

Automation Knowledge Sharing

UI and UX (Part 2)

By: Amirhossein

Review...

- What is UX?
- UX Designers
- UX Design Steps
- UI vs. UX
- UX Factors

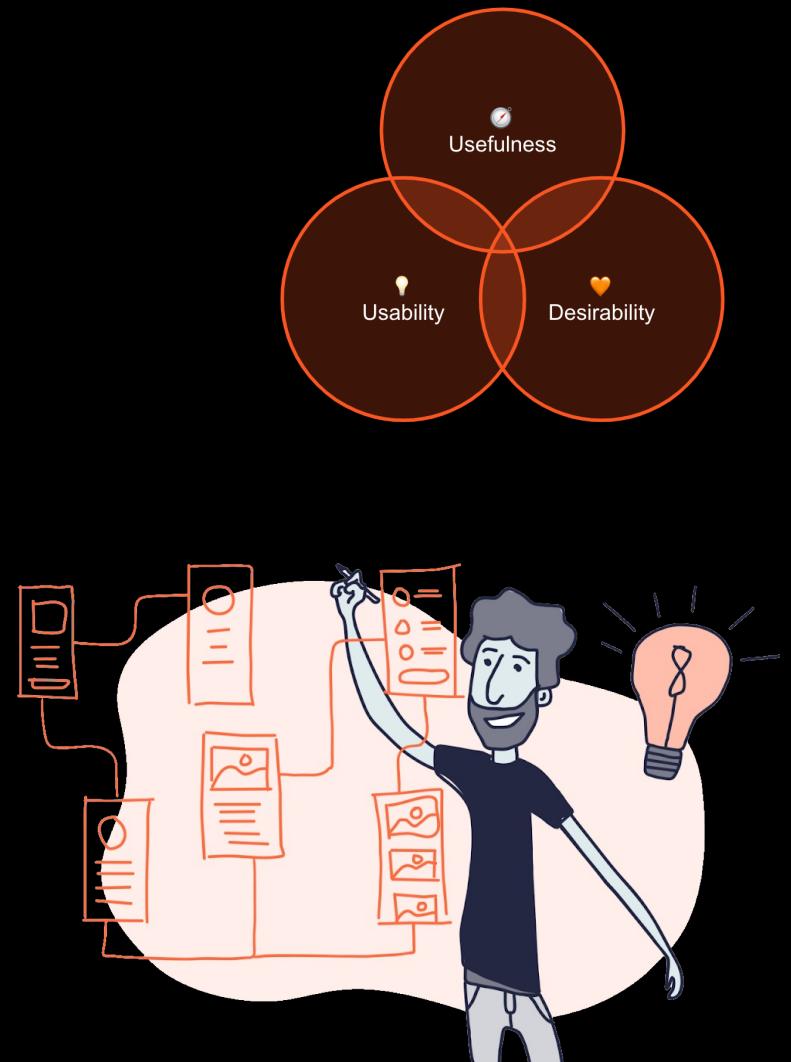
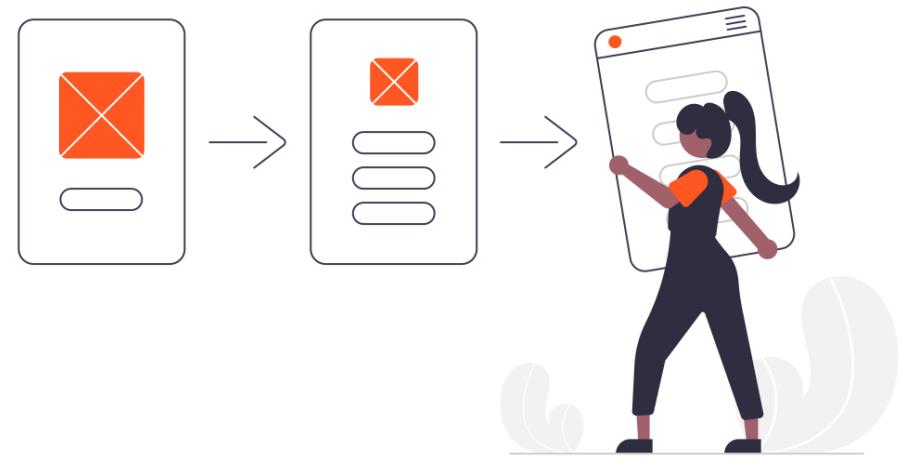


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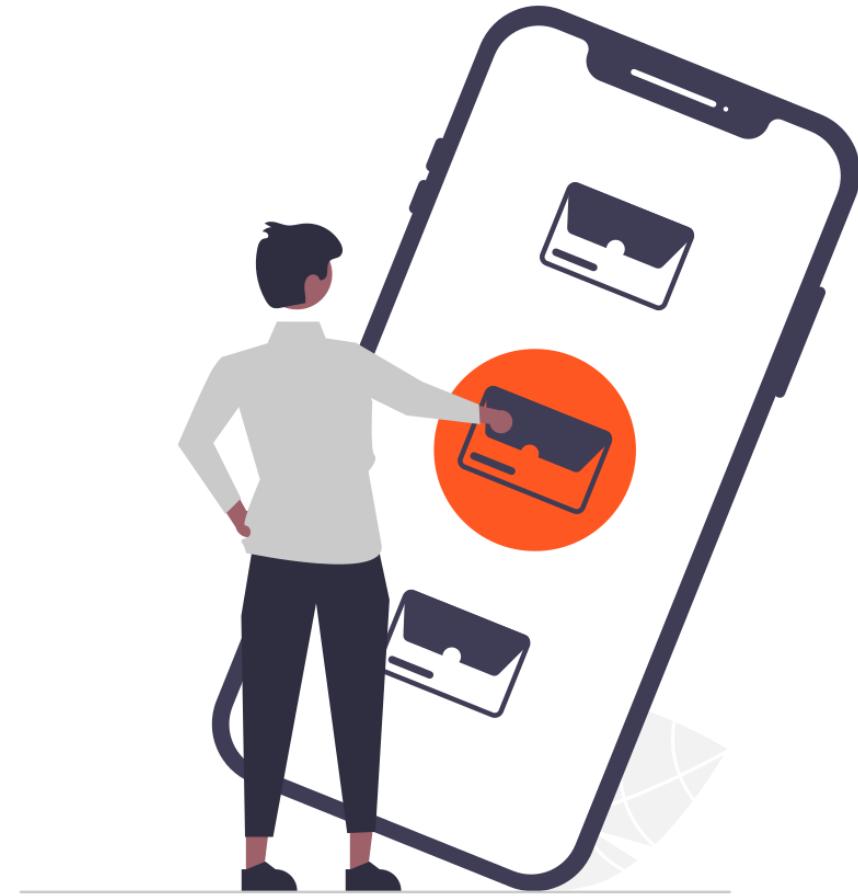
Flow



