

# Draft Guidelines and Outcomes

Exploratory level - March 2024

## Adaptive features

- **Transform content:** A means of transforming content to make its purpose clearer is available.
- **Adjust color:** Adjusting color schemes changes all text and background colors.
- **Virtual cursor:** Assistive technologies can access content and interactions when mechanisms that convey alternative points of regard or focus (i.e. virtual cursor) are used.
- **Customizable:** Content supports customization.
- **User settings:** User settings are honored when using or reviewing content.
- **Haptic stimulation:** A mechanism is available to control haptic feedback
- **Motor fatigue:** Use does not cause motor fatigue.
- **Customized presentation:** Large amounts of data can be customized and broken into smaller chunks.
- **Triggers:** A mechanism to manage triggers and trigger warnings is available.
- **3rd party content presentation:** A mechanism is available to control the presentation of advertising and other third-party content that obscures or interferes with the primary content.
- **Sensitive information:** Prompts to hide and remove sensitive information from observers are provided.
- **Optional information:** Entering unnecessary or optional information is not required.
- **Alternative presentation:** Complex information or instructions for complex processes is available in multiple presentation formats.
- **Optimized processes:** Tasks can be completed without reading or understanding unnecessary content.
- **Conversational support:** Conversational support that allows both text and verbal communication is available.
- **Help using new interfaces:** Help using new or changed interfaces is available.
- **Personalizable help:** Adaptable/personalizable help is available.
- **Text Customization:** Text appearance [font, size, etc] and layout [orientation, spacing, single column] can be customized by the user.
- **Preferences apply to printing:** Printing respects user's content presentation preferences.
- **Control interruptions:** The timing and positioning of notifications and other interruptions can be controlled, suppressed or saved by the user, except interruptions involving an emergency.
- **AT control:** Content can be controlled using assistive and adaptive technology

## Animation and movement

- **Motion under user control:** Visual motion and pseudo-motion are under user-control
- **Safe from continuous motion:** Users are safe from the effects of continuous motion (actual, or perceived).
- **Safe from flashing and strobing:** Content does not contain flash or strobe.
- **Safe from audio shifting:** Audio shifting designed to create a perception of motion is under user-control.

## Forms, inputs, and errors

- **Steps and direction:** The steps and directions needed to complete a process are visually and programmatically indicated.
- **Clear input:** The interface clearly indicates when user input or action is required to complete a process
- **Clear agreement:** The interface clearly indicates when a user is entering an agreement or submitting data
- **Error notification:** Error notifications are provided when the error occurs that describe the error and either provide instructions to fix the error or state that the system is at fault.
- **Persistent error notification:** Error notifications persist until the user dismisses them or the error is resolved.
- **Visible error:** Errors notifications are visually colocated with the source of the error within the viewport, or provide a link to the source of the error which moves the viewport.
- **Error identification:** Errors are visually identifiable without relying solely on text, color, or symbols.
- **Error association:** Error notifications are programmatically associated with the error source.
- **Input instructions:** Instructions are provided for inputs that include constraints or conditions (required, line length, date format, password, etc).
- **Moderated form completion:** A moderated approach to data entry is available.
- **Save progress:** Data entry and other task completion processes allow saving and resuming from the current step in task.
- **Preselections:** Preselections are visible and not designed to manipulate users
- **Obstructions:** Users are not obstructed from completing tasks or accessing information (essential exception ex: Security)
- **No cognitive tests:** Tasks, including login/authentication, can be completed without puzzles, calculations, or other cognitive tests (essential exception would apply).
- **Allow automated entry:** Automated input from user agents, 3rd party tools, or copy-and-paste is always supported.
- **Inform at start:** Information needed to complete a multi-step process is provided at the start of the process, including:
  - estimated time or number of steps it might take,
  - details of any resources needed to perform the task, and
  - overview of the process and next step.

- **Go back in process:** The interface supports stepping backwards in a process and returning to the current point without data loss.
- **Support available:** Accessible support during data entry, task completion and search is available
- **Task completion documentation:** Detailed documentation on task completion is available
- **Provide a feedback mechanism:** A mechanism for providing feedback is provided
- **Adequate time:** Users have enough time to read and use content.

