

COMP3511/9511- Human Computer Interaction

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User Interface Critique Concepts

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A. Interface

The selected website is of the Australian Broadcasting Corporation (ABC), i.e., <https://www.abc.net.au/>. ABC is an Australian national broadcaster, which is an independent media. The goals of the ABC websites are to provide the following services: (1) Australian local/national/international news, entertainment, sports, documentary, children programs, awareness programs and informing Australians, (2) unbiased contents, i.e., by following the competitive neutrality principles, and (3) live and recorded contents over the internet (national and international covers).

The website has to serve the following purposes: (1) Detailed digital broadcasting services such as entertainment and education to all Australians by incorporating the diversity of interest and understanding of Australian civic, (2) connecting Australian community all over the world through its services, and (3) delivering the voice of Australians.

B. Users

The main users of these websites are (1) viewers, e.g., Australians and others who are interested in Australian programs/services, (2) content makers, e.g., ABC staffs, including reporters, news editors and cameraman, (3) website support, e.g., website designer, logistic and website IT support, (4) media regulators, e.g., Australian communications and media authority, and (5) rival media broadcasters, e.g., CBS international television Australia. The users are broadly divided into three stakeholders: primary stakeholders, secondary stakeholders, and tertiary stakeholders.

Firstly, the primary stakeholders are the main targeted users of the ABC services available on the website. For example, Australian and international viewers/audiences. Viewers can be in Australia or overseas and belong to various ages ranging from children to aged people. Secondly, the secondary stakeholders are the one who manages, addresses, and provide services to the primary stakeholders—for example, ABC reporters, editors, news anchors, cameraman, operators, and audio engineers. Finally, the tertiary stakeholders are the one who is indirectly affected by the services. For example, media regulators reporting the content biasness and appropriateness of the services, and rival media broadcaster regularly monitor the services' quality and contents for their benefits. Besides, website development and support fall under facilitating stakeholders. For example, website IT support.

C. Tasks

We choose primary and secondary stakeholders in our analysis. Mainly, we analyze viewers and ABC content makers (reporters, editors, news anchors, etc.).

Viewers: Viewers' goals are entertainment, education, and awareness through the programs from the website. Viewers can be of different age groups with other choices and interests. The reason differs from one viewer to another, such as children who like child programs such as

animation movies. Viewers might even want to update the breaking news, such as the COVID hotspot area, bushfire, and severe weather alert.

ABC content makers: They are the one who makes content for the viewers such as news, arts, entertainment. ABC content makers' task is to update the local or international news viewer and create an inclusive program about Australian peoples and reflect their diverse culture in the border perspective.

We choose these two users for this website as they are vital for the media website and the website is depending or stands through this user. Viewers give TRP (Television rating point) of the program how good it is, and the content makers get the appreciation of their work through the viewers' view. Without these two users, the media website is pointless, and cannot move further.

D. Walkthrough

This website's walkthrough was done focusing on the viewer and looking at the ABC content makers. For this task, we take the audience focusing on different age groups and have different interests and choices and have various access reasons such as updating the news, education, and entertainment. Firstly, we tried to open the account using "Login" and then subscribed to the newsletter, and then we walk through the webpage and other functionality. Then we analysis of the content and aim of the page.

Analysis:

Under **Design Principle (DR)** (Sharp H, 2019) (DA, 1998), we choose two issues, namely **Affordance (DR1)** and **Consistency (DPR6)**. **Affordance (DR1)** is the visual clues of the elements that provide hints to use the services. It is positively rated with a severity rating of 3 for the website (i.e., appreciable). This is because the website page has icons with the proper labels that enable the viewers to understand the contents and its use. Moreover, the features such as a color change in the text if it is a hyperlink, provide an idea to the viewer that the link is clickable/explorable. Besides, the audio sign for audio, video sign with video gives an idea that its video and audio as shown in DPRS1.