Flows

- Think of the website as a yellow brick road: **move users seamlessly from one section to the next by understanding user personas' goals and needs**
- Users are more likely to notice items near the **top of the page**, in order of their importance
- Consistent and easy-to-use web interfaces help users concentrate on the content and move through it
- Use **common website patterns and interfaces; don't make users learn something new**

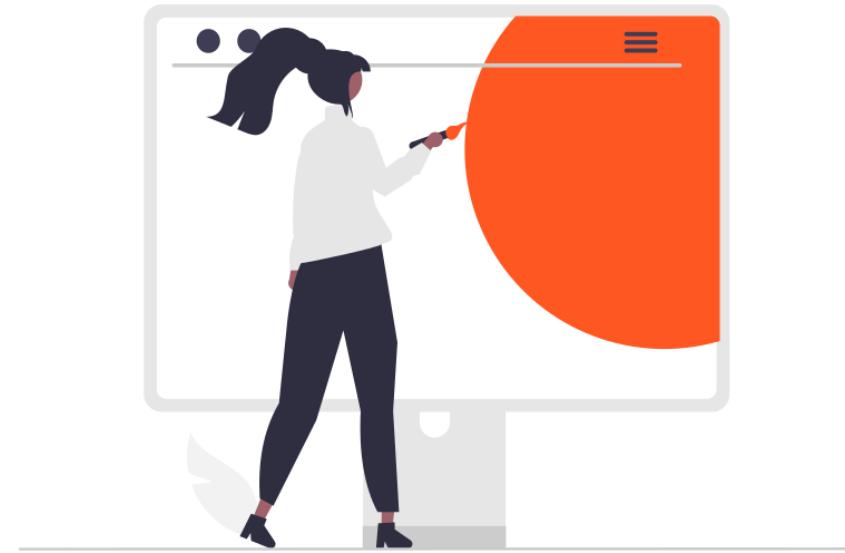
Scrolling



Scrolling

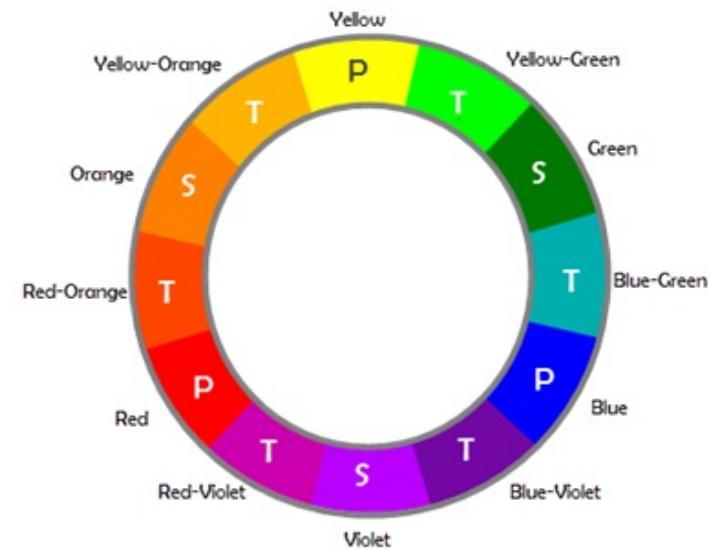
- Users will scroll down the webpage **as long as it is clear that additional, relevant information is below the fold**
- Your website should always provide a strong visual indication of the direction of scrolling and whether more content is available
- The longer the website page, the less likely someone is to scroll down to the bottom
- Running webpages are nice because **scrolling is faster than clicking** - just don't make the pages too long

Colors and Contrast



Color Wheel

- Primary Colors (P)
 - Red
 - Yellow
 - Blue
- Secondary Colors (S)
 - Orange
 - Green
 - Violet
- Tertiary Colors (T)
 - Red-Orange
 - Yellow-Orange
 - Yellow-Green
 - Blue-Green
 - Blue-Violet
 - Red-Violet