## Image and media alternatives

- **Finding media alternatives:** Mechanisms exist to find media that has the desired media alternatives. (research needed)
- **Enabling media alternatives:** Media provides a clear mechanism to enable available media alternatives. (research needed)
- **Audio descriptions and descriptive transcripts:** Equivalent visual alternatives are available in media as synchronized audio and in a descriptive transcript
- **Captions and descriptive transcripts:** Equivalent audio alternatives are available as synchronized captions and in a descriptive transcript.
- **Audio alternative in preferred language:** Audio alternatives are available in preferred language
- **Interactive audio alternative:** Audio alternatives allow user interaction to look up terms
- **Color in media alternatives:** Media alternatives include information conveyed by color alone
- **Sound in media alternatives:** Media alternatives include information conveyed by sound alone
- **Non-verbal cues:** A mechanism is available to explain nonverbal cues in captions or audio descriptions, such as tone of voice, facial expressions, body gestures, or music with emotional meaning.
- **Supplements to text:** Visual illustrations, pictures, and images are available to help explain complex ideas, events, and processes.
- **Use of color:** Meaningful information in graphics and interfaces does not rely solely on color to convey meaning
- **Non-text alternatives:** Non-text content that requires a text alternative has one
- **Decorative indicator:** Decorative and informative images are clearly indicated (users can apply interaction preference).
- **Identify AI:** Auto generated text descriptions are identified
- **AI editable:** Auto generated text descriptions are editable
- **Image type:** The type of image (photo, icon, etc) is indicated
- **Image alternatives:** Images have equivalent text alternatives
- **Images of text alternative:** Images of text have equivalent text alternative
- **Decorative image alternative:** Decorative images have descriptive text alternatives
- **Complex image alternative:** Complex images have equivalent text alternative
- **Context in image alternative:** Image alternatives include context.

- **Data visualization help:** Help understanding and using data visualizations/non-text information is available
- **Persistent figure captions:** Figure captions persist or can be made to persist
- **Media alternative availability:** A mechanism is available to turn captions and audio descriptions on and off
- **Caption control:** A mechanism is available to change the position and formatting of captions
- **Audio control:** A mechanism is available to turn off audio while allowing video to play
- **Media chapters:** A mechanism is available to navigate media by chapters

## Interactive components

- **Focus restored:** When a temporary change of view is undone, the focus or point of regard returns to its location before the change of view.
- **Control labels:** Controls have visible labels that identifies the purpose of the control
- **Consistent purpose indicators:** Provides consistent indications of purpose
- **Conventions:** Follows established conventions (common usage? platform guides?)
- **Consistent labels:** Controls and inputs with the same functionality have consistent labels
- **Non-Text Contrast:** Visual information required to identify user interface components and states meets the 'color contrast threshold', except for inactive components or where the appearance of the component is determined by the user agent and not modified by the author;
- **Interaction indicators contrast:** Interaction indicators have sufficient contrast and thickness
- **Visual design of controls:** Controls, except links and buttons, that have similar function and behavior have a consistent visual design.
- **Behavior of controls:** Controls and inputs with the same functionality behave consistently.
- **Indicate changes of context:** Components which trigger a 'change of context' are indicated, or the change of context can be reversed.
- **Known interaction types:** The tasks available in a view can be understood without needing to learn new interactions.
- **Restore focus:** The focus or point of regard is restored after temporary change of view
- **Relevant focus:** The focus order does not include repetitive, hidden, or static elements.
- **Notify on change:** Notification is provided when previously viewed content changes.
- **Notify before activation:** Controls that can alter the order of content convey their purpose prior to activation, and convey their impact on content order when activated.
- **Distinguishable controls:** Controls are visually distinct from static content and include visual cues on how to use them
- **Pointer location:** Users are able to determine where the pointer is located.
- **Keyboard focus location:** The keyboard focus is visually indicated.
- **Change focus with pointer device:** Selecting an element with a 'pointer' sets the focus to that element.

