# SMART INTERFACE DESIGN PATTERNS









Coming up with a new solution for every problem takes time, and often it's really not necessary. We can rely on **smart design patterns** and **ask the right questions** ahead of time to avoid issues down the line. This deck of 100 cards is supposed to help with just that.

Just before starting a project, I would sit down with designers and developers and talk through the questions listed in this deck. It helps save time and drive to better decisions when tackling pretty much **any interface challenge** — from intricate data tables and web forms to troublesome hamburgers and carousels.

Each checklist has been curated and refined over 8 years by yours truly — all based upon usability sessions, design iterations and A/B tests. So my sincere hope is that this deck will be helpful for your work to bring up **important conversations** before issues arise, not forget anything crucial that would cause trouble in usability tests, and be prepared for whatever comes next.

Vitaly Friedman





#### DESIGNING FOR TOUCH



- o1 Input is never precise: are hit targets at least 50×50px?
- O2 Are all our icons large enough to avoid rage-taps/-clicks?
- •3 Can we turn icons into larger clickable areas with labels?
- •4 Do our links, form elements, and search have enough padding?
- os Do we expose critical navigation as bottom nav on mobile?
- •• Do we center a critical icon/call to action in the bottom bar?
- o7 Do we want to have any floating buttons on mobile?
- OB Do we repeat critical calls to action within our content?
- 09 Do we show tooltips/hints above the tappable area?



#### DESIGNING FOR TOUCH



- 10 Can users double-tap on the same spot to undo/restore actions?
- 11 Do we provide visual feedback on tap (ripple/active state)?
- 12 Do we prompt a larger selector view on imprecise taps?
- 13 Did we test input areas with keyboard covering the screen?
- 14 Do we space out icons with opposing functions to avoid mis-taps?
- 15 Do we always pause auto-play (carousels, video) on tap?
- 16 Do dropdowns open on tap/click, rather than only hover?
- 17 For prev/next nav, is it displayed on bottom left/right on mobile?
- 18 For prev/next nav, is it displayed on center left/right on tablets?



#### DESIGNING FOR TOUCH



- 19 Do we measure the time needed to complete a task (no errors)?
- 20 Do we have at most five tabs at the bottom on mobile?
- 21 How do we maximize the speed of getting users from A to B?
- 22 Can we replace dropdowns with toggles and buttons?
- 28 Can we avoid parallax and scroll hijacking for accessibility?
- 24 Do we provide buttons for copying/sharing chunks of text?
- 25 Have we tested for frequency of rage-clicks/-taps?
- 26 Have we optimized the UI for both mobile and desktop?







#### ACCORDIONS



- o1 How do we design a category's title?
- •• What icon do we choose to indicate expansion?
- •s How do we indicate collapse/ expanded states?
- •4 Do we place the icon on the left, inline, or on the right?
- os By default, should all sections be collapsed or open?
- •• What happens if a user clicks on the category link?
- o7 What happens if a user clicks on an empty bar?
- OB Should an expanded section collapse automatically?
- •• What if there isn't enough space to display all items?

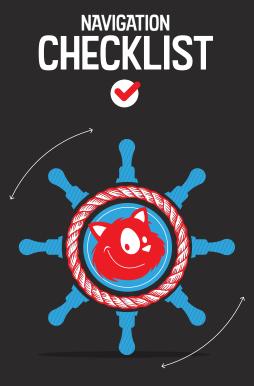


#### ACCORDIONS



- 10 Should the accordion contain a link to a category's main page?
- II Should the user be scrolled automatically when expanded?
- 12 Do we remove parallax and autoplay for slow phones?
- 13 Do we keep the state of an accordion on reload?







#### NAVIGATION



- O1 What critical navigation do we always need to expose (filters, cart, topics)?
- •• Are critical CTAs optimized for mobile (float at the bottom)?
- •• Are critical CTAs optimized for desktop (upper-right corner)?
- 04 Do we always display a search box to increase searches?
- os Do we always display some navigation to raise engagement?
- •• Do we use a "more/less" pattern to show/hide more navigation?
- o7 Do we display breadcrumbs to jump to the parent category?
- <sup>08</sup> Does tapping on a category's title prompt accordion or navigation?
- OP Do dropdowns appear/disappear on hover, tap/click, or both?



#### NAVIGATION



- 10 If dropdowns disappear automatically, when exactly does that happen?
- If we use a hover delay in dropdowns, how long is it?
- 12 If a search icon is used, how does the search box appear when prompted?
- 13 Do we list a category's main page in a dropdown?
- 14 Do we place the "menu" button at the top or at the bottom?
- 15 Can we push the "menu" down to make it reachable for thumbs?
- 16 Do nav items appear in a full page/partial overlay or slide-in?
- 17 Do we use a layered, "curtain" navigation for multiple levels?
- 18 Do we absolutely need a deep-nested navigation (>3 levels)?



#### NAVIGATION



- 19 Have we considered using search with autocomplete instead?
- 20 Do we use tabbed navigation at the top or at the bottom (<5 items)?</p>
- 21 Do we use a floating navigation icon at the bottom right?
- 22 Do we highlight popular or important navigation items?
- 23 Do mega-dropdowns appear/disappear on hover, tap, or both?
- 24 Do we group mega-dropdown sections as cards/links on mobile?
- 25 Do we use icons to display differences between sections?
- 26 Can we split the nav vertically for submenus on mobile?
- 27 Can users tap on the same spot to open/close navigation?

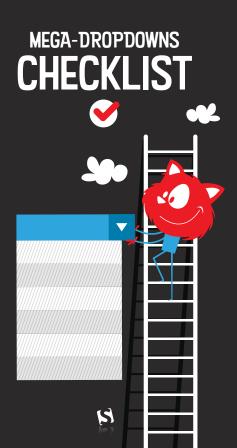






- 28 Are all navigation options reachable via keyboard on desktop/mobile?
- 29 Are all navigation options accessible via a screen reader?
- 30 Have we minimized the distance/time to travel from one step to next?







- O1 What content do we want to show in the mega-dropdown?
- 02 How many levels of navigation should be accessible directly from the mega-dropdown?
- O3 Do we want a simple overlay or multilevel navigation with nested submenus?
- 04 How does the user open a mega-dropdown with mouse/keyboard (on hover/tap/click)?
- os How does the user open a mega-dropdown with touch (on tap/click)?
- •6 Are important navigation options accessible without the mega-dropdown?
- o7 Do we need to repeat some options within and outside of a mega-dropdown?
- OB Can we display only 6-7 items at a time and include a "Browse all" button to access the rest?
- •• Do we need a "Browse all" button that would surface all navigation at once?



## MEGA-DROPDOWNS \*\*

- 10 How do we group, organize, and design navigation options in a mega-dropdown?
- 11 Do we use icons to display differences between sections?
- 12 Do we feature thumbnails, videos, or frequently asked options?
- 13 Do we style links to the category's main page and its subnavigation differently?
- 14 For each category, do we include a link to the category's main page in subnavigation?
- 15 Can we underline category titles to identify them as links to the category's page?
- 16 Can we add a "Home" link or a "Browse all" button within each subcategory?
- 17 Do we avoid split bar navigation (category link and icon opening the menu)?
- 18 Do we need to use accordions to expand some sections or subsections?



### MEGA-DROPDOWNS

- 19 Are all sections in the mega-dropdown accessible via keyboard? (focus:not-visible)
- 20 For hover menus, do we avoid hover flickering (e.g. SVG path exit areas)?
- 21 For hover menus, do we avoid long fade-in/fade-out transitions and entry/exit delays?
- 22 For hover menus, do we avoid placing important, frequently used items close to the mega-dropdown navigation (e.g. search bar, CTA, shopping cart icon)?
- 23 Do we highlight a selected section (e.g. underlined/background change)?
- 24 For click/tap menus, do we have an icon to indicate that a category title triggers a mega-dropdown on click (arrow, chevron, min. 50×50px)?
- 25 For click/tap menus, do we keep it open until the user manually closes it?



## MEGA-DROPDOWNS \*\*

- 26 On mobile, do we turn the mega-dropdown into a group of vertical accordions?
- 27 On mobile, do we avoid multiple overlays and turn the mega-dropdown into a group of vertical accordions?
- 28 Can we avoid horizontal overlays and use vertical accordions and split-menus instead?
- 29 Could we replace mega-dropdowns with structured guides and "navigation queries"?
- 30 How do we extend navigation if necessary (e.g. if more items need to be added)?





#### HAMBURGER



- O1 Can we avoid a hamburger icon and show navigation as is?
- O2 If not, what icon do we choose to indicate navigation?
- <sup>03</sup> Are the icon and padding large enough for comfortable tapping?
- •4 Will we place the icon on top left/right, bottom left/right, or floating?
- os Can we push the icon down a bit by placing the logo above it?
- •• What exactly happens when the user clicks/taps on the icon?
- <sup>07</sup> How will the icon change on tap or click?
- 08 Will navigation appear as full page/partial overlay, accordion, or slide-in?
- o9 If we use slide-in, does navigation appear above or below the header?