Contrast and Colors

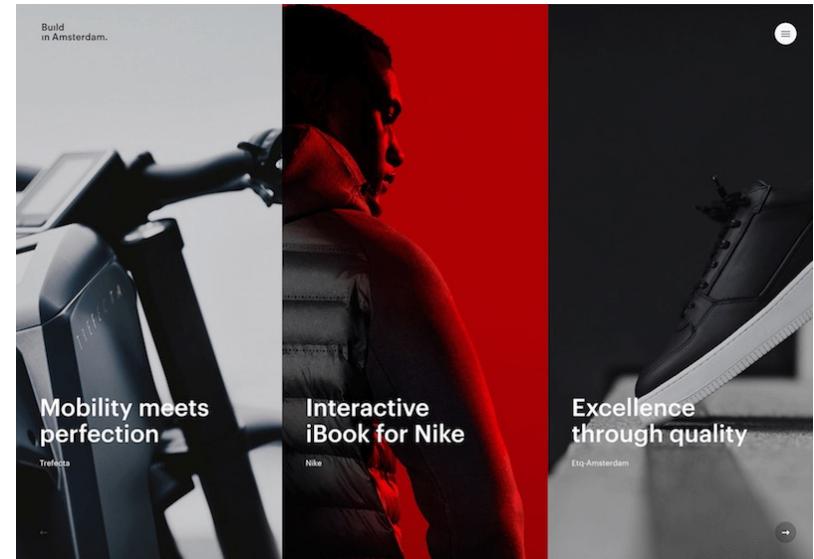
Color Meanings

- **Red:** Passion, Love, Anger
- **Orange:** Energy, Happiness, Vitality
- **Yellow:** Happiness, Hope, Deceit
- **Green:** New Beginnings, Abundance, Nature
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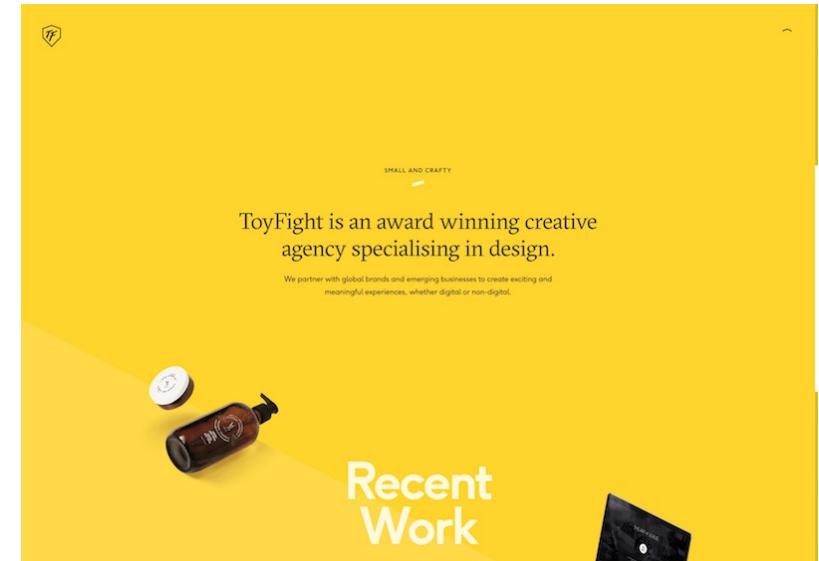
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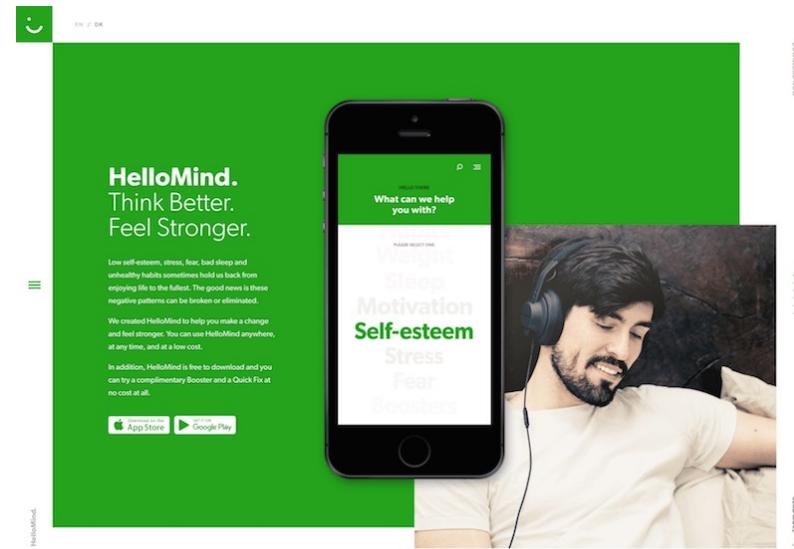
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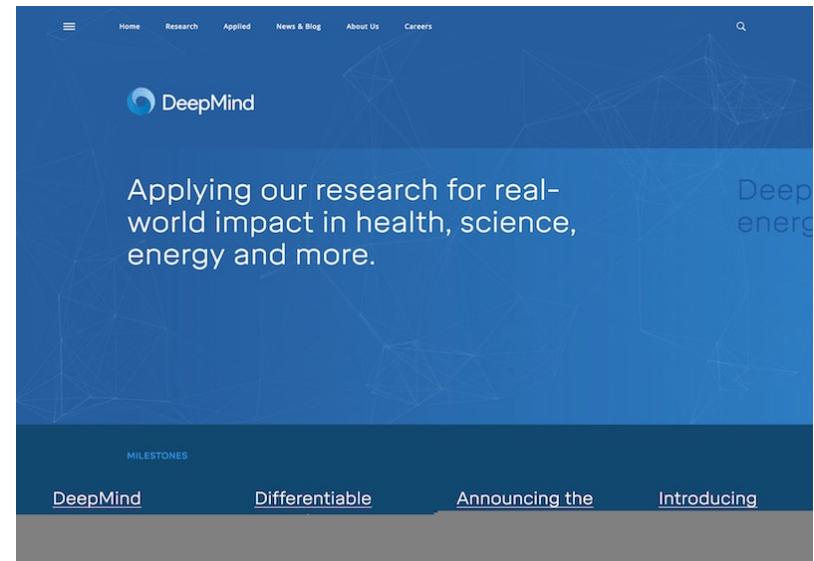
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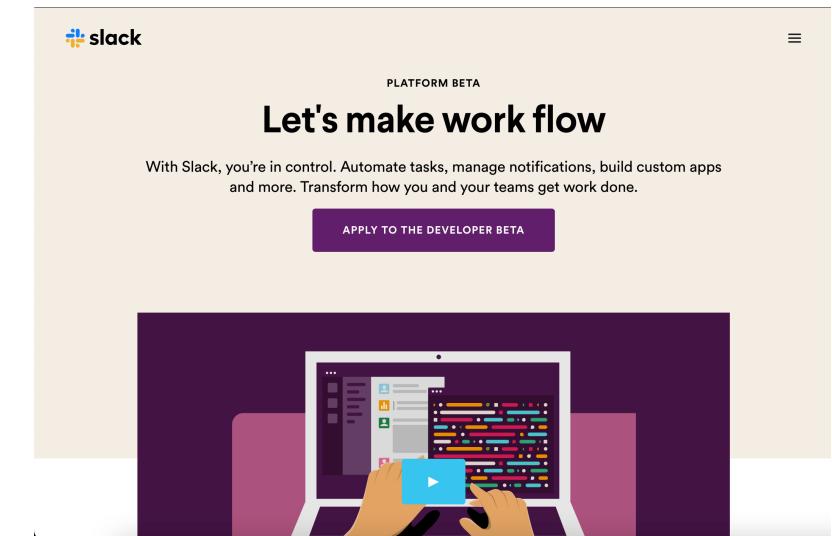
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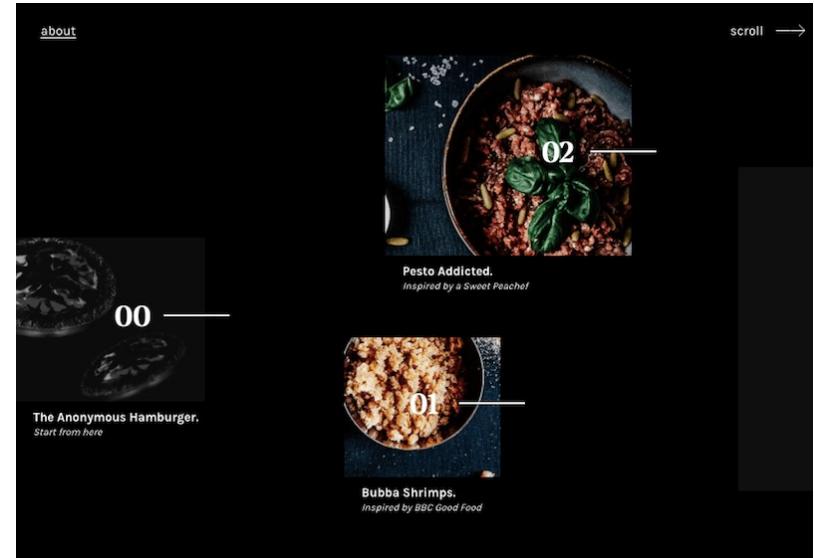
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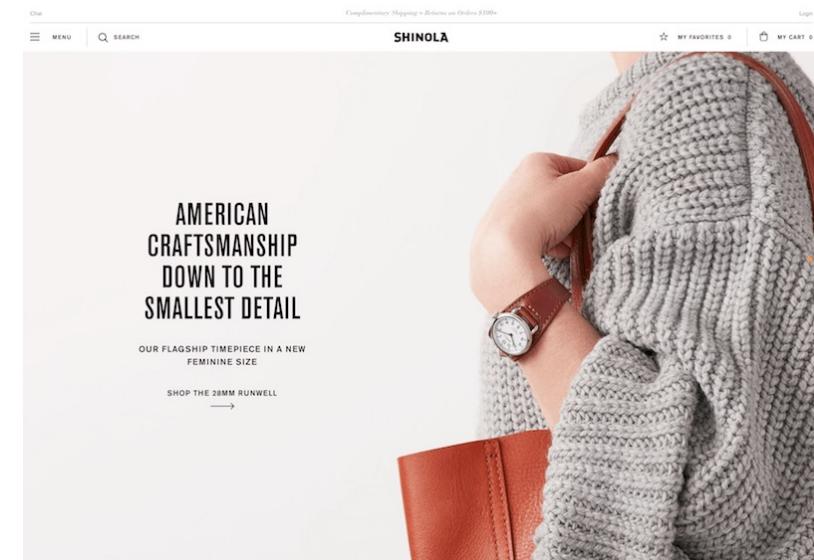
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I'm Nuno, a product designer based in Tokyo.



