

Springfield Pet Rescue

Presented by Pramodya

Interface Design Guidelines for Adults

- **Use clear and concise language:** Ensures users can quickly understand the content.
- **High contrast for readability:** Helps users with visual impairments.
- **Consistent navigation:** Provides a predictable and user-friendly experience.
- **User-friendly forms:** Simplifies data entry.
- Example: Large buttons for easy navigation





Interface Design Guidelines for Children

01. Use bright colors and engaging visuals:

Attracts and retains children's attention.

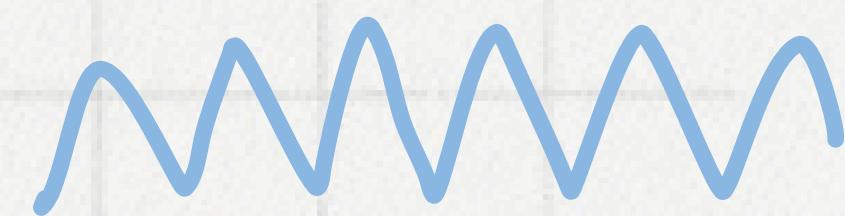
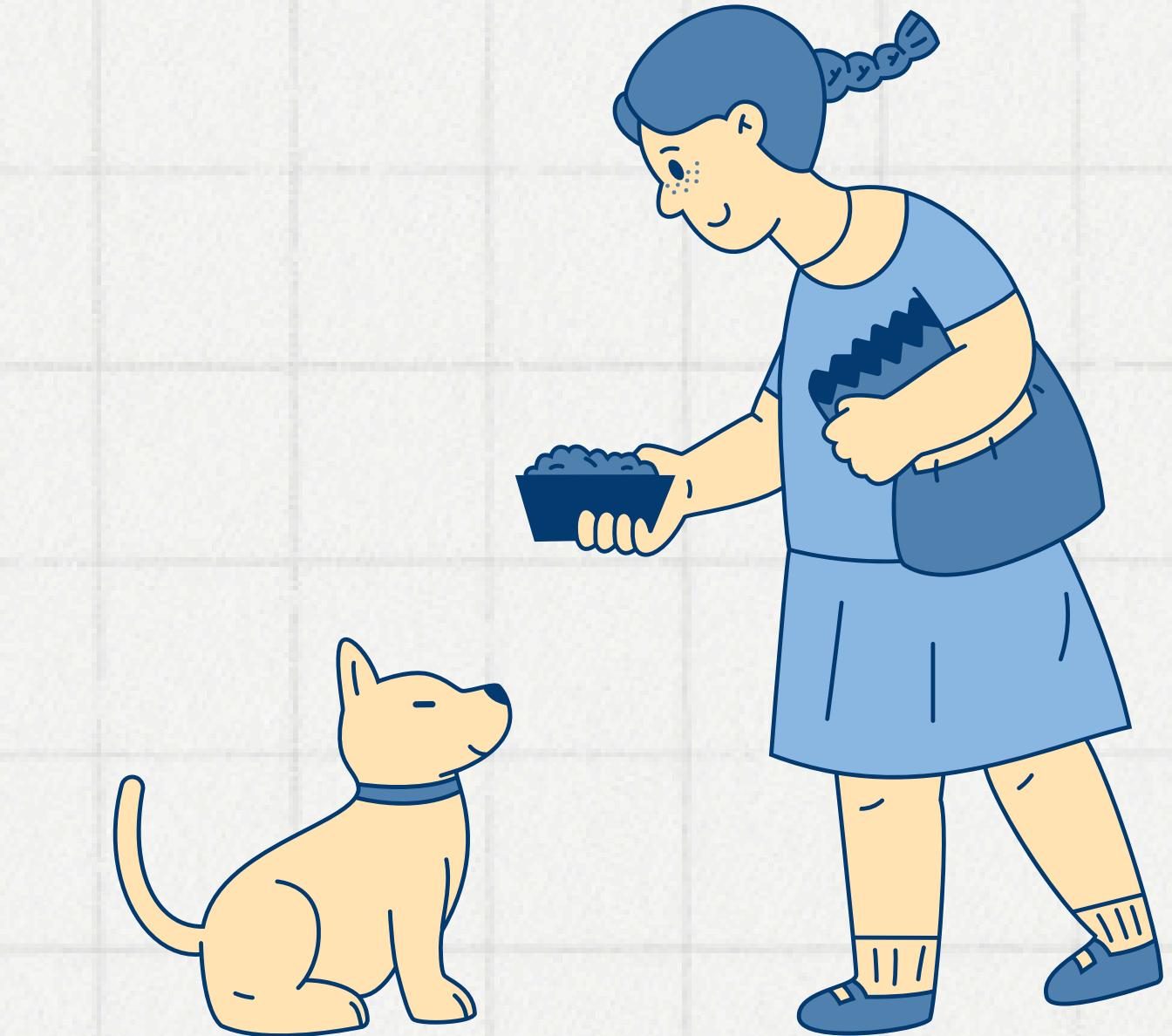
02. Simple language and short sentences:

Ensures comprehension.

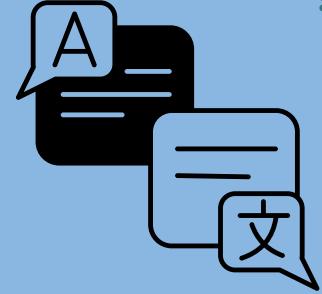
03. Interactive elements: Increase engagement

04. Large, clickable areas: Facilitates easy interaction.

Ex: Animated characters guiding the user.



Adult Interface Designs



Focus on efficiency and information:

- **Clear and Concise language:** Ensures users can quickly understand the content.
- **EX:** Minimalist design with clear headings.



- **High contrast for readability:** Helps users with visual impairments.
- **EX:** Black text on a white background.



- **Consistent navigation:** Provides a predictable and user-friendly experience.
- **EX:** Standardized menu structure across all pages.



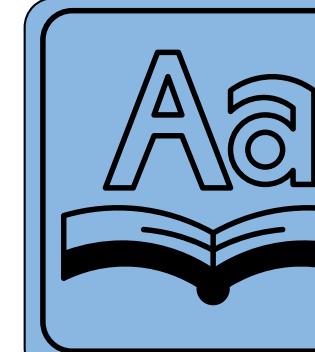
- **User-friendly forms:** Simplifies data entry.
- **EX:** Auto-fill options and clear error messages.

Child Interface Designs



Focus on engagement and simplicity:

- **Bright colors and engaging visuals:** Attracts and retains children's attention.
- **EX:** Colorful backgrounds and playful icons.



- **Simple language and short sentences:** Ensures comprehension.
- **EX:** Simple instructions with visual aids.



- **Interactive elements:** Increase engagement.
- **EX:** Learning activities disguised as games.



- **Large, clickable areas:** Facilitates easy interaction.
- **EX:** Animated characters guiding the user.

Comparison between Adult and Child Interfaces

Importance of Design for Users

○ Enhance user experience:

- **Improves satisfaction and usability:** Users find it easier and more pleasant to navigate the site.
- **EX:** Clear navigation menus help users find information quickly.

○ Increase engagement:

- **Keeps users on the site longer:** Engaging and intuitive designs encourage users to explore more.
- **EX:** Interactive elements like quizzes or animations retain interest.

○ Builds trust and credibility:

- **Professional design instills confidence:** Well-designed interfaces appear more trustworthy and reliable.
- **Ex:** A clean, professional design can lead to higher user satisfaction and trust.



Accessibility in Design

Definition and importance of Accessibility

- Ensures inclusivity for All users: Everyone, regardless of ability, can use the website.
 - EX: Designing for various types of disabilities(visual, auditory, motor, cognitive).