#### HAMBURGER



- 10 Will we have some sort of animation or transition on click?
- 11 Can we use just CSS for the animation to stay performant?
- 12 What if the user opens search/filters and drawer at the same time?
- 13 Do we expose some critical navigation by default on desktop/mobile?
- 14 Can users close the navigation drawer by tapping on the same spot?
- 15 If search is placed within the hamburger nav, can we pull it out?
- 16 Do we need to add a label ("Menu") or replace the icon with the label?
- 17 Can we use the "less/more" pattern to display at least some nav items?
- 18 Can we use tabs or a scrolling pane to expose some sections of the site?



#### HAMBURGER



- 19 When do we start hiding the hamburger and start showing nav items instead?
- 20 What if we have space to show some navigation items but not all of them?
- 21 Do we want to show/hide navigation on scroll down/up?
- 22 What metrics do we use to measure how well our navigation performs?
- 23 Have we tested how the hamburger performs against other options?





#### FILTERING



- O1 Can we avoid a filter icon and show filters as they are?
- OP If not, what icon do we choose to indicate filtering?
- <sup>03</sup> Is the icon plus padding large enough for comfortable tapping?
- O4 Do we put the icon at the top, bottom, or floating (mobile/desktop)?
- os What exactly happens when the user clicks/taps on the icon?
- <sup>06</sup> How will the icon change on tap/click?
- o7 Will filters appear as full page/partial overlay or slide-in?
- OB Can we avoid sidebar filtering as it's usually slow?
- •• Do we expose popular or relevant filters by default?



#### FILTERING



- 10 Do we display the number of expected results for each filter?
- 11 Can we use a horizontal swiper to move between filters?
- 12 Can we avoid dropdowns and use only buttons/chips plus toggles?
- 13 For complex filters, do we provide search within filters?
- 14 Do we use icons to explain differences between various filters?
- 15 Do we use the right elements for filters, e.g. sliders, buttons, toggles?
- 16 Do filters apply automatically (yes, for slide-ins)?
- 17 Do filters apply manually on confirmation ("Apply") (yes, for overlays)?
- 18 How do we communicate already selected filters?



#### FILTERING



- 19 Can selected filters appear as removable pills, chips, or tags?
- 20 Do we recommend relevant filters based on selection?
- 21 Do we track incompatibility between selected filters?
- 22 How do error messages or warnings appear in the UI?
- 23 Do we allow customers to reset all filters quickly, at once?
- 24 Are filters (or filter buttons) floating on scroll on mobile/desktop?
- <sup>25</sup> Can users tap on the same spot to open/close filters?









- O1 Can we just show a grid of images instead of a carousel?
- 02 If not, what's our main goal for using it (traffic, clicks, purchases)?
- OS How much space do we allocate for the carousel (mobile/desktop)?
- 04 How do we indicate that the component is a carousel?
- os How many slides do we want to feature in the carousel?
- •6 How do we choose the sequence of slides (first are more important)?
- or Are we designing a horizontal, vertical, or circular/diagonal carousel?
- 08 Where do we place prev/next arrows (below the carousel, or on it)?
- OP Do we auto-detect contrast for prev/next arrows?





- 10 How do we indicate the carousel slide the user is currently on?
- 11 Do we display a part of the next/prev slide (30–70%) on mobile/desktop?
- 12 Do we want to display a slide's labels next to prev/next buttons?
- 13 Do we want the carousel to auto-advance, and if so, how quickly (5–7s)?
- 14 Is there a way to pause a carousel if it's auto-advancing?
- 15 Do we pause auto-advancing on hover and stop on interaction?
- 16 Do we really need auto-rotation on mobile (often ignored)?
- 17 How do we indicate how many slides the carousel contains?
- 18 Can we replace grey dots with thumbnails, tabs, or just remove them?





- 19 Can we test and measure the CTR for these alternate options?
- 20 Do we use an animation to indicate that a carousel contains slides?
- 21 What should happen when a user hovers over a slide?
- 22 What should happen when a user hovers over dots/thumbnails/tabs?
- 23 Do we provide sufficient :active and :focus states?
- 24 How many carousel slides do we preload ahead of time (for perf)?
- 25 If the carousel contains videos, how do we make them distinct?
- 26 Do we show information scent for next slides (# of views/rating)?
- 27 On mobile, do we support tap and swipe gestures?





- 28 How many items do we display on mobile vs. desktop?
- 29 Does layout break if there are too many items (wrapping)?
- 30 How do we arrange thumbnails/tabs/dots-/buttons on mobile?
- 31 Do we persist the position of the carousel on refresh?
- <sup>32</sup> Do we need other flavors of the carousel somewhere (content slider)?
- <sup>33</sup> Have we measured the CTR for each slide?
- 34 Have we measured interaction decay rates?









- O1 Where do we need to use any dialog prompts?
- O2 Can we prevent critical errors with inline validation rather than a modal?
- <sup>03</sup> When do we need to warn the user or prevent critical errors (modal)?
- 04 When do we absolutely need user input to continue (modal)?
- os When do we want to support or inform the user (overlays, pop-overs)?
- <sup>o6</sup> When are we legally obliged to ask for consent (cookie prompts, age verification) (overlays, pop-over)?
- o7 When do we want to advertise to the user (ads, surveys, etc.) (no modal, inline box)?
- •8 When do we absolutely need to interrupt the user (modal)?







- 09 If we do interrupt, are we absolutely certain that users will value that disruption?
- 10 When is the right time and place for the modal to appear and get a positive response?
- 11 Do we show prompts on success moments (completed task, new paycheck, etc.)?
- 12 Do we avoid showing errors as a modal window?
- 13 Do we avoid asking for feedback or rating as a modal window?
- 14 Do we want to use a modal to display a loading message/indicator?
- 15 Do we want to use a modal for larger images or image galleries?
- 16 Do we want to use a modal for video content?
- 17 Do we want to use a modal for cookie pop-ups?







- 18 Do we want to use a modal for critical notifications?
- 19 Do we want to use a modal to confirm an intent (to deactivate, delete, restore, etc.)?
- 20 Do we want to use a modal to bring user attention to important details?
- 21 Do we want to use a modal to verify the correctness of user input?
- 22 Can we avoid opening modals automatically?
- 23 Do we never interrupt users with non-critical requests or details?
- 24 Do we never interrupt users when they perform critical, focused tasks?
- 25 Do we never show a modal before the page finishes loading?
- 26 Do we never show a modal when a user has just logged in?







- 27 Do we avoid modals that try to keep users from leaving the page?
- 28 When do we want to dim the background (modal, lightbox)?
- 29 When can the main content coexist with the dialog (overlay)?
- 30 On opening, is a modal always in sight and does it fit the screen (desktop/mobile)?
- 31 How much space do the modals take up on mobile/desktop (<75% / <30%)?</p>
- 32 On mobile do we show lengthier modals as full-page overlays or large pop-overs?
- 33 Do we avoid scrollbars or scrollable areas within the modal (if not, is a separate page a better option)?
- 34 On opening, is it visually clear that a modal is separate from the rest of the UI?
- <sup>35</sup> On opening, does a modal receive keyboard focus?



## MODALS



- 36 Is tabbing through links and controls in the modal window possible?
- 37 Do we have a focus-trapping mechanism built in?
- SB Does the title of the modal match the call to action on the button that triggers it?
- <sup>39</sup> Can we use an icon and color to indicate the nature and purpose of the modal?
- 40 How do we arrange the buttons: [primary] [secondary], or the other way around?
- <sup>41</sup> Do we have actionable labels on buttons?
- 42 Is it always possible to dismiss a modal, or are some modals blocking?
- 43 Do we have a high-contrast "Close" button in the top-right corner?
- 44 Do we want to add an additional "Dismiss" link at the bottom of the modal?
- 45 Can users escape every modal with the Esc key?





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- 46 Can users escape every modal with "Close" or "Dismiss" links?
- 47 Can users escape every modal by clicking outside of the modal?
- 48 Do we confirm the user's intent to leave the modal if they've already entered data in it?
- 49 Do we provide an option to undo the action or restore the previous state quickly?
- <sup>50</sup> Do we avoid nested modals?
- 51 Do we avoid multiple modals appearing consecutively?
- 52 Do we avoid lengthy multistep modals (more than 5 steps)?
- 53 If we do use a multistep modal, do we provide navigation between the steps?
- 54 Do we group critical notifications in one prompt, rather than showing multiple ones consecutively?







- 55 What exactly happens if the user doesn't act on the modal but chooses to close it?
- 56 What happens if a modal is fully blocked by the browser or a browser extension?
- 57 Do we measure how many people act on the modal, and how many dismiss it immediately?
- 58 What would the experience be with alternatives: separate page, injected content, or accordions?