Consistency (DPR6) indicates that the same operation should be there for the same actions, including icons and labels. It also falls under the heuristics principle (HR4). It is negatively rated with a severity rating of 2 for the website (i.e., minor issue). This is because the layout of the website is somewhat different for different pages, for examples, (1) layout of the news page and the radio page, and (2) for video, it will not show the video at the side when scrolling down the page, whereas we can see the radio player scrolling downward/upward. Also, the color change for the already clicked hyperlink is different; for example, on home page it shows in blue color whereas in the ABC radio it shows dark red. In addition, the icon varies according to the different pages; for example, the audio on the home page is different than the icon in the ABC radio

webpage. The consistency slightly varies from one web page to other, but the login, font size, click buttons for the links are similar for all pages.

Under **User Experience Goals (UXR)** (Sharp H, 2019) (DA, 1998), we choose two issues, namely **Engaging (UXR2)** and **Boring (UXR3)**.

Engaging (UXR2) indicates whether the website can draw the users' attention or not. It is positively rated with a severity rating of 1 for the website (i.e., basic features). This is because the home page of the website contains a lot of the news update with the hyperlink, videos, and audios with large pictures and labels. Besides, there is a differentiation between the audio and video contents, which make users use the website in more flexible ways. Users can easily find the different contents on different pages and search via the search bar, which makes the user more flexible and make easy choices. Most common contents, such as weather updates, are kept at a convenient place, i.e., the top right of the page. However, there is room for improvement.

Boring (UXR3) indicates the negative excitement of the users to the services/platform. Boring less websites can engage the user efficiently and get the attention of many users to its platform. It is negatively rated with a severity rating of 1 for the website (i.e., cosmetic issue). This is because the webpage has a standard format with a plain layout though with large pictures. Besides, the news and contents do not update overtime automatically. Each time, the user needs to refresh the page. No recommendations for the user, especially in the news section, make the website less interactive. The lack of animation effects, for example, the static weather icon, makes it less attractive and realistic.

Under **Usability Goals (UG)** (Sharp H, 2019) (DA, 1998), we choose two issues, namely **Effectiveness & Efficiency (UGR1 and UGR2)** and **Learnability & Memorability (UGR4 and UGR5)**.

Effectiveness & Efficiency (UGR1 and UGR2) indicates any website on its goodness to its supposed actions/services and allowing the user with minimal steps, respectively. These issues are positively rated with a severity rating of 2 (i.e., helpful) and 0 (basic features), respectively. This is because the website is clear and simple to use. The website has a variety of subjects and channels with various ranges of information for different age group audiences. These pages are easily navigable through the links, i.e., whenever we hover around some link, it gives a flash of color change to indicate that it is clickable. The search bar makes the user easy navigation to the contents of their interest.

Learnability & memorability (UGR4 and UGR5) indicates whether a user needs to remember or learn to use the services or not without hurdles. These issues are positively rated with a severity of 3 (i.e., appreciable). This indicates that the website is good in general from these aspects because the hyperlinks, buttons, icons are uniform with minimal confusion, e.g., forward and backward icons in the video player. Moreover, the website and its pages follow the standard format, e.g., familiar icons, clear labels, play buttons, etc., which helps users of different groups to easily learn and use them appropriately in a short time.

Under **Heuristics (HR)** (DA, 1998) (Sharp H, 2019), we choose two issues, namely **User control and Freedom (HR3)** and **Help and document (HR6)**.

User control and Freedom (HR3) provide the audience the freedom of navigation on the pages, for example, exit and back buttons to leave any page. These issues are negatively rated with a severity rating of 2 (i.e., minor issue). This is because there is no back button neither exit button in the webpage, which reduces the user control. However, if someone clicks the share button, we can see the cancel button to avoid accidental shares.



Help and document (HR6) are essential for a broadcaster website. This enables easy information search and gives an idea of some concrete steps to follow for any error or suggestion. These issues are positively rated with a severity rating of 4 (i.e., excellent). This is because the required information is well documents and made available via links at the bottom of the website, for example, the FAQs (Frequently Asked Questions) section.



