removed from the page.

Option 2

	Key Questions	*Notes*
1	Will the user try to achieve the right effect?	A user is likely to be confused about how to remove a show via this path. Scrolling through the homepage, it is not very clear which items are in My Stuff or not. The user has to hover over a show's tile to see the appropriate icons appear. If a show is already in My Stuff, a checkmark icon will appear on the bottom left of the tile. However, the action of the checkmark icon is unclear. A user must hover on the checkmark icon for the remove option to appear.
2	Will the user notice that the correct action is available?	It is difficult for the user to notice the correct action. The remove option only becomes available when hovering over the checkmark icon, as mentioned above.
3	Will the user associate the correct action with the effect that the user is trying to achieve?	Yes, after finding the remove option, a tooltip appears that informs the user what action will be completed.
4	If the correct action is performed, will the user see that progress is being made toward the solution of the task?	Yes, a status message appears letting the user know that the show has been removed from My Stuff.

Recommendations

One

Priority: High

My Stuff Icons should be reevaluated to be more consistent across different sections of the site. Icons should be made more intuitive to users.

- On show tiles, a label can be added under the + icon that reads “Add to My Stuff” so the user knows what action the icon performs without needing to hover for a tooltip.
- Reconsider whether the checkmark icon best represents the “My Stuff” concept. Other concepts may be more intuitive for users, such as a heart icon (for favorites), or a list icon.
- Icons for removing items from My Stuff should be made to be consistent. On homepage and category pages, the icon is an X, but on the My Stuff page, the icon is a bar. The My Stuff page should use the same X icon, as this is more intuitive concept for users.

Two

Priority: Medium

Close actions when exiting the video player in full screen mode should be modified to match user’s expectations. Currently, when the user closes the full screen player, the player does not close. Rather, it is minimized in a smaller window. This does not match the user’s expectation, since the X icon is almost universally used across applications to completely close a window. Additionally. the current set up requires an additional action from the user, which is inefficient.

- Pressing the X in full screen mode should completely close the window.
- An additional icon can be added for the user to choose a smaller player window, if desired.

Three

Priority: Low

Actions associated with the details icon should be made more consistent. When a user clicks on the details icon, they are taken to a the episodes page, and have to select details from the episode page navigation.

- The details icon should take the user to the details page.
- Or, the tooltip should be changed to state “Go to episodes page” to better set the users expectations.

In addition, the position of the icon should be made more consistent across the site. On the homepage, the details icon appears when the user hovers on a tile, on the lower left side. On a category page, the details icon appears on the image thumbnail when the user hovers on the tile.

- The icon should consistently appear on the lower left of the tile across all pages