Read more

Currency is an incredibly simple currency converter for iOS. Download it for free on the App Store.

Project: Currency for iOS
Role: Product Designer & iOS Developer
Date: January to March 2016
Website: currency.nunocoehosantos.com
Description: A side-project with the goal to create a product that does one job incredibly well and learn a new

Contrast and Colors

Color Meanings

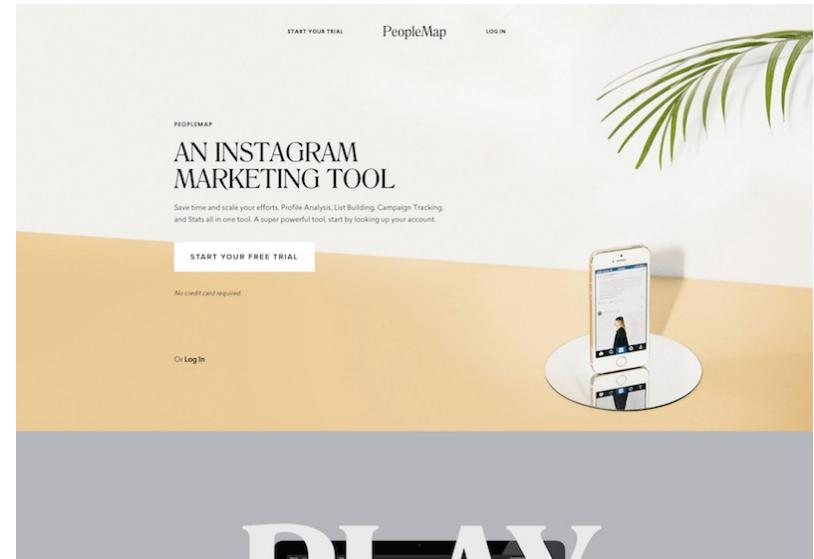
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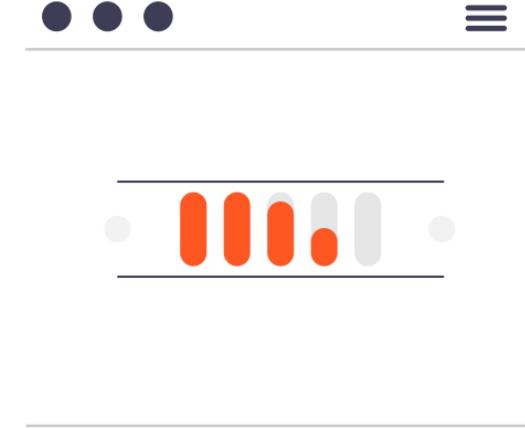
Contrast and Colors (cont.)

Tips

- Design for color **blind users**. Convert your designs to **grayscale** to ensure all users can read important info
- Don't use the color blue for any text on websites other than links
- Be aware of the **contrast on mobile websites**. Screen glare can render your website unusable
- **Warm, bright** colors come **forward** and **cold, dark** colors stay in the background



Loading



Loading

- Make sure website users can complete their primary goal quickly and easily
- What matters the most to users is that your website feels fast (even if it is just their perception)
- Perception of website speed is based on load time, load behavior, waiting times and smoothness of animations

Loading (cont.)

- Show a **skeleton** of the website's elements to communicate the layout when it is loading

C



Why First Minister of Scotland Nicola Sturgeon
thinks GDP is the wrong measure of a country's
success:

Loading (cont.)

- Show a **skeleton** of the website's elements to communicate the layout when it is loading
- Website **text should load before images** so users can start reading before the rest of the site loads

Loading (cont.)

- Show a **skeleton** of the website's elements to communicate the layout when it is loading
- Website **text should load before images** so users can start reading before the rest of the site loads
- Delays **longer than several seconds** will often make users leave the website

Mobile



Mobile

- Mobile interface elements are hard to tap accurately if they are small or close together
- The minimum size for a touch target on mobiles should be 1cm*1cm with proper padding

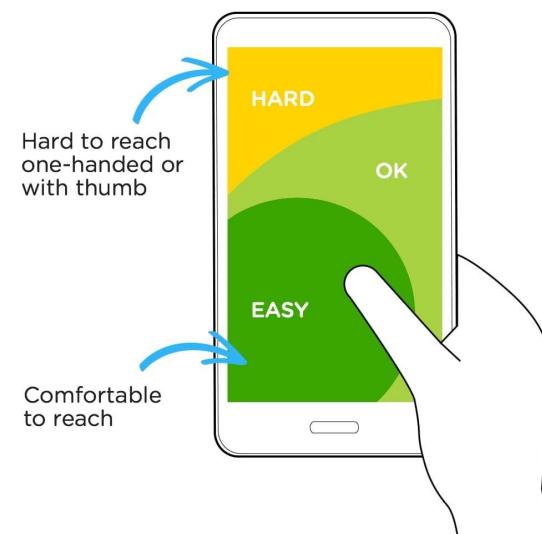


Mobile

- Mobile interface elements are hard to tap accurately if they are small or close together
- The minimum size for a touch target on mobiles should be 1cm*1cm with proper padding
- Someone using a pinky finger on your mobile website or app means that the interface targets are too small
- When holding a tablet, the sides and bottom of the screen are most easily reached with the thumb

Mobile (cont.)

- Don't require vertical swiping for anything other than normal webpage scrolling
- **Don't use double-taps** on mobile devices. Make sure users can interact with a single touch
- Determine whether users will use devices with one hand or two when designing mobile layouts





Navigation



Navigation

- Always have an **obvious way to access the navigation menu** on your website
- If your website **hierarchy is greater than 3-4 levels deep**, it's time to **redesign**
- Consider using **sticky menus**, especially on longer webpages or when quick access is needed
- Make your navigation consistent; it shouldn't change throughout the website
- Make navigation labels **specific, no more than 2-3 words** and start with the **most information carrying word**
- Let users know where they are on the website by using **breadcrumbs**

Navigation (cont.)