E. Issues Table and Critique

The severity is rated on 0-4 scale which is defined as follows:

+: 0 = Basic features (required enhancement), 1 = Rooms for improvement, 2 = Helpful, 3 = Appreciable, 4 = Excellent



-: 0 = Technical bug, 1 = Cosmetic issue, 2 = Minor issue, 3 = Major issue, 4 = Showstopper.

Design Principles (DP)					
Reference Number	Severity	+/-	Principle	Description	Sketch/Screenshot
DPR1	3	+	Affordance	Icon with label and color changes in the hyperlink can be seen. In detail: <ul style="list-style-type: none"> If there is video, then there is , and if there is audio then there is  Sign. And for an image just image. The links which are clickable change into the blue color. Once the Link is clicked previously, it changed the color permanently, which gives a clue to the user that it is already clicked. 	DPRS1
DPR2	1	+	Visibility	<ul style="list-style-type: none"> There are Sidebars for all the menus available on the top of the website. There is visibility in login without distractions can be seen. Categorical contents like editor's choice, top news, science, etc., with the big images, can be seen. Hovering over the icon gives the description of that in some icon. 	DPRS2
DPR3	2	+	Feedback	<ul style="list-style-type: none"> The feedback on which page we are on can be seen. Subscription of the newsletter feedback can be seen. Feedback at login can be seen. 	DPRS3

DPR4	2	+	Constraints	<ul style="list-style-type: none"> In login, if there is a weak password, it does not lead forward. On the same page and same tab, one playable video link is available. – no distraction and confusion – for other videos, we need to click that link, which lands on a different page (canceling the previously playing video) 	DPRS4
DPR5	0	+	Mapping	<ul style="list-style-type: none"> The horizontal slider and the videos mapped each other. 	DPRS5
DPR6	2	-	Consistency	<ul style="list-style-type: none"> In the layout of the website, its different for example, on the news page and on the radio page, the pattern of the login is different; for video, it will not show the video at the side when scrolling down the page, but while in radio page we can see listen and scroll down at the same time. The icon varies according to the different page; for example, the audio on the home page is , but for the radio, it is . But the operation functions are similar. 	DPRS6

User Experience Goals					
Reference Number	Severity	+/-	Principle	Description	Sketch/ Screenshot
UXR1	2	+	Helpful	<ul style="list-style-type: none"> The website also provides an on-air schedule and in other television schedules by TV Guide bars. The different page for different menus is helpful for the users according to their preferences and choices; for an example, for Kids, there are ABC kids dedicated for only kids. The news with the sub header for the news categories is helpful for the audience to read stories according to their choices and different web. Button color changes for the clickable, search bar, icons such as video, audio, and the big image is helpful for users. 	UXRS1, DPRS1
UXR2	1	+	Engaging	<ul style="list-style-type: none"> The location preferences, such as the weather forecast for the weekly forecast, is engaging. The video sign for video, audio sign for audio, the big image, scroll in the video, especially in the ABC iView is engaging for the user. 	UXRS2, DPRS2
UXR3	1	-	Boring	<ul style="list-style-type: none"> The news will not update unless the page is refreshed. There is no recommendation on a user basis, especially in the news section. The website does not contain any animated icons, dramatic effects; for example, the weather icon can 	UXRS3

				be more realistic like rainy it can show rainy animation.	
UXR4	3	+	Satisfying	<ul style="list-style-type: none"> The image for each title is satisfying to view. Credibility and Professionalism in the contents. There is diversity in content. The live update of the news with the various field of interest and breaking news section makes user satisfy. 	UXRS4

