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Human Computer Interaction

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Assignment 1

Throughout chapter two of the book *Human-Computer Interaction: Fundamentals and Practice* we learn a wide array of guidelines to follow and what the main elements of human computer interaction are. These main elements to look out for are as follows: Visual display layout, Information architecture and navigation, User input, Accounting for users with disabilities/accessibility, Mobile devices, Iconography, and E-Commerce.

Visual display layout is one of the primary focuses on design guidelines, it focuses on the visual layout of pages, or in other words how a page is organized and its allotted relevant information (Kim, 2015. p. 15). When creating a page the layout will generally be organized with the information or content of the page, such as order of importance or functionality. As well how it is sized, what grabs attention, and what is the most visually pleasing elements of a page (Kim, 2015. p. 15). I feel that it is critical to get the design of the visual display layout correctly with HCI because if done improperly a user may not be able to find things that they need to find as efficiently as they could be doing, resulting in wasted time. It is also important because it is also one of the first things a user sees when looking at a website, and if they do

not like the first looks of it they may be turned away from the website. A great example of an amazing visual display layout is Google, it's extremely simple and straight to the point, having the primary function of the website right in the middle of the page, allowing you to quickly search for something and then getting results in a simplified view.

Information architecture/structuring and navigation focuses on how a website structures specifically the information as well as making it easy to move or navigate throughout the website and being able to go where they need to easily (Kim, 2015. p. 16). This is important for HCI because without it the way a user navigates a website will be extremely diminished, making them unable to find what they need to find on the website at all or extremely slowed down if they have to navigate through tons of different menus which aren't structured or laid out properly. An example that I like to use that shows a good structure and navigation is Gmail. When looking at Gmail it immediately opens up to your primary inbox, allowing you to switch between different categories near the top, and even more categories on the left side, and even including a search at the top of the page.

User input simply put is how as a website we are able to take in information from the user, involving forms with buttons, text boxes, menus, and icons (Kim, 2015. p. 18). Paying attention to user input is important to HCI because it is how we are able to get information from the user, such as contact details, handling adding to cart and payment information, and many more things. It is also important to pay attention to it because we have to make sure that they enter in the correct information so our back-end systems are able to properly process the data they enter into the form. An example of user input that a lot of people may not even realize is a type of form is when checking out on Amazon. It pre-fills most information in already

such as the card you want to pay with, the delivery address, and a pre-selected delivery speed type, and then lets you go through all of this and then confirm it before submitting it, or change information as needed.

Accounting for users with disabilities/accessibility allows programmers and designers to look out for people with any potential disability such as the inability to see, which means that we have to make sure our websites are able to be used with a screen-reader, have alternate text for images, as well as is able to be navigate by someone who may be blind. This is important for HCI because if done improperly may for one cause some issues with the ADA, and may prevent users from interacting with or using your website completely. An example of a good website which accounts for users with disabilities is Google. Their design is extremely simple, and works perfectly with most screen-readers as almost all of their content is simply text, they also have the ability to search for things by using a microphone. You are also able to easily navigate the website by using a keyboard/tab through items and go to the websites quickly.

Mobile devices are important to consider when designing a website because they have an extremely different resolution compared to laptops and monitors, and need specialized formats and menus to be able to navigate the website easily. It is also important to consider mobile devices may not have as much power as a laptop or desktop computer and that the website needs to be properly optimized for this. When using a mobile device such as a phone, it is important to also note that they almost strictly use touch as an input, meaning you need to make sure your website in its mobile format doesn't have too small of text or buttons and can be clicked on easily. It is important to consider mobile devices in HCI as they are extremely

common to have now and may be used to navigate your website, in which case it needs to be properly formatted to allow this. An example of a well-formatted website for a mobile device is Youtube's website, as it is able to properly scale with your resolution, has an easy to use menu, and can click on things very easily.

Iconography is the ability to balance visual elements such as images and icons with a website, as well as focusing on the use of colors and size of the images and icons to be able to properly fit and scale to phones and laptops and monitors. Iconography also focuses on font choices and sizes, how to make headers look good, as well as recommended fonts for certain font sizes, and when to use bold and not to use it. This is important for HCI because if done improperly may make the website not look good or be unreadable on certain platforms or resolutions. An example of good iconography is Microsoft's website. They combine headers, bold font, different font styles, and icons and images to make a good looking and easy to use website.

E-commerce focuses on how we are able to combine specific elements in order to make a website that focuses on selling a product, and how a e-commerce website should be navigate such as going through a checkout process with a shipping method, address, billing information, as well as address everything else that may be needed with selling products online. This is important for HCI today because e-commerce websites are extremely common, and are some of the largest, most popular websites today. An example of a good e-commerce website is Amazon for many reasons. It combines ease-of-use and is able to make sales to customers very well, and many customers leave the website buying things that they may not have been coming to the website to initially buy, resulting in more sales for Amazon, and its sellers.

References

Kim, G. J. (2015). Human-Computer Interaction: Fundamentals and Practice. Auerbach.

I have neither given nor received unauthorized aid in completing this work, nor have I presented someone else's work as my own.

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