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- O1 Do we really need to display this table as a table on mobile?
- •• Are some rows/columns more important than others?
- OS What data points are most critical to our customers?
- O4 Can we hide some columns while showing the important ones?
- o5 Do we add steppers to navigate through columns or rows predictably?
- •• Do we add controls to select what columns/rows users want to see?
- or Do we allow users to display all columns/rows if they want to?
- <sup>08</sup> Do we need horizontal scrolling with fixed columns?
- •• Do we need horizontal/vertical pagination (for big datasets)?







- 10 Do we have any hover actions, inline editing, sorting, search, filtering?
- II Do we highlight the cell, row, or column on a user's tap/click?
- 12 Do we enlarge the selected row on tap/click for easy scanning?
- 13 Do we need to display more details on tap/click?
- 14 Do we display details in a modal, or sidebar overlay?
- 15 Did we consider transforming each row into a card/accordion?
- 16 Can we transform each row into a card (rows) with a dropdown (col)?
- 17 With rows as cards, do we expose relevant data for comparison?
- 18 Did we consider transforming the table into a data grid?







- 19 Can we tilt or flip (short) headings to win some horizontal space?
- 20 Did we consider various content types (text, numeric, mixed, toggle)?
- 21 What will editable and read-only cells look like?
- 22 Did we design interactive states (normal, hover, active, focus)?
- <sup>23</sup> Did we consider empty cells, placeholders, valid/invalid input?
- 24 How do we display warnings and error messages?
- <sup>25</sup> Do we allow for selecting multiple cells?
- 26 Do we allow for resizing of columns or rows?
- 27 How do we truncate data strings if they can't be displayed in full?
- 28 Have we considered the minimum width of columns/rows?











- o1 How much space can we afford for the slider?
- 02 Do we use a single or double slider?
- <sup>03</sup> Should the slider be continuous or discrete?
- 04 How do we design the thumb, track, labels?
- os How do we choose the slider scale (linear/non-linear)?
- •6 How many tick-points do we need?
- or How do we label lower and upper boundaries?
- What icon do we use for the thumb, if any?
- •• How and where do we display the current value?
- 10 Should we provide a more precise text input as well?



# **SLIDERS**



- How do we indicate availability to avoid dead ends?
- 12 How do we indicate availability to avoid dead ends (e.g. distribution graph over the slider)?
- 13 Are there any values on a slider that shouldn't be accepted?
- 14 Should the user be able to restore the previous state?
- 15 How do we announce changes to screen readers?
- 16 Do we have interdependent sliders?
- 17 How should the track change with thumb movements?
- 18 Should users be able to lock some values?
- 19 Should we have some sort of hover/tap preview?







# DATE PICKERS



- o1 Date picker, a date-range picker or a time picker?
- OP Should it be activated when a user clicks on input/icon?
- os Should we combine day/month/year into one input field?
- O4 Should the date picker contain default preselected values?
- os How do we design the navigation between months and years?
- <sup>06</sup> How will the icon change on tap/click?
- or What happens if a user clicks on the empty bar?
- •8 How do we communicate unavailable options?
- 09 Should we allow for smart date input?



# **DATE PICKERS**



- 10 Do we use color coding for different rates, frequency or busyness?
- II Is a date picker the right pattern to use for date selection?
- 12 How do we highlight a selected date range?
- 13 Do we display a daily/weekly/monthly view by default?
- 14 Should users be able to type a date in the input field?
- 15 Should users only select predefined values?
- 16 Should the date-picker overlay appear? And if yes, when?
- 17 Should the date picker contain default prepopulated values?
- 18 Should we display availability, price, etc?



# **DATE PICKERS**



- 19 Should the week run from Mon-Sun or Sun-Sat?
- 20 How do we avoid displaying unavailable dates or zero-results?



# CONFIGURATORS CHECKLIST







- O1 Are we designing for inspiration, customization, or both?
- •2 What's the entry point to the configurator?
- OS How many premade presets, and how to define them?
- 04 Do we provide recommendations/labels with presets?
- os Do we ask for custom preferences or use filters to guide users?
- o6 Is the product always visible on mobile/desktop?
- o7 Do we always display the current price?
- 08 Do we use a 3D view, and is it accessible?
- •• Are we using drag-and-drop functionality?





- 10 How do we design navigation, with pins or prev/next pattern?
- 11 Do we need to integrate search or filtering?
- 12 Is it possible to jump from the current step to a previous one?
- 13 How do we highlight the current step?
- 14 How do we highlight already completed steps?
- 15 Is it clear how to undo a change/feature?
- 16 How do we design adding/removing choice (color, icon, overlay)?
- 17 Is the next step never empty, and does it contain a smart default value?
- 18 Should the user automatically move to the next step when finished?





- 19 For every step, do we display the impact of a selected feature on price?
- 20 For every step, do we explain and highlight dependencies?
- 21 For every step, is the summary of all changes always accessible?
- 22 For every step, do we need to group some options to limit scope?
- 23 Do we provide context-sensitive inspiration to ease a choice?
- 24 Do we have recommendations to nudge a user towards a choice?
- 25 Do we integrate a feature comparison table at some steps?
- 26 Do we display dependencies, and are some options mutually exclusive?
- 27 Is visual feedback for the product preview instant on 3G?





- 28 Do we have a fullscreen view for the product rendering?
- 29 Do we store choices automatically? What happens on page refresh?
- 30 Is it possible to save/label a current snapshot of the configuration?
- 31 For every step, do we explain and highlight dependencies?
- 32 Are we lazy-loading assets (and options!) for performance?
- <sup>33</sup> Do we provide extras, e.g. financing, lease, reservation, sharing?
- <sup>34</sup> Do we integrate a chatbot or conversational UI?



# FEATURE COMPARISON

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- o1 How do you indicate that comparison is possible?
- •• What happens when the first item is added for comparison?
- •s Have we disabled the option to compare only one selected item?
- •4 How do we highlight a product selected for comparison?
- os Do we display a comparison bar or a modal after adding to compare?
- •6 How do users unselect a selected option?
- or Should we suggest products to compare at some point?
- •8 How many items can a customer add for comparison?
- 09 Do we use animation or transitions to display comparison?



# FEATURE COMPARISON

- 10 Do we display the price, ratings, a thumbnail and the reference number?
- 11 Can users switch to see only differences/similarities/all?
- 12 Do we group and collapse attributes by default?
- 13 Do we track attributes' consistency/comparable metadata?
- 14 Do we highlight columns and rows on hover or tap?
- <sup>15</sup> Can the user move columns left and right?
- 16 What if users compare items in unrelated categories?
- 17 How do we allow users to add more items for comparison?
- 18 How do we allow users to remove items from comparison?
- 19 Should we ask customers to choose preferred attributes?





- 20 Do we suggest a winner among the compared products?
- 21 Does every action have visual and/or aural feedback?
- 22 Do we display sticky headers as users scroll down the page?
- 23 With many products, do we use steppers to move between options?
- 24 Have we provided a shareable link for comparison?
- 25 Are compared items stored persistently (page refresh/exit)?
- 26 Do we include a "Notify about price drop" option for emails?
- 27 Is the feature comparison (and navigation within) accessible?
- 28 Have we considered the minimum width of columns/rows?





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# TIMELINES



- •1 What kind of events should the timeline display?
- OP Does the number of events vary or is it always the same?
- os If it varies, is the number of events limited (min/max)?
- 04 Do new events occur over time (betting, real-time events)?
- OS Do all events have the same weight, or are there any critical ones?
- •6 How do we expose/highlight critical events (e.g. now/coming up next)?
- or How do we represent each event (photo, date, icon, text, rates)?
- o8 For each event, do we need to display more details on tap/click?
- o9 If yes, how do we display these details (accordion, tooltip, overlay)?



# TIMELINES



- 10 Should some events or time segments be available/fixed at all times?
- 11 Do we communicate changes over time with an underlying histogram?
- 12 Do we need any filters for various event types? Where do we place them?
- 13 Do we need a slider to help users filter out irrelevant segments?
- 14 Can we use a dual-point slider to explore timeline in snapshots (video editing)?
- 15 Would a horizontal or vertical timeline work best on desktop?
- 16 Can we break up the timeline across multiple lines (wrapping, snake)?
- 17 Can we break down the timeline into segments (e.g. tabs, swipers, accordions)?
- 18 Can we collapse calm segments to make space for busy segments?



# TIMELINES



- 19 Can we add zooming to change the number of events or level of detail?
- 20 Can we make better use of mobile space with a circle/square UI?
- 21 Can we add a mini map to help users navigate a complex timeline?
- 22 Can users explore events with a swiper or a wheel navigation?
- 23 Can we show dependencies via metaphors (tree, branches, layers, bubbles)?
- 24 With a lot of events, how many do we expose by default (mobile/desktop)?





