**Audio Design – Unit 7**

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**Introduction: Tell the listener your name, the date, and the topic for your podcast.**

Hello! Thank you for joining us this Wednesday, October 19th. I’m Corey Crooks, today’s host for our new podcast on the importance of auditory design in computer interfaces.

**Research and explain the difference between auditory icons and earcons.**

One important distinction is something you may not have thought about before. Real world sounds can queue you to an alert, or focus your attention such as a car driving past you, or the sounds of construction work right outside your apartment at 7 am before that big interview you’ve been planning for months. These are auditory icons; real-world auditory events that happen diegetically. Other alerts are classified differently. Such examples might be the alarm you set to get up fresh and early at 10am. It could also be the text notification on your phone telling you that your sleepy responses were not enough to land the job. These are earcons; manufactured chimes to call your attention to something unnatural.

**Give reasons why and when/where audio can be useful, and give examples.**

With this in mind, it’s important to consider exactly WHY your audio is needed in the interface you’re designing. Audio can be an essential tool when making accessibility features for the visually impaired users of you application. It could also help reduce clutter on the screen by alleviating a need for text notifications to pop up by playing a certain chime with some sort of associated meaning.

**Explain when sound is not a good idea in an interface, and give examples.**

All these factors can be tricky to navigate, however. As it turns out, there very much can be too much of a good thing. Having too many chimes with hidden meanings may add to a learning curve for your users, and force a sort of commitment needed for the users to memorize every little detail, when they could just read text without the need. How many times has your phone gone off without a notification in the tray to leave you wondering: “What on earth is it trying to tell me?” Sound may also be inappropriate depending on the context. If a user is working with sensitive information, it may be unwise to verbally tell the user a confirmation of their information in case another individual is within hearing range. Some secrets are best kept secrets. See HIPAA violations (Health Insurance Portability and Accountability Act).

**Describe some of the obstacles to speech recognition or speech production (or both) and give examples.**

One aspect commonly taken for granted is speech recognition. Virtual Assistance like Google or Apple’s live in many of our phones today. Although, the path to these being so commonplace may be significantly less trivial than asking Google what the weather’s like outside. Many obstacles to speech recognition are born from how unique we all are as people. Because we are all human, everyone has their own mannerisms, accents, and speech patterns. One person may pronounce niche, while another may say niche. These variances make accessibility difficult for speech recognition, and that is a concept all algorithms will continue to struggle with.

**Explain what accessibility and redundancy mean and why they are appropriate to incorporate in ethical design.**

All of these features wouldn’t exist without two driving principles, however; Accessibility, and Redundancy. Firstly, accessibility is the concept of implementing features specifically to ensure a wider range of audiences with different challenges and backgrounds may be able to utilize your designs. Examples of this may include wheelchair accessible ramps, or brightness settings of electronic screens. All of those designs make it easier for more people to access it. Secondly, there is redundancy. Redundancy is the technique of adding functionally similar or identical features with the goal of heightening accessibility. Some examples here could be a staircase in juxtaposition of the aforementioned wheelchair accessibility, or a hotkey such as CTRL+B to bold text despite a bolding button being located within the Font ribbon. All of this works together to heighten ethical design and make sure more people are able to utilize your interface.

**Conclusion: Thank the listeners for hearing you speak about this topic.**

Thank you all for listening to me speak on audio design and accessibility features in interface design. I have been Corey Crooks, and I look forward to catching your ear again.