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Research input methods for blind users. Write a short paper briefly describing these input methods and how you can integrate them into an information system.

Blind users rely heavily on screen readers, which is when the computer system reads the screen aloud to the user, and refreshable Braille displays, which convert screen text into Braille by raising dots through holes in a flat surface. With both of these methods to read screen outputs, blind users do well with an ordinary computer keyboard to type in responses. However, the screen displays must be able to interface with the screen reader or refreshable Braille display.

This means that graphics-only displays are inaccessible to blind users. They cannot know that text is red and flashing in urgency or that green text means everything is all right, they must rely on the verbiage of the message itself, which should be descriptive enough to communicate urgency or success. Forms that require typing in the graphical display of text in a box, such as the ones comment fields use to prevent computer programs from entering data or the “bot-check,” are also a major hindrance to them.

The Federal government requires designing all systems to be accessible by users with disabilities. Known as “Section 508 Compliance,” this requirement means that a Federal websites and computer programs cannot rely solely on colors or sounds to distinguish form and display elements, because these are inaccessible for color blind and deaf users. These systems must provide text alternatives to graphics for blind users as well.

This means that, in addition to labeling a text-input, if the system is online, the text input itself should have a text-label placed on it that normal browsers won't see, but

the blind user's reader will recognize and read to the user. Similarly, images should have "ALT" tags, which label and describe the content of the image. This practice is not only good for blind users, but regular ones as well, as people with low-bandwidth will see a description of the image in their web browser in a place-holder as the page is loading.

These simple habits of design are very small things that are very easy to include in an interface. Therefore, it makes sense for non-professional designers to include them, business sense for companies to include them, and legal sense for Federal institutions to include them. It also makes good ethical sense to include all potential users in our designs.