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# MAPS AND CHARTS



- o1 What kind of map/chart are we designing (geography, floor plan, seat map)?
- •2 How much space do we reserve for it in our UI (mobile/desktop)?
- OB Do we have any levels, planes, or layers that users need to navigate between?
- 04 If yes, how many? How do we design the navigation?
- os Will the map/chart change over time (elections, real-time events)?
- o6 Will the map/chart contain markers, labels, and distinct regions?
- o7 Do they all have the same weight, or are there any critical ones?
- •8 How do we expose/highlight critical ones (e.g. large states)?
- •9 How do we represent each label/ marker (date, icon, text)?



# MAPS AND CHARTS



- 10 Do we need to display details for taps/clicks on them?
- If yes, what kind of content should we display?
- 12 Where do we display the details (below, above, near the tap/click)?
- 13 Should we track if there is enough space to fully display all details?
- 14 Do we provide zooming? How many levels of depth will zoom provide?
- 15 Do we need filters to adjust the amount of detail? Where do we place them?
- 16 Do we need a slider to help users remove irrelevant details?
- 17 Would a list/cartogram/cards view help in exploring data faster?
- 18 Do we add a mini map to help users navigate the fullscreen map? Where?



# MAPS AND CHARTS



- 19 Would an autocomplete search help users find information faster?
- 20 Should we allow for multi-selection within our search?
- 21 Should we allow users to switch between different views?
- 22 Can a slider or carousel help swipe through relevant sections?
- 23 Do we use some sort of normalization to minimize rage-taps/-clicks?
- 24 If the tap isn't accurate enough, can we prompt users to specify intent?
- 25 For charts, can we flip axes to make use of available space?
- 26 Technically, how do we minimize the lag when the map is explored?





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B02



B02

# SEAT SELECTION



- o1 What kind of seat selection are we designing (theatre, concert, sport event)?
- O2 What kinds of pricing tiers and discounted tickets (senior, student) do we have?
- OS Do some seats have special attributes (e.g. wheelchair-friendly)?
- 04 Can customers select flexible dates to see the cheapest prices in that date range?
- os Do we have any seating levels that users need to navigate between?
- o6 If yes, how many? How do we design the navigation between them?
- o7 How realistic/precise do we need the seating plan to be?
- OB Can we use some sort of normalization map to minimize rage-taps/-clicks?
- 09 Do we ask for # of seats up front, or can users choose as many seats as they want?



# SEAT SELECTION



- 10 What filters do we need to reduce/increase level of detail (price, score, # of seats)?
- 11 Do we include the option "Any" for each of the filters used?
- 12 Where do we place filters in our interface (mobile/desktop)?
- 13 Do we need some sorting options (low/ high price, quality of view, best seats)?
- 14 How do we show unavailable seats, and seats that don't match the filter?
- 15 Can users easily reset their filters selection ("Reset")?
- 16 Do we display the number of results for every applied filter?
- 17 Do we show the number of available seats for every pricing tier?
- 18 Do we use color coding to indicate different pricing tiers?



# SEAT SELECTION



- 19 How do we display seats to which a discount may/may not be applied?
- 20 For results, do we add a mini map or a list view for quicker exploration?
- 21 What data do we need to show for each seat (availability, price, photo, 3D view)?
- 22 When displaying a photo preview, can we display it on a single tap?
- 28 Do we calculate and display an experience score for each seat?
- 24 Do we nudge customers towards recommended seats?
- 25 Do we ensure that recommended seats don't come across as promoted?
- 26 Do we provide zooming? How many levels of depth will zoom provide?
- 27 If the tap isn't accurate enough, can we prompt users to specify intent?



# SEAT SELECTION DESIGN



- 28 Do we split the seating plan into large, tappable sections?
- 29 If yes, will a tap prompt zooming or show best seats in that section (or both)?
- 30 Do we give users just an estimate of the perspective once a seat is tapped?
- 31 Or do we rather provide accurate 360 degree/VR views?
- 32 If yes, how exactly do users prompt and interact with these views?
- <sup>33</sup> Have we looked into accessibility aspects of the UI (e.g. keyboard-friendly)?
- <sup>34</sup> Technically, how do we minimize the lag when the seating plan is explored?
- 35 Can we further minimize the number of taps/clicks to the first seat preview?
- 36 Do we lock the seats while the customer is checking out?



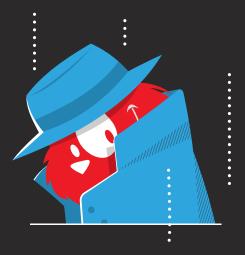
# SEAT SELECTION DESIGN



- 37 How long is the expiry time for the ticket to be locked? What happens afterwards?
- 38 How do we allow customers to change their seat in the checkout?







S

- O1 What user data is absolutely necessary for our service to be fully functional?
- •• Which data do we consider as mandatory for our business?
- OB Can we group user data according to low/medium/high priority?
- O4 When are the right time and place in the UI to get high priority permissions?
- os Can we gradually request more user permissions when we need them?
- o6 Can we never prompt native permission requests automatically (often dismissed)?
- o7 Are all permission requests prompted manually by the user ("Turn on location," etc.)?
- OB Do we ask for permissions only if we are likely to get them?
- OP Do we show install app prompts only when we are likely to get a yes?





- 10 For every permission request, do we explain why we need it and what value it provides?
- II What third parties do we use, and what data do they collect?
- 12 How can we influence, restrict, and track the data they collect?
- 13 Do we ask for only what we absolutely need to know (by default)?
- 14 Do we collect optional data only if we have a permission for it?
- 15 Can we set up a centralized privacy hub with an overview of all a user's data?
- 16 Is it easy to adjust privacy settings (revoke consent, modify permissions)?
- 17 Can customers extract and delete their personal data?
- 18 Can customers be irrevocably forgotten (third-parties, backups)?



- 19 Do we provide a friendly TL;DR version/summary of our privacy policy?
- 20 Do we have a solution for cookies/privacy policy in place?
- 21 Do we have a clear picture of our obligation regarding data protection legislation?
- <sup>22</sup> What impact does an install app prompt have on the conversion in the funnel?
- 23 What impact does a newsletter box popup have on the conversion in the funnel?
- 24 What impact does a chat window pop-up have on the conversion in the funnel?
- 25 Did we measure the impact of "gray" patterns on costs in marketing/support?
- 26 Can we measure conversion without pop-ups/app prompts on a slow weekend?
- 27 Do we also measure time-to-repeat-purchase, time-to-share, lifetime value?



- 28 Does the site/app work properly with popular ad/tracking blockers?
- 29 Do we group cookies and explain how each group helps us?
- 30 Do we allow customers to reject entire groups and also individual services?
- 31 Can we avoid blocking out the entire page with a cookie consent?
- 32 Can we avoid setting any non-functional cookies on critical landing pages?
- 33 Do we know the impact of enabling users to reject all cookies quickly?
- 34 Do we give customers good reasons to submit valid data (phone number, email)?
- <sup>35</sup> Do we provide info-tooltips for every piece of data we are collecting?
- 36 When asking for title, do we provide a way out ("Human!")?



- 87 When asking for gender, do we provide a way out ("I'd rather not say")?
- 38 When asking for age, do we provide a way out ("Forever young!")?
- <sup>39</sup> When asking for phone number, do we provide a way out ("Optional")?
- 40 Do we really need birth date, or do we need age confirmation or day of birth?
- 41 Should we allow customers to choose the frequency of notifications?
- 42 If we anticipate a high volume of notifications, can users snooze/pause them (24h)?
- 43 What's the key data we need to initiate a sign-up/free trial? (email/phone/zip code)
- 44 Did we consider the offboarding experience (what happens to user data)?



# ONBOARDING AND OFFBOARDING CHECKLIST





- O1 How many popular, representative user stories do we have in our app?
- O2 What are the customer's main success moments in our app?
- OS How do we drive customers towards these success moments?
- 04 How many taps/clicks are required to accomplish the first success moment?
- os Does our UI pass the "banana test" (replace all words with "banana")?
- •• Can we avoid first-look tours, wizards, and slideshows?
- o7 Can we make use of empty states and just-in-time hints instead?
- OB Have we defined any useful templates (example content) for users to get started with?
- 09 Can customers customize a template to fit their needs best?





- 10 Can we produce a video with built-in pauses for the user to tap-to-continue?
- 11 Can we provide a "Get started" checklist to keep customers engaged and learn the UI?
- 12 What's the minimal amount of data required from users to get started?
- 13 Do we ensure that a user's input is minimized, and never, ever lost?
- 14 Is authentication absolutely necessary for the first success moment?
- 15 If so, can we use magic sign-in or SMS verification instead of passwords?
- 16 Do we avoid asking for personal details unless necessary (gender, age, etc.)
- 17 For our sign-up form (if we have one), have we removed all optional fields?
- 18 Can we delay the payment input or plan selection until later?