- **Keyboard mode:** The keyboard input mode is indicated.
- **Name, Role, value, state:** Accurate names, roles, values, and states are available for interactive components
- **Input control:** Interactive components are available to all navigation and input methods
- **Control updates:** Changes to control or input name, roles, values or states are indicated
- **Control importance:** The importance(/prioritization) of controls is defined.
- **Focus in viewport:** The focus does not move to a position outside of the current viewport, unless a mechanism is available to return to the previous focus point.
- **Consistent keyboard interaction:** Keyboard interface interactions are consistent
- **Comparable keyboard effort:** The number of input commands required to complete a task using the keyboard is similar to the number of input commands when using other input modalities.
- **Keyboard only:** All functionality can be performed through the keyboard interface only, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints.
- **No keyboard trap:** If keyboard focus can be moved to an interactive component, then the keyboard focus can be moved away from that component
- **Keyboard commands:** Application keyboard commands do not conflict with platform commands, and the user is informed of non-standard commands.
- **Pointer-agnostic:** Functionality which supports pointers can be used by any pointing device supported by the platform
- **Target size:** All functionality can be used without needing to accurately position a pointer.
- **Gestures & dragging:** Every function that can be operated by a pointer, can be operated by a 'single pointer input' or a sequence of single pointer inputs, without limitations on timing for input.
- **Use without body movement:** All functionality can be done without needing to move their body, except for accessibility supported input devices.
- **Use without device movement:** All functionality can be done without needing to move the hardware device.
- **Specific pressure:** Click activation using a pointer device does not require applying a specific pressure
- **Speed insensitive:** Use of a pointer does not require a particular speed of pointer movement or click activation
- **Pointer cancellation:** Pointer cancellation is consistent.
- **Varied inputs:** Any input modality available on a platform can be used concurrently
- **Hover information:** Additional content triggered by hover can be dismissed without moving the pointer, unless the additional content communicates an input error or does not obscure or replace other content.
- **Deceptive controls:** Controls and interactions are not deceptively designed (invisible, incorrectly labeled, placement, etc).

# Layout

- **Section length:** Content is organized into sections of related content.
- **Section headers:** Sections have well structured, understandable headings
- **White spacing:** Whitespace separates chunks of content
- **Clear background:** Patterns, designs or images placed behind text are avoided or can be removed.
- **Clear relationships:** The relationships between parts of the content is clearly indicated
- **Section purpose:** The purpose of each section of the content is clearly indicated
- **Order of content:** Content and interactions are presented in an order that supports understanding the content or interaction.
- **Consistent order:** The order of content and interactions remain consistent throughout a workflow.
- **Resize text:** Text can be resized with no loss of functionality
- **Reflow:** Content can be viewed in multiple size viewports, orientations, and zoom levels without loss of content, functionality and meaningful relationships AND with scrolling only occurring in 1 direction.
- **Focus retention:** A user can focus on a content “area” then resume their view of all content using a limited number of steps
- **Reliable positioning:** Interactive components retain their position unless a user changes the viewport or moves the component.
- **Content orientation;** Content orientation allows the user to read the language presented without changing head position
- **Visual stimulation:** Use does not cause visual overstimulation
- **Citation:** The source of the interface and primary content is visually and programmatically indicated
- **Indicate 3rd party content:** Third party content (AI, Advertising, etc) is visually and programmatically indicated
- **Familiar components and layout:** Common components and layouts are used
- **Interface redesign:** When interfaces dramatically change (due to redesign), a mechanism to learn the new interface or revert to the older design is available.
- **Related information:** Information required to understand options is adjacent to the options.
- **Distinguishable sections:** Sections are visually and programmatically distinguishable
- **Programmatically distinguished sections:** Meaningful associations between distinct pieces of content are programmatically determinable
- **Notification of change:** Changes in content and updates notify users, regardless of the update speed.
- **Control location:** Controls are visually and programmatically located in an expected location
- **Section labels:** Sections of content have clear visual and programmatic labels
- **Organized content:** Related information is grouped together within a visual and programmatic structure