Usability Goals					
Reference Number	Severity	+/-	Principle	Description	Sketch/Screenshot
UGR1	2	+	Effectiveness	<ul style="list-style-type: none"> The website has a variety of subjects and channels with various ranges of information, which is effective. Clear and simple languages. 	UGRS1
UGR2	0	+	Efficiency	<ul style="list-style-type: none"> Easily navigate through the pages and contents (either search or links). 	UGRS2
UGR3	1	+	Safety	<ul style="list-style-type: none"> Avoid sign up with weak password login. Improvement: Underage login for certain video is not used. It is only aware of the content age rating. 	UGRS3, DPRS4
UGR4	2	+	Utility	<ul style="list-style-type: none"> Contents related to education, news, entertainment are accessed without a login. More like this feature on iView page. Search button on every page. 	DPRS2
UGR5	3	+	Learnability	<ul style="list-style-type: none"> Hyperlinks, buttons, icons are uniform with minimal confusion, e.g., Such as there are  forward and  backward icons. 	DPRS5
UGR6	3	+	Memorability	<ul style="list-style-type: none"> Follows the standard format, e.g., familiar icons, clear labels, play buttons, etc. Users use it every day. 	DPRS1

Heuristics					
Reference Number	Severity	+/-	Principle	Description	Sketch/Screenshot
HR1	0	+	Visibility of system status	<ul style="list-style-type: none"> Indication of the current page, for example, color change in the full TV guide if we are on that page and if we are watching live videos live button. 	HRS1

HR2	0	+	Match between System and the Real World	<ul style="list-style-type: none"> The highlighted news and contents do not resemble paper but follow standard web format. For example, the calendar is not clickable and does not resemble a real paper calendar. Language is easily understandable to the respective audience. They do not use complicated sentences and jargon. Social media icons can be seen on the page. 	HRS2
HR3	2	-	User Control and Freedom	<ul style="list-style-type: none"> There is no back button on the website. There is a cancel button before sharing the content. 	HRS3
HR4	1	+	Consistency and Standards	<ul style="list-style-type: none"> Font sizes, buttons, log in all the pages can be found similar; however, there is inconsistency in the change in color of the hyperlinks in different pages. Familiar patterns, e.g., play buttons. 	DPRS6
HR5	3	+	Aesthetic and Minimalist design	<ul style="list-style-type: none"> The webpage has no confusion with the labels, big images, news updates using breaking news with aesthetic and minimalist design. 	DPRS1
HR6	4	+	Help and documentation	<ul style="list-style-type: none"> The website information is easily searchable with the documentation of the steps with the FAQs section. 	HPRS6
HR7	1	+	Error Prevention	<ul style="list-style-type: none"> If we put an invalid email id in the login and subscription letter, it could not prevent the error. But while using a password, it does recognize the wrong pattern or password. 	DPRS3, DPRS4
HR8	2	+	Recognition rather recall	<ul style="list-style-type: none"> Color changed in the already clicked link. The webpage recognizes the errors with a suggestion. Gives suggestion if there is an error, for example, in the video player. 	HPRS8

F. Sketch Solutions

After analyzing the issues stated in the analysis part, we can find the rooms for improvements. The sketch of the improvements is listed below:

1. **Affordance (DR1):** Further improvement can be made by adding more metaphors in the sidebar of the menu, which can be put with the different patterns in the slide bar. More realistic and animated icons, for example, in the weather section, can be kept. This is shown in Figure 1.

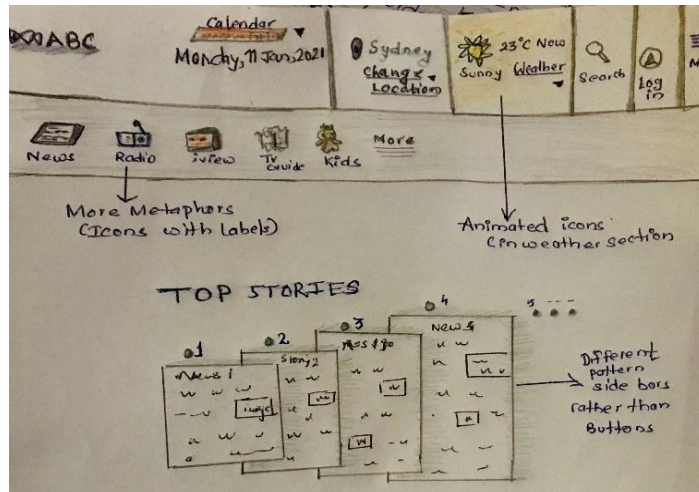


Figure 1: Improvement in Affordance (DR1)