- 19 Do we track the most frequently used features by our customers?
- 20 Do we track common frustration points, slow tasks, and repetitive tasks?
- 21 For each user type, what are some of the most repetitive tasks?
- <sup>22</sup> For each repetitive task, can we highlight a faster way after a few repeats?
- 23 For a new feature, what's the right place and time to expose it to users?
- 24 Which of our features contribute most to the success moments for users?
- 25 How many features do we want to highlight to a new user over the first 14 days?
- 26 What is the right timing to highlight each of these features (pain points)?
- 27 For major layout changes, can we animate how sections have shifted in the new UI?





- 28 Do we provide help only when users actually need it, not when they don't?
- 29 Do we provide a free trial period, and what features do we restrict during that time?
- 30 How do we prepare the customer for the end of the free trial?
- 31 For each user, do we use progressive onboarding (anonymous account first)?
- <sup>32</sup> Is it possible to adjust the billing period and pause a subscription temporarily?
- <sup>33</sup> For offboarding, is the cancellation process easy and straightforward?
- 34 Do we display compelling alternatives for cancellation?
- 35 Do we allow users to download their data (orders, projects, etc.)?
- 36 Do we explain what will happen next to the user's data, and when it will be irrevocably deleted?





- 37 Do we provide an option to restore an account (or plan/subscription) within 30 days?
- SB Do we ask a customer to tell us why they've left and rate the experience?
- <sup>39</sup> Do we show a summary of everything the user has achieved in the app so far?
- 40 Do we provide contact details for questions and custom plans?









- O1 What intro copy do we include above pricing plans (strong one-liner, useful byline)?
- O2 Can we include the number of companies/customers that have already signed up?
- O3 Can we highlight logos of prominent brands that already use our service?
- 04 How many plans do we have, and which one do we want to sell?
- os What are the differences between the plans? Does each target a different audience?
- OG How many features do we want to display per plan? Can we offload some of them to a separate section ("See all features")?
- or Do we need an option to switch between monthly/annual pricing?
- OB Do we want to allow customers to switch currency (€/\$/£)?
- 09 Do we mention that all prices are total, all-inclusive prices (if they are indeed)?





- 10 Do we provide a free trial to increase engagement? How long (14/30/60 days)?
- If so, can we avoid requiring credit card data for the free trial period?
- 12 Do we have templates in place for customers to get started right away?
- 13 Can we postpone sign-up and drive users into the UI instead (small commitments first)?
- <sup>14</sup> When are the right times to ask for an actual sign up/credit card? (e.g. to save data/share it)?
- 15 Do we indicate that users can cancel their plan any time?
- 16 Do we include a link to the refunds or cancellation fees?
- 17 Do we allow customers to select important features and suggest a plan based on that?
- 18 Do we allow users to configure their own pricing plan?





- 19 Do we allow users to estimate their overall cost with various plans and annual/monthly options (e.g. with a slider)?
- 20 Do we allow users to compare features (e.g. show differences or pick important features)?
- 21 For complex plans, do we group features in accordions for easier scanning?
- 22 For comparisons, do we allow users to switch between views (e.g. table/list/ map/slider)?
- 23 Can we use color coding or tilt headers to still show all available plans?
- 24 Do we include a prominent option to ask for a custom plan/contact sales?
- 25 Do we include a prominent option to contact us in case of questions?
- 26 Do we provide (and highlight) group discounts? What size, and how long?
- 27 Do we have any add-ons that customers for any plan can add?





- 28 Do we have any customizable features for every plan (number of users, servers etc.)?
- 29 If so, how do we display these features and add-ons?
- 30 Do we want to include a group of diverse, authentic testimonials?
- 31 If so, does every testimonial include a photo, title, company, level of experience?
- 32 Do testimonials have genuine photos, rather than stock photos?
- <sup>33</sup> Do we want to include a video testimonial as well, and where do we embed it?
- <sup>34</sup> Do we provide an FAQ?
- 35 Should we indicate payment options that we support (PayPal, credit card, etc.)?
- 36 How do we design the pricing plan options?
- 37 Do we use some sort of metaphor to indicate difference in plans (bicycle, car, van)?





- S8 How do we highlight the recommended option (larger/centered/colorful)?
- 39 How do we indicate which audience each pricing plan is for (e.g. freelancers/business/enterprise)?
- 40 How do we structure pricing options on mobile (accordions/tabs/slider/stacked)?
- 41 On mobile, are pricing plans displayed as a floating bar (top or bottom)?
- 42 How exactly do we indicate that some features are available in a plan? (e.g. checkmark)
- 43 How exactly do we indicate that some features aren't available in a plan (but available in another)?
- 44 Do we highlight a selected row/column on tap or click?
- 45 Is our copy focused on selling benefits rather than features?





- 46 Can we avoid "sign up"/"create an account" on CTAs? (e.g "Get started", "Start for free", "Free for 30 days").
- 47 Do we have repeating calls to action on top and bottom?
- 48 Do we highlight important features or testimonials in the sign-up form?
- 49 Do we adjust the pricing plan page for people who are already signed in/ signed up?







- OI Can we ask for testimonials from customers who recently interacted with the brand on social media?
- <sup>02</sup> Can we ask for testimonials from customers who've just started using the service?
- O3 Can we ask for testimonials from customers who've been using our service frequently?
- 04 Can we ask for testimonials from customers who've been using service for a while?
- os Can we get testimonials from well-respected brands or customers?
- OG Can we ask for testimonials on specific features or qualities? (e.g. response times, customer support, ease of use).
- o7 Can we avoid generic, non-specific testimonials (e.g. I absolutely love the brand!)?
- <sup>08</sup> Are all testimonials focused on qualities and improvements rather than general impressions?





- OP Can we group testimonials by a feature or impact and highlight them together?
- 10 Can we produce more detailed customer stories for each testimonial?
- 11 Could we produce video testimonials, or video case studies?
- 12 If not, can we produce a single video that features some of our clients?
- 13 How many authentic testimonials and reviews do we have?
- 14 Can we highlight the number of testimonials and reviews prominently?
- <sup>15</sup> Do people represented in our testimonials reflect the diverse audience we are talking to?
- 16 Do we have any news coverage, so we could quote articles mentioning us?





- 17 What are the critical areas that we definitely need to display testimonials for?
- 18 Do we want to display testimonials at checkout?
- 19 Do we want to display them in feature comparison and product/pricing pages?
- 20 Can we group and assign testimonials based on these critical areas?
- 21 How many testimonials do we want to display for each critical area?
- 22 What details do we want to display for each testimonial? (Name, photo, title, age, location, role, company, brand logo, customer since when, when the review was made)?
- 23 Do we dedicate enough space to show a large photo?
- 24 Do we avoid non-realistic, exaggerated, or non-authentic stock photos?





- 25 If we can't get photos, can we design custom illustrations instead?
- <sup>26</sup> Can we use brand logos as well?
- 27 Should we use a carousel to expose testimonials?
- 28 Are our carousels accessible on mobile and on desktop?
- 29 For video testimonials, do we provide proper captioning and transcripts as well?
- 30 Do we want to display (curated?) Twitter/Instagram posts, along with a Twitter/Instagram handle?
- 31 Do we track (and collect) our testimonials on third-party platforms, e.g. TripAdvisor?







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- •1 What's the absolute minimum user input we need for new customers to get started?
- <sup>o2</sup> When is the right time and place to ask users to verify critical input (email, password, permissions)?
- •3 For each piece of data, what's the best form element to collect it fast and accurately?
- O4 For sensitive data input (e.g. phone number), do we explain why we need it?
- O5 Are there any form elements which need hints (e.g. password requirements, username)?
- OB Do we have an attribute profile for each input in our form – required/optional, allowed characters, min/max length, prefilling enabled/disabled, masking/validation/auto-formatting needed, accessible tooltip, dependencies on other elements, detection by IP.
- or Do we always prioritize actionable copy: instead of "Password", "Choose password"?





- OB Do we always prefer tap-friendly components, i.e. large buttons, toggles, and sliders?
- o9 Do text boxes appear as text boxes (good padding, bordered).
- 10 Have we adjusted the width of each box to give users a hint of the expected length of input?
- 11 Do we use proper labels, associated with input fields?
- 12 Do we use letter case for the microcopy on labels?
- <sup>13</sup> Do we highlight required or optional fields, or both (preferably either optional or both)?
- 14 How do we style placeholders, and is the microcopy helpful?
- 15 Will labels be top-aligned or right-aligned (preferably the former)?
- 16 Will we be using floating labels? If so, check if they are still announced to screen readers?