- Mobile navigation: Show the most frequently used options and hide the others under a hamburger menu
- Hamburger menus on desktops are less noticeable, less familiar, increase interaction cost and diminish information scent
- For secondary navigation on mobiles, use category landing pages, submenus or in-page menus
- Menu dropdowns should be vertical, not horizontal hover; it is much harder to scroll horizontally



Navigation (cont.)

- If using megamenus, organize links into groups and distinguish between clickable and non-clickable items

﴿ خودرو، ابزار و تجهیزات صنعتی

﴿ مد و پوشاس

﴿ اسباب بازی، کودک و نوزاد

﴿ کالاهای سوپرمارکتی

﴿ زیبایی و سلامت

﴿ خانه و آشپزخانه

﴿ کتاب، لوازم تحریر و هنر

﴿ ورزش و سفر

﴿ محصولات بومی و محلی

| لوازم جانبی گوشی <

| کیف و کاور گوشی

| پاور بانک (شارژر همراه)

| پایه نگهدارنده گوشی

| سامسونگ

| هوآوی

| اپل

| شیائومی

| آنر

| نوکیا

| واقعیت مجازی <

| مجبند و ساعت هوشمند <

| هدفون، هدست، هندزفری <

| اسپیکر بلوتوث و با سیم <

| هارد، فلاش و SSD <

| دوربین <

| دوربین عکاسی دیجیتال

| دوربین ورزشی و فیلم برداری

| دوربین چاپ سریع

| لنز

| کیف

| کارت حافظه

| کاغذ چاپ عکس

| تبلت <

| شارژر تبلت و موبایل <

| کیف، کاور، لوازم جانبی تبلت <

| تجهیزات مخصوص بازی

| مانیتور

| کیس‌های اس梅بل شده

| قطعات داخلی کامپیوتر

| ماوس

| کیبورد

| لپ تاپ <

| لوازم جانبی لپ تاپ <

| کیف، کوله و کاور

| HDMI و AUX و کابل صدا

| کارت هدیه خرید از دیجی‌کالا <

| کامپیوتر و تجهیزات جانبی <

| باتری <

| دوربین‌های تحت شبکه <

| مودم و تجهیزات شبکه <

| ماشین‌های اداری <

| تلفن، بی‌سیم و سانترال

| فکس

| پرینتر

| لوازم جانبی اداری <

| کتابخوان فیدبیوک <

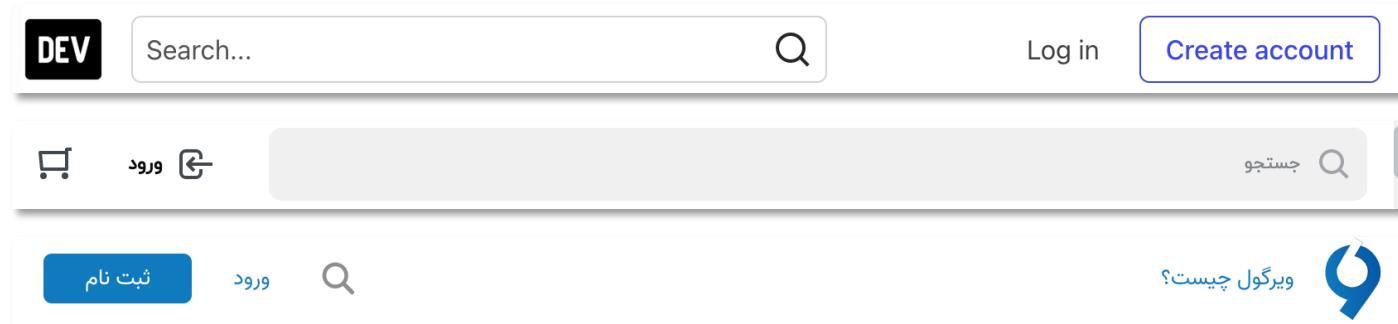
برترین
گوشی‌های
پرچم‌دار

خرید

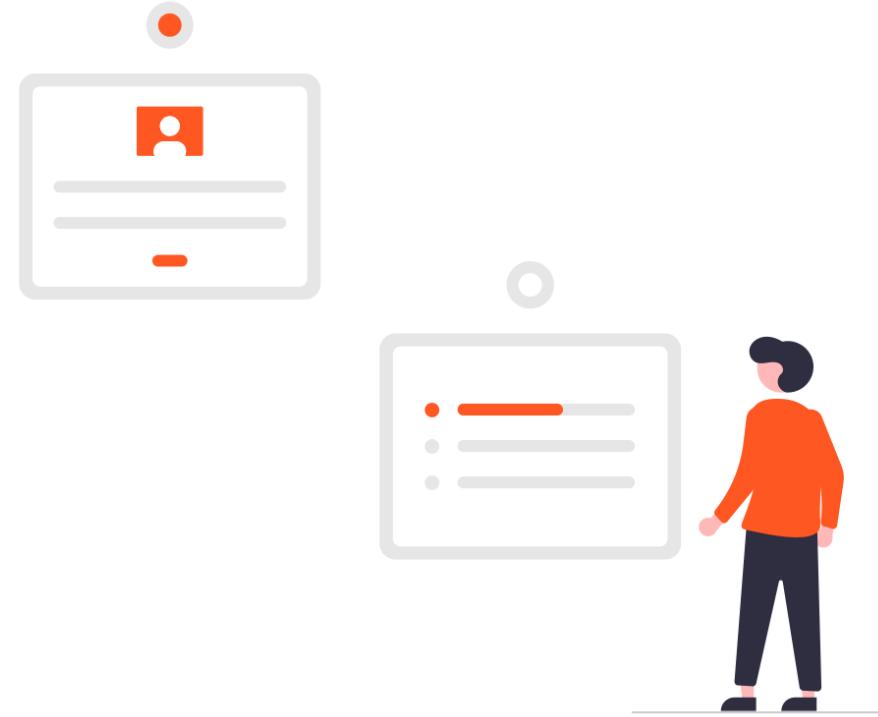


Navigation (cont.)

- If using megamenus, organize links into groups and distinguish between clickable and non-clickable items
- Megamenus should be narrower than the page so it is easy to “click out” of them
- Don't hide login or search features inside website menus



Forms



Forms

- Align form labels and fields in a single vertical line to allow for fast scanning
- Field labels should be outside the text field, not inside, so users do not lose track of them
- Split up sections with separators to make long web forms more user-friendly

The image shows a mobile application interface with a red border. Inside, there are five input fields arranged vertically. Each field has a placeholder text and a label to its right. An orange button is located at the bottom.