2. **Consistency (DPR6):** Popping out the video player at the right bottom, if the user scrolls down/up the page helps keep continuously watch the video. This feature is available on the radio page. For video, as shown in Figure 2.

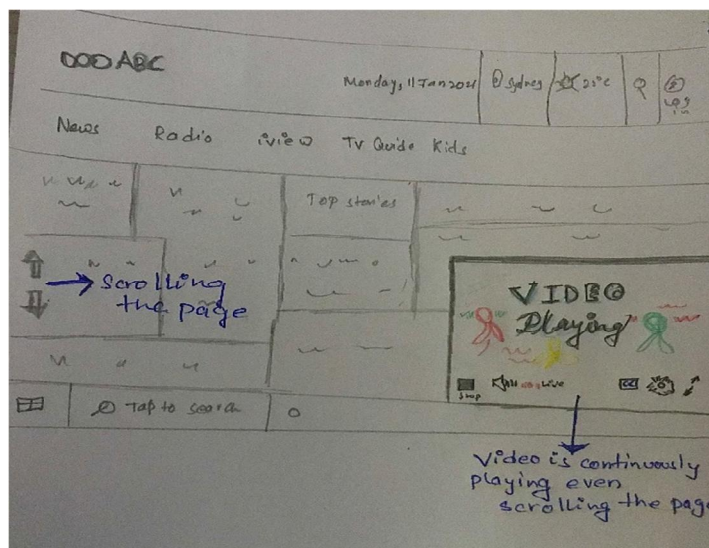


Figure 2: Improvement in Consistency (DPR6)

3. **Engaging (UXR2):** The improvement of the website can be made by integrating a chatbot, which makes the user more engaging. This adds an easy communication interface to the website for the user. For the live icon, a live blink animated icon can be kept in the webpage to make the interface livelier. The solution for the improvement is in Figure 3.

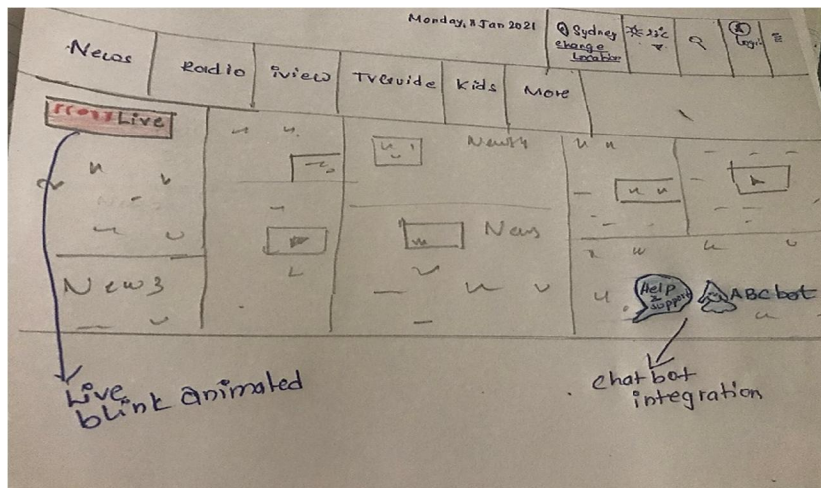


Figure 3: Improvement in Engaging (UXR2)

4. **Boring (UXR3):** Chatbot features and an automatic news update without manually refreshing the page is required. Besides, recommendation systems for the contents and posts based on the popularity of the contents are recommended (on the right-hand side vertical section). It is helpful to know the inside contents for the user if the video can quickly show its content if the arrow hovers over it. After all, the feature adding one of the solutions is shown in Figure 4.