- 17 Do inputs have :focus and :active styles?
- <sup>18</sup> For each input, do we need to enable/disable autocorrect, spell-checking and autocapitalization?
- 19 Do we use HTML5's pattern to restrict input with in-browser validation?
- 20 Are there any inputs where we need to provide a reasonable default value?
- 21 Do we make use of autofill with the autocomplete attribute?
- 22 Do we always display the right keyboard on mobile (inputmode)?
- 23 Do we use autofocus to bring focus to the first input element on page load?
- 24 Do we lay out fields in a single column (preferably yes)?
- 25 Do we lay out field groups in multiple pages (one-thing-per-page pattern)?





- 26 Do we show at most 7–8 input fields at a time on desktop, 3–4 on mobile?
- 27 Are radio buttons actually round (preferably yes)?
- 28 For radio buttons, are there any where a fallback input is required (e.g. "I'd rather not say" for gender, age etc.)?
- 29 Are checkboxes square, with enough padding and large font size (18px+)?
- 30 For checkboxes used as filters, do we track incompatibility of options or low result count to prevent users from landing on pages with no results?
- 31 Do we avoid <select>-dropdowns as much as possible, and use steppers (<10 options) or datalist with autocomplete (>10 options) instead?
- SP For autocomplete, do we surface frequent hits at the top of autosuggestions?





- 33 For a country selector autocomplete, do we need to display some countries as frequently used? Do they also appear in the alphabetical list?
- 34 How do we design the country selector, and what height should it have (6–7 rows)?
- 35 For our autocomplete, do we also accept abbreviations (GB, UK, DE, NL, CH etc.)?
- 36 For our autocomplete, do we also accept alternative manual input?
- 37 Do we display the results count for categories with autocomplete?
- S8 Is autocomplete keyboard-accessible, and forgiving of minor typos and errors?
- 39 Do we use a localization based on user-provided country or ZIP/postal code (placeholders, masks, input field(s) width, formatting, spelling, currency, legal requirements)?
- 40 Can we ask for a full name instead of first, middle and last names?





- 41 Do we avoid "Address Line 2" and use more contextual labels instead ("Apartment, suite, unit, floor")?
- 42 Can we use an address look-up widget (Loqate, Algolia Place, Google Place Autocomplete) to speed up location input?
- 43 For date and time input, do we display input boxes or widgets with steppers for quick jumps?
- 44 Do we provide autoformatting for phone number, birthday, amounts, numbers, dates, postal codes?
- 45 For credit card input, can we avoid selection of the credit card type before input?
- 46 As a label for the name on a credit card, do we use "Name on card"?
- 47 As a label for security code, can we use "Security code" instead of "CVC" etc.?
- 48 As a label for expiry date, can we use a single input field with auto-masking?





- 49 Can we use Payment Request API, Apple Pay, Google Pay to avoid lengthy input altogether?
- 50 For inline validation, can we define a threshold per input field, after which we start validating input?
- 51 Can we not validate the input yet unless the threshold is reached?
- 52 Do we show success only if the user has moved to the next field?
- 53 When editing a field that was valid, do we validate after full data entry? (Reward early)
- 54 When editing a field that was invalid, do we validate during data entry? (Punish late)
- 55 Do our error messages drive users to a clear path on how to fix the error?
- 56 On submit, do we scroll the user to the first error and focus on it?
- 57 ...or display the error above the submit button (focused)?





- 58 If there are a few errors, do we additionally display a summary of errors at the top of the page?
- 59 Do we display the error message just above the input field (not covered by keyboard on mobile)?
- 60 Do we show the number of errors in the tab title as a prefix?
- 61 Can we not disable submit buttons until all fields are filled in (easier to highlight and explain errors)?
- 62 Do we display confirmation boxes only for absolutely critical situations (e.g. deleting email list entirely)? Can we use undos to help users quickly restore data instead?
- 63 Do we move users to the next input field automatically after successful input?
- 64 Do we persist the data on refresh?





- 65 Have we tabbed through the entire form (incl. date picker and autocomplete)? Is the tab order predictable and reasonable?
- 66 Have we tested the form on desktop, tablet, mobile? Where do error messages appear? Do labels always appear in full?
- 67 For lengthy forms, do we need to first explain to users how much time the form will require, what documents they need to be prepared, and if they can save input and continue later?
- 68 Do we have an input budget in place (max number of input fields per step)?
- 69 Do we track the tap count (min number of taps needed to successfully complete the form)?
- 70 Have we considered what happens when the form is loading (skeleton screen, loading indicator)?











- O1 How do we ensure that authentication/security don't stand in the way of usability?
- 02 Do we prioritize usability against security in our UI, or the other way around?
- O3 What are the more sensitive areas which require a more strict authentication?
- 04 In which situations will we prompt users to authenticate themselves?
- 05 What password requirements do we want to implement?
- OG What authentication method do we want to prioritize for signing in? Login/pass, Login/passphrase, 2-factor-authentication, social media sign-in, magical sign-in, biometric input (mobile), other?
- or Can we avoid asking users to verify email immediately, and ask at review page or success page instead?





- OB Can we avoid asking users to verify their password and use the show/hide pattern instead?
- 09 Can we provide a live password requirement checklist (to indicate what characters are needed to meet requirements)?
- 10 Can we ask for a passphrase instead of a password?
- How do we explain passphrases and 2-factor-authentication in our UI?
- 12 Can we replace security questions with a 2-factor-authentication?
- 13 For 2-factor-auth, can we complement the SMS option with QR, app, email?
- 14 Can we reward customers for using 2-factor-auth (discount, free month, etc.)?
- 15 Do we provide a social media sign in?





- 16 If yes, what services do we support? What permissions do they get?
- 17 Do we have a spam prevention strategy in place?
- <sup>18</sup> Do we really need CAPTCHA, or can we use honeypot technique plus time traps instead?
- 19 Can we set a long cookie expiry date to avoid frequent sign-ins?
- 20 Can we set a long cookie expiry date for quick checkouts (like 1-click-checkout)?
- 21 When is the right time and place to ask for permissions (location/camera, etc.)
- 22 Can we authenticate users by asking for a phone number and send a code as a text message?
- 23 How do we design and build a password recovery experience?





- 24 Do we set any requirements on the frequency of password recovery at a given time?
- 25 Do we enable customers to merge multiple accounts (social sign-in, email, like Medium does)?
- <sup>26</sup> If not, can we place a cookie and suggest to customers what they signed in with last time?
- 27 How do we prevent customers from using insecure passwords?













- O1 Which audiences are we targeting with the donation form?
- 02 What reason for donating would resonate best for each of our audiences?
- •• How do we communicate that purpose visibly?
- 04 Do we highlight the organization's mission, goals, objectives, and work done?
- os Do we highlight how we use donations (case studies, videos, etc.)?
- o6 Do we include any testimonials or stories next to the donation form?
- o7 Do we allow visitors to choose what their donation is used for?
- OB Do we provide an option to make a donation in honor or in memory of someone?
- •• Do we provide an option to donate anonymously?





- 10 Do we require an account or do we have an option to donate as a guest?
- 11 What suggested amounts do we display?
- 12 Do we explain what impact each amount has on our projects?
- 13 Which types of donations do we provide: one-off, monthly, quarterly, annually?
- 14 If the donation is recurring, do we communicate when the donor will next be charged?
- 15 Do we explain the process of cancelling a recurring donation?
- 16 Do we avoid hidden fees/processing costs and show the final amount up front?
- 17 Which option(s) do we want to highlight as a "recommended" option?
- 18 Is there a "most popular" option we could highlight?





- 19 Do we provide an option for custom input?
- 20 Do we indicate if the donation tax is deductible?
- 21 Do we highlight people who've just donated?
- 22 Do we allow visitors to change the currency?
- 23 Do we include an option to top up the amount in the payment flow?
- 24 Do we use one-page layout or multi-page layout?
- 25 Do we avoid performance hits when switching tabs or moving through steps?
- 26 What's the absolute minimum of data we need?
- 27 Do we indicate that the donation form is secure?



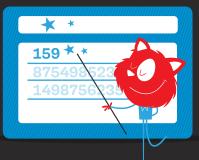


- 28 What payment options do we provide (credit card, PayPal, etc.)? Which one do we set as a default?
- 29 Have we examined and refined error messages?
- 30 Did we ensure that the form is fully accessible?
- 31 Do we follow up with the donor about the impact of their donation?





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- o1 Is search collapsed or visible at all times?
- •2 Do we want search to be prominent or hidden?
- <sup>03</sup> Is the search box actually a search box?
- 04 Does the placeholder explain search types?
- os Is it possible to preselect a category for an in-section search?
- o6 Is search input keyboard-focusable?
- o7 What changes when the input field has focus?
- OB Do we darken the rest of the screen to bring search into focus?
- 09 Do we show popular searches, products, or categories on focus?
- 10 Do we start displaying suggestions with the very first character?