Additional considerations

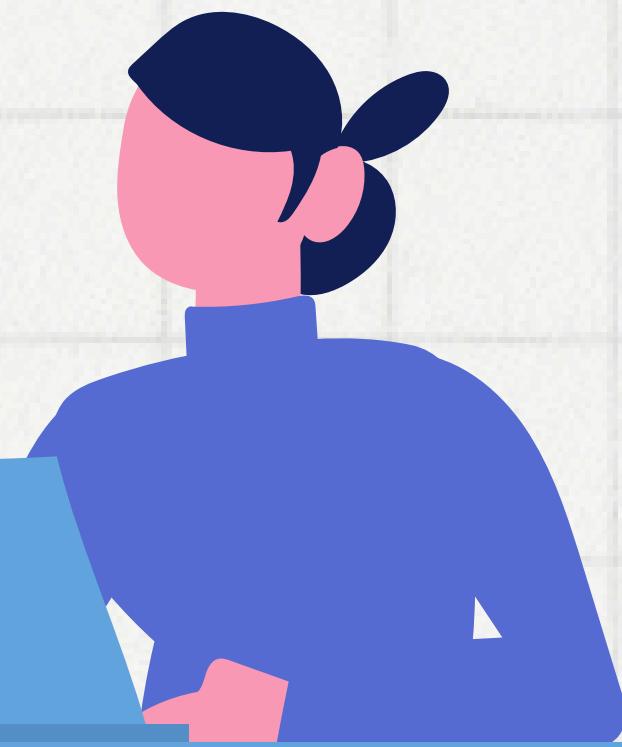
- Color Contrast: Ensures text is readable for users with color blindness.
 - EX: High contrast between text and background colors.
- Resizable text: Allows users to adjust text size for better readability.
 - EX: Using relative units like ems or percentages for font sizes.

Making websites usable for All users, including those with disabilities

- Screen reader compatibility: Ensures visually impaired users can access content through audio.
 - EX: Using ARIA(Accessible Rich Internet Applications) labels for interactive elements.
- Keyboard navigation: Enables users with motor impairments to navigate using keyboard shortcuts.
 - EX: Providing focus indicators for interactive elements like buttons and links.
- Alt Text for images: Describes images for users who cannot see them.
 - EX: Adding descriptive text for all images and graphics to ensure they are understood by screen readers.



Impact of Accessibility for All Users



Benefits of Accessible design for everyone

- **Not just for those with disabilities:** Accessible design improves usability for all users.
 - **EX:** Clear navigation benefits users with cognitive impairments and new visitors.
- **Enhance user experience:** Simplifies interaction and increase satisfaction.
 - **EX:** Easy-to-read fonts improve readability for all users.

Inclusive design principles

- **Universal design benefits all users:** Designing for accessibility leads to innovations that benefit everyone.
 - **EX:** Curb cuts designed for wheelchairs also help parents with strollers.
- **Adaptable content:** Content can be adapted for different needs and preferences.
 - **EX:** Responsive design works well one all devices.

Examples of accessibility features helping everyone

- **Captions for videos:**
 - Helps non-native speakers understand content.
 - Assists users in noisy environments.
 - **EX:** Subtitles in YouTube videos help users follow along regardless of their hearing ability.
- **Text resizing option:**
 - Allows users to adjust text size for comfort.
 - Benefits users with visual impairments and those who prefer larger text.

Mobile Design Guidelines



- **Responsive usability across devices:** Ensures usability across devices
 - Content adapts to different screen sizes and orientations.
 - **EX:** Fluid grids and flexible images adjust layout based on device.
- **Touch-Friendly navigation:** Large, tappable areas
 - Buttons and links are sized for easy tapping with fingers.
 - **EX:** Using at least 44x44 pixels for touch targets to avoid user frustration.
- **Simplified layouts:** Focus on essential content
 - Prioritize important information and minimize clutter.
 - **EX:** Using a single-column layout for better readability on small screens.
- **Additional mobile design considerations:**
 - **Fast loading times:**
 - Optimize images and code to ensure quick load times on mobile networks.
 - **EX:** Using lazy loading for images and minimizing JavaScript.
 - **Intuitive gestures:**
 - Incorporate common gestures like swiping and pinching for navigation.
 - **EX:** Allowing users to swipe through image galleries.

Mobile Usability Across Devices

O1. Consistency across different screen sizes:

- Design elements should look and function similarly across various devices.
- EX: Consistent use of fonts, colors and navigation structures.