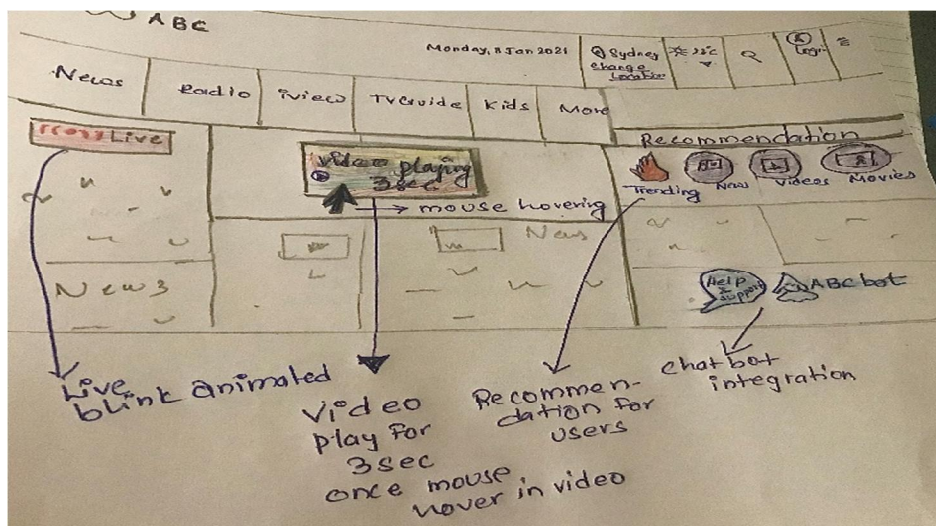


Figure 4: Improvement in Boring (UXR3)

5. **Effectiveness & Efficiency (UGR1 and UGR2):** Hot news bar is recommended to inform/dissipate information on COVID statistics, breaking news at the front of the website. This makes the user more aware of the situation quickly and conveniently. One example is shown in Figure 5.

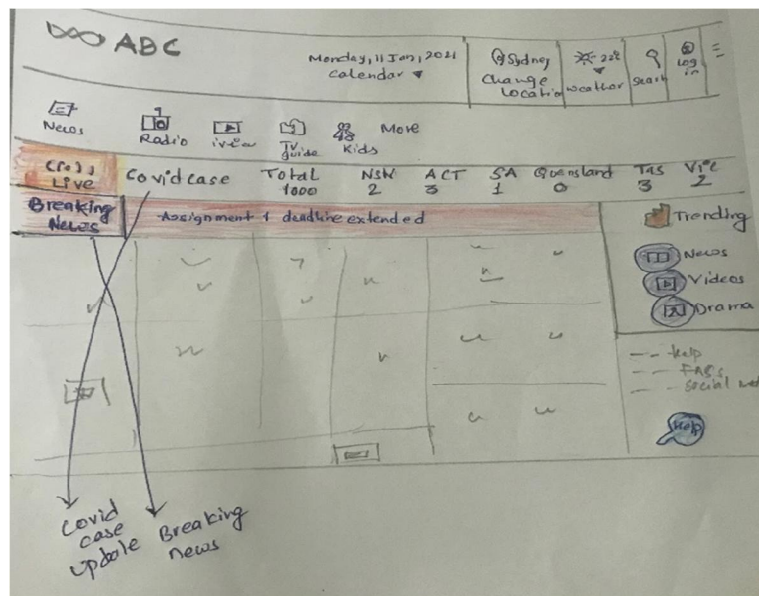


Figure 5: Improvement in Effectiveness and Efficiency (UGR1 and UGR2)

6. **Learnability & memorability (UGR4 and UGR5):** The current website has an excellent interface in this aspect, so no further improvements are required.
7. **User control and Freedom (HR3):** Menu bottom can move with the page when the user scrolls downward or upward. This makes easy navigation and increases efficiency as he/she does not scroll back to the top to access the menu bars. The webpage does not have back to top button in the middle, and we need to scroll up and down through the browser up and down. Besides, redundancy in navigation control, such as the back button at the middle of the page and the last page, helps navigate from different points of the page. The solution of the feature is shown in Figure 6.