- 11 Do we use a lookahead pattern for search queries?
- 12 How many suggestions do we display on desktop?
- 13 How many suggestions do we display on mobile?
- 14 How do we design autosuggestions?
- 15 Do we distinguish between keyword and category suggestions?
- 16 Do we show keywords, featured products, categories, and brands?
- 17 Do we highlight the user's input (keyword) within suggestions?
- 18 Do we display the number of expected results for each suggestion?
- 19 Do we display ratings, the number of ratings, and product thumbnail?



- \*\* \*
- 20 Do we display any thumbnails? If yes, how large should they be?
- 21 Do we display popular keywords, category, products, guides, content pages?
- 22 How do we change the design on hover/tap for suggestions?
- 23 Are autocomplete suggestions keyboard-focusable (Enter/Esc/up/down)?
- 24 Do we persist search input on the search results page?
- 25 Do we display breadcrumbs, categories, and search results count?
- 26 Do we have an option to look up and clear all previous searches?
- 27 Do we keep all sorting and filter settings on refresh?
- 28 Do we suggest categories or keywords in search results?





- 29 Does autocomplete disappear when the entire query is removed?
- 30 Have we tested the behavior with empty space and special characters?
- 31 Do we keep track of important synonyms and abbreviations?
- 32 Do we keep track of thematic and seasonal queries?
- <sup>33</sup> Do we keep track of misspellings via search logs?







#### SORTING



- o1 How do we indicate sorting and sorting types in our UI?
- 02 Do we display sorting above the content list (right corner)?
- OS Do we repeat sorting at the bottom of the content list (right corner)?
- 04 Are sorting options displayed as buttons, links, chips, or as a dropdown?
- os If we do use a dropdown, how do we implement it (native/custom dropdown)?
- •• How do we design :hover, :focus and :active states for all options?
- o7 Do we include the "Sort by" label separately from the buttons/dropdown?
- OB How many sorting options do we provide (price, alphabetical, featured, reviews)?
- 09 Do we need to provide any category-specific sorting options (volume, capacity)?



#### SORTING



- 10 Do we feature the most popular filters as sort types within each category?
- II Do we use "Relevance" or "Featured items" as the default selection for sorting?
- 12 Does the default sorting reflect the diversity of all major product types?
- 13 How do we indicate the default selection for sorting in our UI?
- 14 What sorting directions do we provide? How do we indicate them?
- 15 Do we include sorting options within reviews (e.g. skin type, skin shade, age range)?
- 16 Does our wording focus on benefits? ('Ratings (high to low)' vs 'Highest ratings')
- 17 Do we suggest scope within the sorting category (faceted sorting)?
- 18 Can customers combine multiple sorting types (e.g. relevance and price)?



#### SORTING



- 19 With multiple sorting types, can they appear as removable pills, chips, or tags?
- 20 How do we help users skip irrelevant items while scrolling (extra navigation?)
- 21 How do we calculate an "average rating" when customers choose to sort by rating?
- 22 Do we account for the number of ratings to calculate best "average ratings"?
- 23 Are sorting and all sorting directions accessible via the keyboard?
- 24 Do we update only a section, or the entire page, when a sorting type is selected?
- 25 Do we use a loading indicator to indicate that a section is being updated?
- 26 Do we support the "Back" button as users switch between sorting types?
- 27 Does sorting apply automatically (yes, on a dropdown selection)?

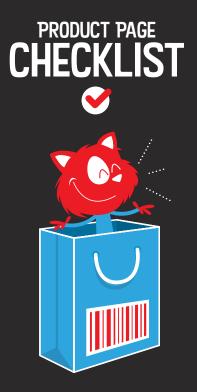






- 28 Does sorting apply manually on confirmation ("Apply") (yes, for overlays)?
- 29 Do we allow customers to reset all sorting types quickly, at once?
- 30 Where do we place sorting options on mobile screens?
- 31 Is sorting (or sorting buttons) floating on scroll on mobile/desktop?
- <sup>32</sup> Do we persist users' sorting settings when they refresh the page?





S



- o1 For a given product page, what details matter most to our customers?
- o2 For a given product page, what details matter most to the business?
- O3 Are there any issues to be aware of due to a legacy system or merchants?
- 04 What layout do we use for the page (tabs, accordions, one long page, floating bar)?
- os If we use an accordion or tabs, which section is visible/open by default?
- o6 If we use a floating bar, do we show price, thumbnail, reviews, navigation in there?
- o7 How much screen real estate do we dedicate to product images?
- OB Do we replace dots in the gallery with thumbnails, or display images in a grid?





- •• How many images do we provide per product (ideally, 5–15)?
- 10 Do we feature product images from customer reviews?
- 11 Do we provide a close-up photo, zoom in/out functionality?
- 12 What image resolution do we need our images to be for close-ups?
- 13 Where do we show a close-up when a customer hovers over a part of an image?
- 14 Do we use any videos and, if so, do we provide subtitles?
- 15 Do we provide 360° views, and how do we indicate them?
- 16 Do we front-load the title with a product's model number, specs, and sizes?
- 17 Do we need to highlight compatibility or accessories in the title?





- 18 Do we include a brand logo for the product?
- 19 Do we highlight the main keywords from reviews in the description?
- 20 How do we explain advanced key features of the product (visuals)?
- 21 Do we include technical specs for the product?
- 22 Do we suggest any required accessories that aren't included?
- 23 Do we display ratings, rating count, average, and rating distribution?
- 24 Are ratings linked to the "review" section of the page?
- 25 Do we include any testimonials and reviews?
- 26 What flavors of pricing do we need (sale price, original price, discount value)?





- 27 Is the pricing large, bold, clear, and noticeable?
- 28 Do we display the final price (incl. standard shipping, taxes, payment fees, currency)?
- 29 If so, do we mention that all prices are final, all-inclusive prices?
- 30 Do we track a customer's IP and adjust currency accordingly?
- 31 Do we want to ask customers for country and currency on entry?
- 32 Do we allow customers to switch currency (€/\$/£)?
- 33 Do we display estimated shipping costs, taxes, etc. next to the price?
- 34 For products in varying amounts, do we provide price-per-unit to ease comparison?
- <sup>35</sup> Do we highlight the "best-price-guarantee"?





- 36 Do we include leasing options?
- <sup>37</sup> How do we display product variations?
- 38 Do the product title, image, specs change when a variant is clicked/tapped?
- 39 Do we provide any filters for size, color, delivery, availability?
- 40 Do we highlight stock availability?
- 41 What do we display when an item is out of stock (notification via SMS/email)?
- 42 Can customers purchase an item or a variant if it's temporarily out of stock?
- 43 How do we implement the quantity selector (dropdown, stepper)?
- 44 With a stepper, do we have min and max values?
- 45 Do we display delivery options with pricing for each?





- 46 Do we display the estimated arrival date (Tue, Mar 23), rather than generic delivery speed (3-4 business days)?
- 47 Do we display free shipping notice or free shipping threshold?
- 48 Do we suggest any products to add to the cart to get free shipping?
- 49 Do we include the link to returns and refunds near the price?
- 50 Do we include the link to the shipping costs near the price?
- <sup>51</sup> Do we provide a shipping cost estimator?
- 52 Do we need an overnight shipping cost countdown?
- 53 Do we display gifting options and which options are provided?
- 54 Do we display subscription options and which options are provided?





- 55 Do we display supported formats, packages, or bundles?
- 56 Do we include options for a protection plan or insurance?
- <sup>57</sup> Do we include sharing links?
- <sup>58</sup> Do we provide warranty details?
- 59 What kind of calls to action do we have ("buy now," "add to basket," "save for later")?
- 60 Do we provide a feature comparison ("add to compare")?
- 61 Do we include the section "Frequently bought with this item..."?
- 62 Do we include the section "Customers who bought this also bought..."?
- <sup>63</sup> Do we include recently viewed items?
- <sup>64</sup> How do we design and sort reviews?





- <sup>65</sup> What sorting options do we provide?
- <sup>66</sup> Is search within reviews available?
- <sup>67</sup> Do we expose popular keyword filters?
- 68 Do we show supported payment methods and options?
- 69 Do we provide quick access to the shopping cart or checkout?
- 70 Do we include breadcrumbs above the product title?
- 71 Do we need to provide a spec sheet or compatibility table?
- 72 Do we include an FAQ section?
- <sup>73</sup> Do we keep photos, ratings, pricing, fees, shipping, returns close?
- 74 What happens when an item is added to the cart (new page, overlay)?









- o1 How do we design the thumb, the track, and the controls?
- 02 Do we ensure a large enough tap area for the thumb on mobile?
- OB Do we increase the thumb size and scale size on hover, tap, or click?
- 04 How do we optimize for precise input and fast-forwards (keyboard, buttons)?
- •• When do we display and hide controls?
- <sup>06</sup> How do we design the audio controller?
- 07 Do we mute audio by default?
- <sup>08</sup> Do we display subtitles by default?
- OP Do we use IP-geolocation to choose a default language for audio/subtitles?