O2. Importance of testing on various devices:

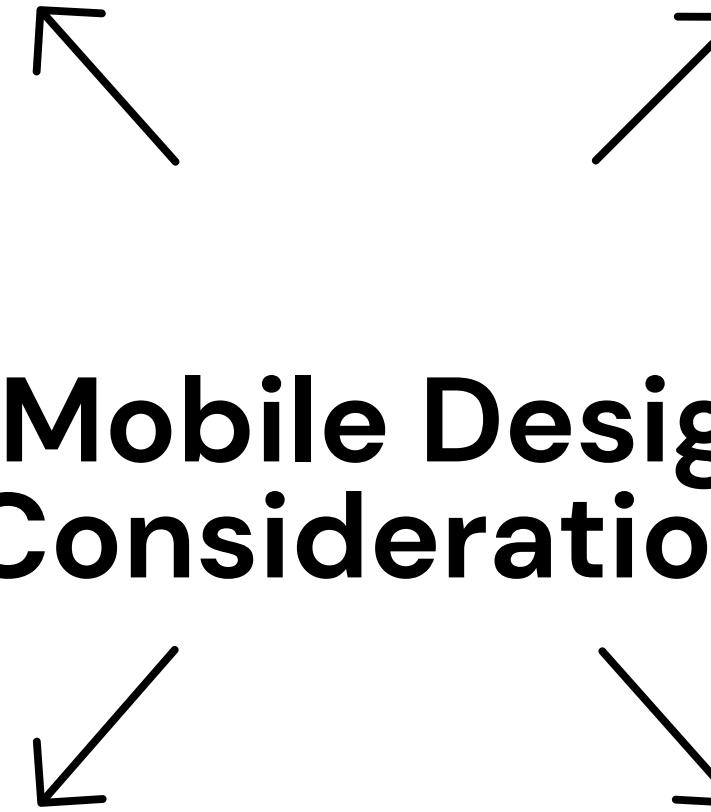
- Identifies usability issues:
 - Testing on different devices ensures compatibility and identifies potential problems.
- EX: Checking touch responsiveness and visual clarity on both high-resolution and older devices.

O3. Responsive design elements:

- Fluid grids:
 - Layout adjusts fluidly to the screen size, maintaining visual hierarchy.
 - EX: Columns that stack vertically on smaller screens.
- Flexible images:
 - Images scale according to screen size without losing quality.
 - EX: Using CSS to set image width as a percentage of the container.



- Prioritizing content for Mobile users
 - Essential information first:
 - Display the most critical content prominently.
 - EX: Key actions or information appear at the top of the screen.



- Collapsible sections for Detailed content
 - Expandable content areas:
 - Allows users to access additional information without cluttering the main interface.
 - EX: FAQ sections that expand on tap or click.

- Fast loading times
 - Optimized content:
 - Compress images and minimize code for faster loading.
 - EX: Using responsive images that load different sizes based on the device.

- Touch-Friendly elements
 - Large tappable areas:
 - Ensure buttons and links are easy to tap.
 - EX: Avoiding small touch target that are hard to interact with.

References

- 1 **Interface design for adults:** Nielsen, J. (2024) 10 Usability heuristics for user interface design.
<https://www.nngroup.com/articles/ten-usability-heuristics/> (Accessed: July 16, 2024).
- 2 **Interface design for children:** Designing websites for Kids: Trends and best practices — Smashing Magazine (2009).
<https://www.smashingmagazine.com/2009/11/designing-websites-for-kids-trends-and-best-practices/> (Accessed: July 16, 2024).
- 3 **Accessibility in design:** Initiative, W.W.A. (no date) Introduction to web accessibility.
<https://www.w3.org/WAI/fundamentals/accessibility-intro/> (Accessed: July 16, 2024).
- 4 **Impact of accessibility for all users:** Initiative, W.W.A. (no date b) Introduction to web accessibility.
<https://www.w3.org/WAI/fundamentals/accessibility-intro/#benefits> (Accessed: July 16, 2024).

Github Links

- 1 Springfield PHP based project – <https://github.com/Pramodya2002/CB011879.git>
- 2 Springfield React Project – https://github.com/Pramodya2002/CB011879_react.git
- 3 Woocommerce – https://github.com/Pramodya2002/CB011879_woocommerce.git

Thank you !