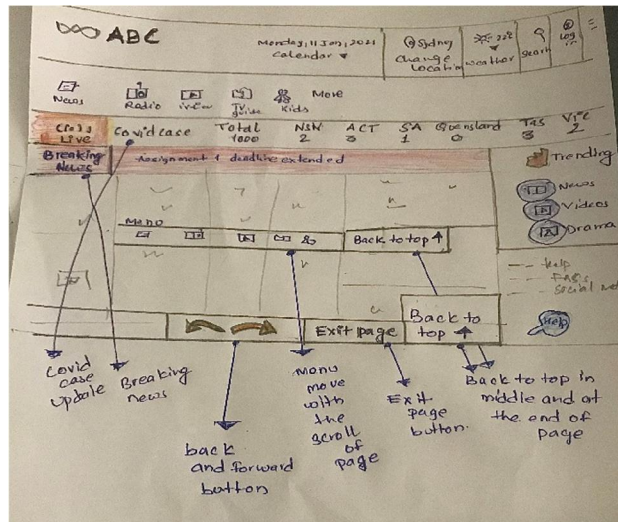
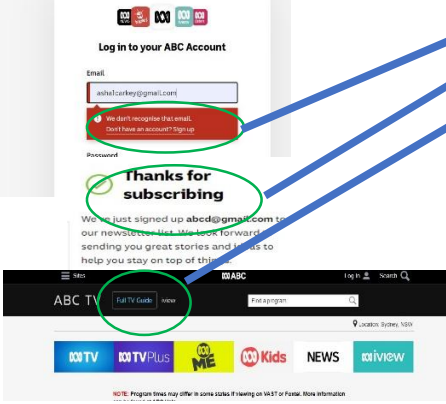
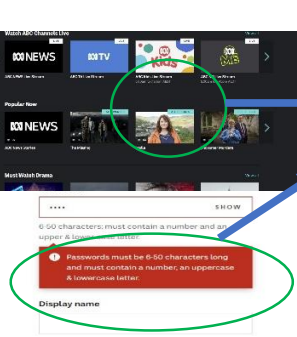
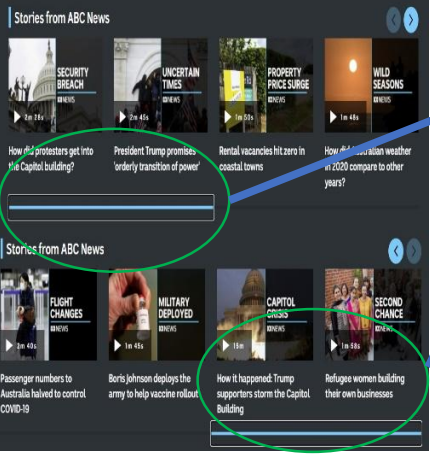
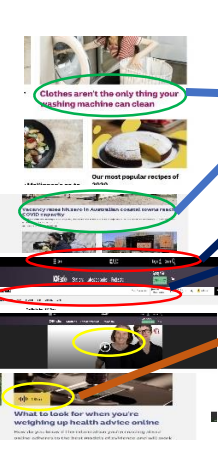
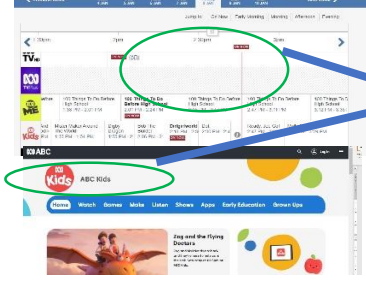
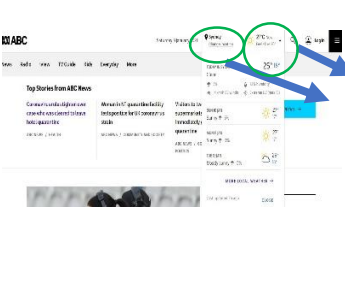
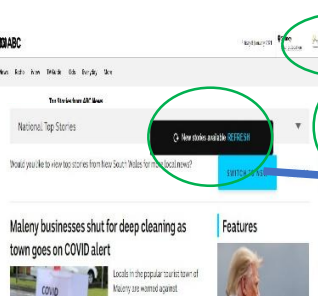
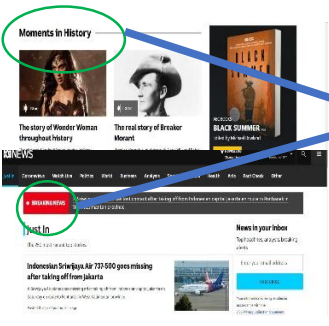