- **Clear navigation:** Navigation elements are visually and programmatically differentiated from static content
- **Persistent navigation:** Navigation features remain available, regardless of screen size and magnification (responsive design)
- **Clear starting point:** The starting point or home is visually and programmatically labeled
- **Current location:** The current location within the view, process, and aggregate is visually and programmatically indicated
- **Multiple ways:** The aggregate provides at least two ways of navigating and finding information (Search, Scan, Site Map, Menu Structure, Breadcrumbs, contextual links, etc)
- **Consistent navigation:** Navigation elements remain consistent across views within an aggregate
- **Multistep process:** Provides context that orients the user in a site or multi-step process.
- **Location indicator:** The current location within the aggregate is indicated.
- **Consistent navigation:** Navigation mechanisms are consistent across the aggregate.
- **Redirection:** A mechanism is available to prevent fraudulent redirection or alert users they are exiting the site
- **Avoid manipulation:** Task completion does not require navigating inessential obstructions or redirections (the opposite of being manipulated is being in control)
- **No Memorization:** Users are not required to memorize and recall information from previous stages of the process.
- **Consistent help:** Help is labeled consistently and provided in a consistent visual and programmatic location

## Policy

- **Exploitive behaviors:** Task completion does not include exploitive behaviors
- **Disability information:** Privacy Disability information is not disclosed to or used by third parties and algorithms (including AI)
- **Algorithm bias:** Algorithms (including AI) used are not biased against people with disabilities
- **Social media algorithm:** A mechanism is available to understand and control social media algorithms

## Text and Wording

- **Uncommon words:** A mechanism to define uncommon or new words is available.
- **Acronyms and abbreviations:** A mechanism for identifying the expanded form or meaning of abbreviations and acronyms is available.
- **Ambiguous pronunciation:** A mechanism for providing all letters and diacritics needed to phonetically read words is available.
- **Verb tense:** The verb tense used is easiest to understand in context
- **Sentence voice:** The voice used is easiest to understand in context

- **Single idea:** Each segment of text [such as sentence, paragraph, bullet] presents one concept.
- **Unnecessary words or phrases:** Sentences are concise, without unnecessary filler words and phrases.
- **Figurative language:** A mechanism is available to explain figurative and non-literal language [such as jokes, sarcasm, hyperbole, metaphors, similes, and idiom]s.
- **Summary:** A mechanism is available to access a plain-language summary, abstract, or executive summaries
- **Topic sentence:** A topic sentence stating the aim or purpose begins each paragraph of text.
- **Lists:** Three or more items of related data are presented as bulleted or numbered lists
- **Instructions** Steps in a multi-step process are numbered.
- **Supplements to numerical concepts:** Text or visual alternatives are available for numerical concepts
- **Ambiguous numerical formatting:** A mechanism is available to access alternative formats for ambiguous number formats
- **Title:** Content has a title or high-level description
- **Minimum text contrast:** The rendered text against its background meets a minimum 'contrast ratio test' for its text appearance and use.
- **Maximum text contrast:** The rendered text against its background meets a maximum 'contrast ratio test' for its text appearance and use. (research needed)
- **Conveying importance without sizing:** When font size conveys meaning (such as headings), the text maintains its meaning and purpose when text is resized.
- **Text minimum:** The rendered text meets a minimum font size and weight (research needed)
- **Verbosity:** The interface avoids overwhelming verbosity
- **Disturbing content:** A warning is provided about content that may be emotionally disturbing and the content can be hidden.
- **Appropriate tone:** The language and tone used is respectful and appropriate to the topic or subject matter
- **Risks:** Clear explanations of the risks and consequences of choices, including use, are stated.
- **Contextual help:** Contextual help is available
- **Provides programmatic help:** Instructions and help do not rely on sensory characteristics
- **Text-to-speech supported:** Text content can be converted into to speech
- **Semantic text appearance:** Semantically meaningful text appearance is programmatically available