نام *	(Placeholder)
نام خانوادگی *	(Placeholder)
کدملی	(Placeholder)
مثال: ۰۰۱۲۳۴۵۶۷۸	(Placeholder)
ایمیل *	email@example.com
شماره تماس *	۰۹۱۲۳۴۵۶۷۸۹
ارسال	

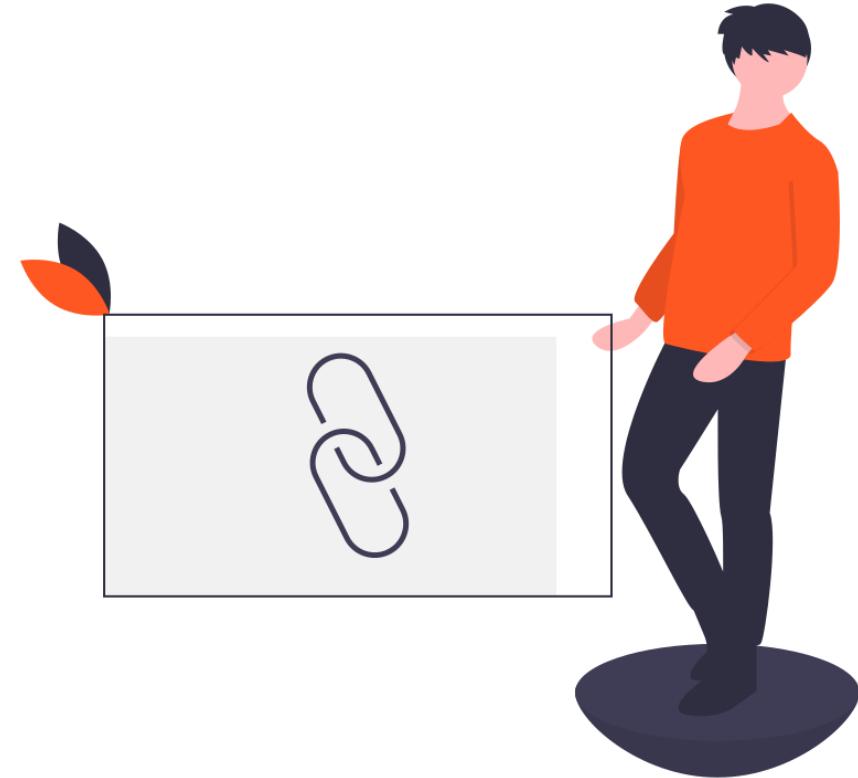
Forms (cont.)

- Put form **errors** next to the error-causing fields on all web forms
- Error messages should be **helpful, usable, concise and easy to understand**
- Show all error-causing fields at once, **next to each problematic field** so mobile users don't miss the warning

The image shows a mobile application interface with a red border. Inside, there are several input fields and error messages in both English and Arabic. At the bottom is a large orange 'Send' button.

- First input field: 'Name *' (نام *). Error message: 'Field name is required' (فیلد نام الزامی من باشد).
- Second input field: 'Phone number *' (نام خانوادگی *). Error message: 'Field phone number is required' (فیلد نام خانوادگی الزامی من باشد).
- Third input field: 'Address' (کدمل). Error message: 'Field address is required' (فیلد نام خانوادگی الزامی من باشد).
- Fourth input field: 'Example: 0012345678' (مثال: ۰۰۱۲۳۴۵۶۷۸). Error message: 'Field example is required' (فیلد ایمیل الزامی من باشد).
- Fifth input field: 'Email' (ایمیل *). Error message: 'Field email is required' (فیلد ایمیل الزامی من باشد).
- Sixth input field: 'Contact number *' (شماره تماس *). Error message: 'Field contact number is required' (فیلد شماره تماس الزامی من باشد).
- Bottom right button: 'Send' (ارسال).

Links



Links

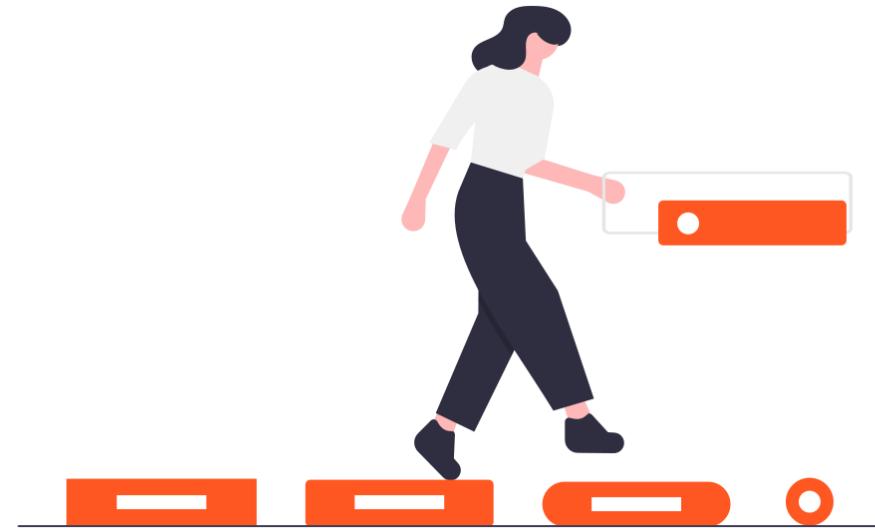
- A user shouldn't have to click on a link to figure out where it leads.
The link text should tell them
- Links on websites must stand out – use **blue text** and/or **underlining** to indicate hyperlinks
- Links should always look like links!
- Don't use blue text or underlining for non-linked elements in websites or apps

Links (cont.)

- A reference to a **full URL** anywhere on a website **should always link to that page**
- Certain elements, such as product images Logos, are always expected to be clickable
- Use a different color for visited links on websites to reduce users' memory load



Buttons



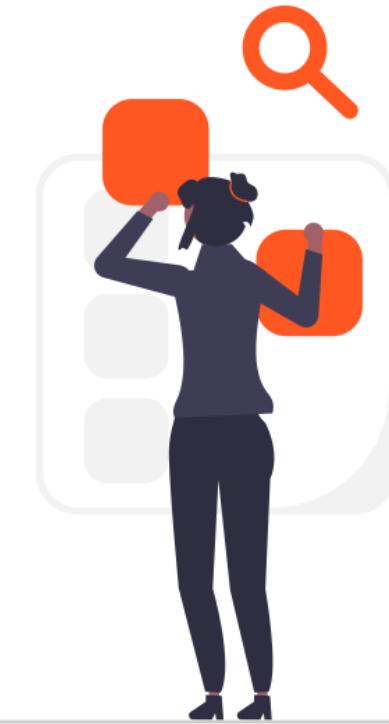
Buttons

- Buttons on websites must look clickable and have enough space for users to click or tap comfortably
- Frequent actions on websites or apps should be large buttons, placed in easily reachable zones
- Background colors, borders and action-oriented labels on a website signal to users that an element is clickable

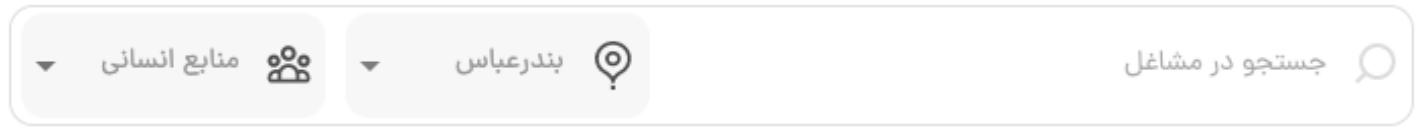
Buttons (cont.)