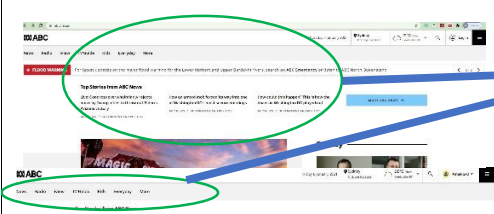
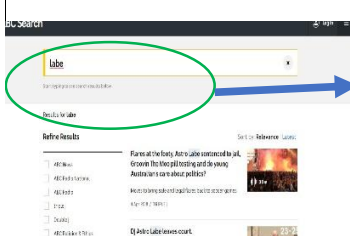
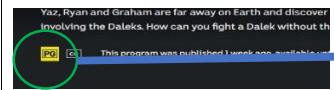




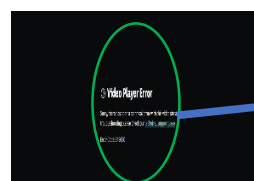
Figure 6: Improvement in User Control and Freedom (HR3)

8. **Help and documents (HR6):** The current website has excellent documentation related to the help and use of the website, so no further improvements are required.

Appendix

Reference Number	Screenshot(S)	Reference Number	Screenshot(S)
DPRS1		DPRS2	

DPRS3	 <p>Feedback after login error, after subscribing and at which page they are.</p>	DPRS4	 <p>Playable video with no distraction and weak password does not allow to go further</p>
DPRS5	 <p>Mapping of side bar and videos.</p>	DPRS6	 <p>Inconsistency in the previous clicked link color, different menus in different pages, Audio sign different in radio page and home page respectively</p>
UXRS1	 <p>On-air schedule and ABC kids</p>	UXRS2	 <p>Location and weather forecast</p>
UXRS3	 <p>No animated weather, no automatic refresh in news and no recommendation section</p>	UXRS4	 <p>Title for news and Breaking news</p>

UGRS1	 <p>Website with clear and simple language and with various channel</p>	UGRS2	 <p>Searchable</p>
UGR3	 <p>There is no restrict in login the content age rating</p>	HRS1	 <p>Live stream</p>
HRS2	 <p>The calendar does not resemble a real paper calendar</p> <p>But we can see the social media icons</p>	HRS3	 <p>Need to use browser back button.</p>
HRS6	 <p>FAQs, Help, and step to follow</p>	HRS8	 <p>Suggestion for video player error</p>

References

DA, N., 1998. *The Design of Everyday Things*. s.l.:MIT Press.

Sharp H, R. Y. a. P. J., 2019. *Interaction Design: Beyond Human-Computer*. 5 ed. Indianapolis: John Wiley.