- For flat designs, make sure that action **buttons** are done in a **contrasting color** with an **action-oriented label**
- A website should have a **visual cue** that a **button click was successful within 0.1 seconds** of the interaction
- Buttons that **change** or **delete** data on mobiles should require more effort to tap to **prevent accidental tapping**

Search



Search



- Unless you have a very small website with little content, always have a search field
- The search field should always look like a **text box** on a desktop.
The **search icon is OK to use for mobile**
- Make the search field **easy to find**. Users typically look for it in the top right corner
- Search fields on websites should be **wide enough** to see the entire search query

Accordions



Accordions

- Use accordions to **compress lengthy content** on mobile websites
- When using accordions, offer a way to **collapse** any exposed content once the user has expanded it
- Using accordions on mobile websites :
 - Pros: Shorter pages are easier to use than in-page jump links
 - Cons: Increased interaction cost; out of sight is out of mind

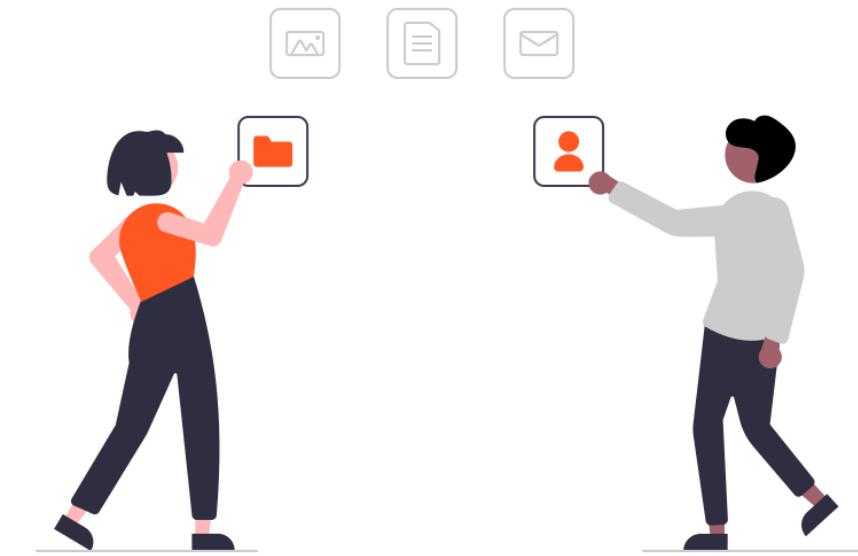
Help and Hints



Help and Hints

- The main purpose of each webpage **should be obvious to the user**
- Users are reluctant to use Help on your website . Put it in context and offer wizards and FAQs **when appropriate**
- Display hints on websites and apps in context and **only when needed**
- Helps and instructions should be **short** and visually different from other interface elements
- Only present **one hint at a time** on websites and mobile apps. This reduces memory burden

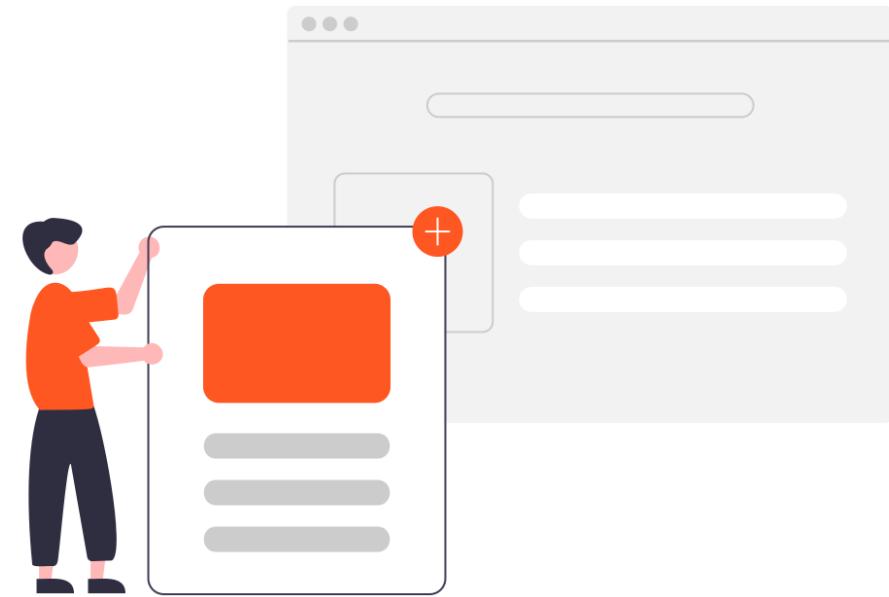
Icons



Icons

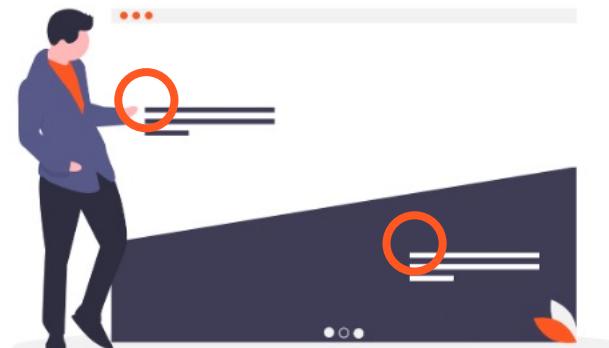
- Icons must visually **describe their function and purpose**. Make them simple, familiar and meaningful
- Icons should only be used when necessary. **Avoid overusing them** and do not use them simply for decoration

Content

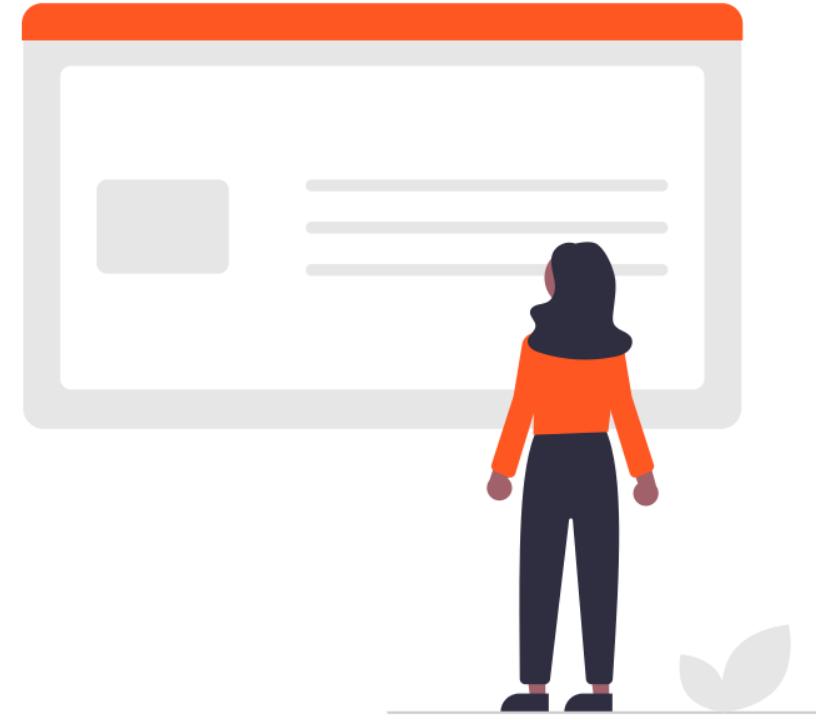


Content

- The **most important information** on your webpage should always stand out as the **most visually prominent**
- Place **high-priority content at the top** of the website page. Use analytics to determine priorities on different devices
- Use **color and size contrast** on your website to differentiate primary information from supporting details
- Put key information first. **Users start at the top left and the first 2-3 words are scanned the most**



Readability



Readability

- Most users **scan first** and **read later**. Use visual variety and meaningful text to make scanning easier
- Readability isn't just about whether you **can** read something - it's also about whether you **want** to read it
- Use **increased line spacing** between bulleted lists, numbered lists, lines and paragraphs to increase readability
- When choosing a website font, consider its **legibility**, **readability**, **weights** and **styles**



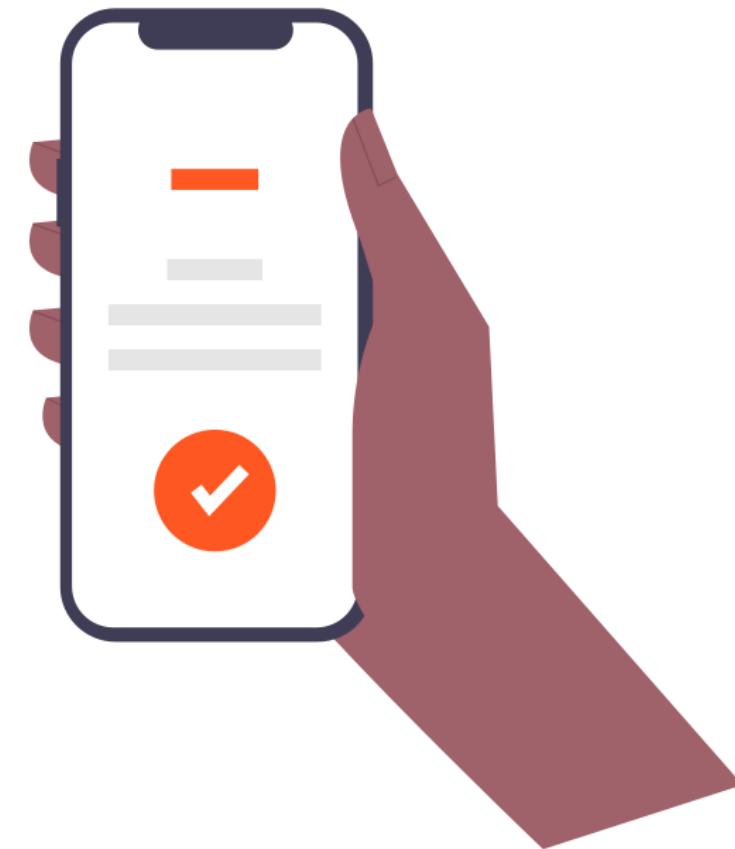
Readability (cont.)

- Avoid small fonts on all devices, especially for long form copy. Do not use condensed fonts in body text
- Make sure that the text size for headlines on a mobile website is as responsive as the rest of the content
- Increase font size on mobile websites - always scale font size to the screen size

Readability (cont.)

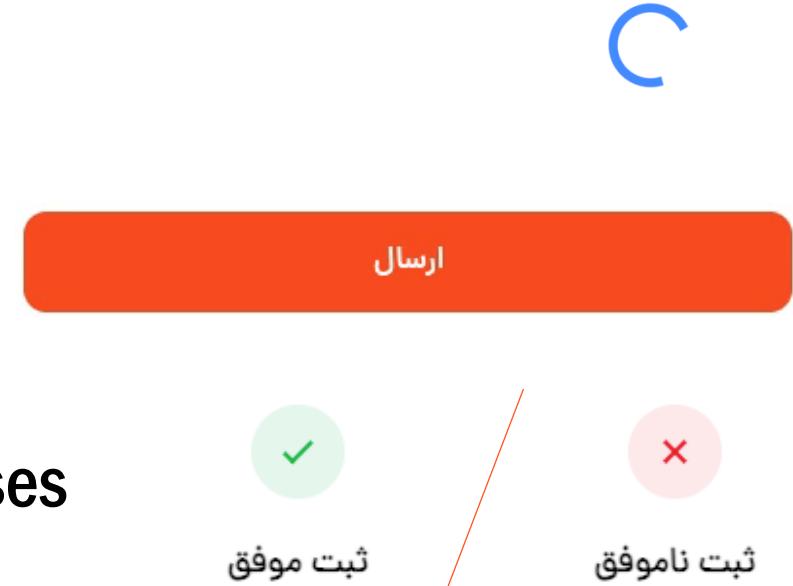
- Banner Blindness: users take effort not to look at anything that looks like advertising banners
- Make long text blocks easier to read by including only one idea per paragraph
- *Italicized text is harder to read*, especially for dyslexic readers
- DO NOT USE ALL CAPS IN YOUR HEADLINES AND TAGLINES. It's much harder to read

Feedbacks



Feedbacks

- Loading animations
- Buttons click animations
- Showing Success and Failure responses



Feedbacks (cont.)

Progress bars:

If a page will load in under 5 seconds, don't display a progress bar, as it'll actually make the loading time seem longer. Instead, use a visualization that doesn't imply progress. If you do use progress bars on your site, consider trying some visual tricks to make the load seem faster.

Handle User Mistakes



“The UI is super intuitive.”

Users:



Developer: Makes a simple, intuitive UI



Users

Handle User Mistakes

- People make mistakes, but they shouldn't (always) have to suffer the consequences.
- Two ways to help lessen the impact of human error:
 - Prevent mistakes before they happen
 - Buttons remain inactive until you fill out all fields.
 - Forms detect that an email address hasn't been entered properly.
 - Pop-ups ask you if you really want to abandon your shopping cart
 - Provide ways to fix them after they happen
 - Explain the problem
 - Explain how to fix it

References

- [10 essential UI \(user-interface\) design tips](#)
- [Top 100 UX Design Tips from a User Experience Master](#)
- [Color Theory for Designers, Part 1: The Meaning of Color](#)
- [The Beginner's Guide to Web Design Patterns](#)





Thank you for your attention!