- 10 How do users select subtitles and lang, position, size, color?
- 11 Do we use preview clips, popularity bar, key moments preview?
- 12 Have we styled the hover, active, and focus states for player controls?
- 13 Have we styled the :hover, :active and :focus states for player controls?
- 14 Are the UI and controls accessible via keyboard?
- 15 Do we provide an input fallback to jump to a specific point in time?
- 16 What happens if the video is outside of the view?
- 17 Can users resize the video size on the page to fit their needs best?
- 18 Do we adjust the slider's scale dynamically when customers navigate the track?





- 19 Is it possible to skip some portions of the video ("skip" link)?
- 20 Do we provide sections for users to jump to? How do we produce them?
- 21 Is it possible to link to a specific part of the video?
- 22 Is it possible to generate a "share" link to a specific section of the video?
- 23 Do we allow for jumps of 10–15 sec with buttons and keyboard arrows?
- 24 Do we provide a "Table of contents" with video jumps?
- 25 Do we provide a running transcript as the video is playing?
- 26 What happens when a user switches to another tab?
- 27 Will video continue to play when a mobile screen is turned off?

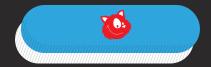




- 28 Do we retain the position of the video on refresh?
- 29 What do we display when the video is buffering?
- 30 How do we adjust the buffering and UI for different network connectivity?
- 31 Have we designed a loading indicator during network issues?
- <sup>32</sup> Do we need to account for copyright and legal issues?
- <sup>33</sup> What happens in the UI when the video has finished?











# **DISABLED BUTTONS**



- o1 Do we need the button to be disabled by default (e.g. item is unavailable)?
- O2 If not, can we keep it enabled and validate user input on submit?
- os If not, can we rely on default values to keep the button enabled?
- •4 When should the button become disabled (e.g. prevent double bookings)?
- 05 Do we want to gray out any part of the interface along with the disabled button?
- o6 Do we want to use a skeleton screen animation as well as the disabled button?
- or Do we want to use a loading spinner for the UI to indicate that the system is busy?
- •8 Do we want to use a progress indicator on the button to indicate progress?
- os Should the wording on the button be different when it's disabled?



# **DISABLED BUTTONS**



- 10 Does it have sufficient color contrast in the disabled state?
- 11 Do we want to add a note under the button explaining why it is disabled?
- 12 Do we want to use a tooltip explaining why the button is disabled?
- 13 Do we keep the disabled button focusable?
- 14 What happens when a user hovers or taps on the disabled button?
- 15 What happens when a user tries to activate or focus on the disabled button?
- 16 Do we change the cursor to not-allowed to indicate that the action isn't allowed?
- 17 Do we prevent the click via JavaScript by using aria-disabled?
- 18 Do we use ARIA live regions to announce dynamic content?



# **DISABLED BUTTONS**



- 19 Do we avoid pointer-events: none as it doesn't prevent focus/keyboard navigation?
- 20 Do we guide users towards error messages when they tap/click/tab to the disabled button?
- <sup>21</sup> When do we enable a disabled button?
- 22 Can we add a link that sends all user input to support if they are locked out?
- 23 In that case, do we ask users for their consent to be contacted?
- 24 Do we use inline validation (positive or negative)?
- 25 When and how do we show error messages?
- 26 Do we include an option to continue even if inline validation fails?
- 27 Do we need to update the state of the button after every user input?



# **DISABLED BUTTONS**



- 28 How will the button change while updating its state?
- 29 Do we change the label of the button ("Updating...") while it's updating?
- 30 Do we change the colors of the button while it's updating?
- 31 Do we want to add a loading spinner while the button is updating?
- 32 Should we stop listening to click/tap after the first click/tap?
- <sup>33</sup> Do we not stop listening to click/tap for undo buttons and steppers?
- <sup>34</sup> Do we track how many people who can't proceed and abandon the flow altogether?
- 35 If applicable, can we test if a design without disabled buttons performs better?









- o1 What input requires inline validation?
- o2 For every input, do we have exact validation requirements?
- <sup>03</sup> What happens when a user jumps between empty fields?
- O4 What happens when a user jumps between incomplete fields?
- os What happens when a user jumps between invalid fields?
- •• What happens when a user jumps between valid fields?
- o7 What happens when a user refreshes the page?
- <sup>08</sup> What happens when a user opens the page in another tab?
- •• What happens if a user changes correct input?





- 10 What happens if a user changes incorrect input?
- 11 What input fields are likely to fail more often?
- 12 Can we break these fields into smaller ones to simplify validation?
- 13 For these fields, can we show input hints above them (under labels)?
- 14 Do we want to allow customers to proceed despite failed validation in these (or any other) fields?
- 15 If yes, do we ask users to confirm their input is correct?
- 16 For every input, do we set a minimum threshold of characters for validation to be triggered?
- 17 For every input, do we start validating only once that threshold is reached?
- 18 If there is an error, do we show it immediately as we detect it?





- 19 Or do we use only late validation (user has left the field, on blur)?
- 20 Do we avoid premature validation (on input focus)?
- 21 Do we avoid immediate validation (as a user starts typing)?
- 22 How do we minimize negative inline validation?
- 28 How do we maximize positive inline validation?
- 24 Do we never trigger new errors while the user fills in a form?
- 25 When editing a field that was valid, do we validate on blur?
- 26 When editing a field that was invalid, do we validate immediately during data entry?
- 27 Can we test a "validate" button for complex input fields (passport number, IBAN, VAT, SMS code etc.)?





- 28 Can we use auto-suggestions or popular input to help fix mistakes faster?
- 29 How do we display error messages?
- 30 Do we announce error messages to screen readers?
- <sup>31</sup> Are error messages focusable?
- <sup>32</sup> Do we change the border/background of an invalid input field?
- <sup>33</sup> Do we display error messages above the input field?
- 34 Do we complement text messages with warning icons?
- 35 Does every error message drive a user towards fixing the error?
- 36 Do error messages change based on a user's specific errors?
- 37 Does every error message remain visible until the error is fixed?





- 38 Do error messages disappear only when input is validated?
- 39 Can we avoid disabled "submit" buttons (and validate on submit)?
- 40 If not, can we explain why they are disabled and how to fix it?
- 41 Also, can we make disabled buttons focusable and provide help on tap/click/tab?
- 42 If yes, can we show a tooltip linking to the error at the top?
- 43 Can we guide users to errors when they submit?
- 44 When should we guide users to the error summary at the top instead?
- 45 Or do we auto-scroll the user to the label of the first error?





- 46 In the error summary, do we display each error as a line on its own?
- 47 Do we have server-side validation as well?
- <sup>48</sup> Do we indicate failed validation in the browser tab's title (e.g. error count and emoji)?
- 49 Do we monitor error rates to track how often users experience errors?
- 50 Do we maintain and refine the wording of error messages over time?









- O1 Can we make the URL more helpful, structured, and human-readable?
- O2 Should we provide an easy way to copy-paste the URL?
- <sup>03</sup> When should we change the URL of the page?
- 04 Do we change the URL with every new state of a modal?
- o5 Do we change the URL with every new state of a filter?
- •6 Do we change the URL with every new state of a sorting?
- or Do we change the URL with every new state of a multistep process?
- 08 Do we change the URL with every new state of an infinite scroll?
- 09 Do we change the URL with every new state of a "load more" behavior?





- 10 Do we change the URL with every new state of onboarding screens?
- 11 Do we change the URL with every new state of cookie/privacy prompts?
- 12 Do we change the URL with every new variation of a selected product?
- 13 When else do we need to create a new entry in the user's browser history?
- 14 Do we not change the URL with every new state of a carousel or image gallery?
- 15 Do we not change the URL with every new state of an accordion?
- 16 Do we not change the URL with every new state of a truncated/expanded content ("Show more...")?
- 17 For multiple selected filters, does the "Back" button remove the last-applied filter?





- 18 For a sorting direction, does the "Back" button restore the previously set sorting direction?
- 19 Once a user deletes an item and then goes back, can we allow them to restore the item if needed?
- 20 Does the "Back" button exit overlays and lightboxes, while staying on the current page?
- 21 If a user opens a modal then goes back, do they return to the list view?
- 22 For multistep flows, does the "Back" button take users back to the previously viewed step?
- <sup>23</sup> If a dynamically injected view changes and a user goes back, do they return to the original view?
- 24 If a user opens an in-page link and then goes back, do they return to the same in-page link?

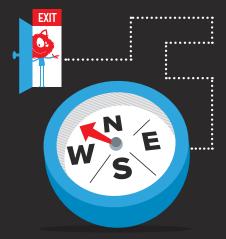




- 25 Are we going to use a "Back" link somewhere as well?
- 26 If so, do "Back" links actually go back in the browser's history or just link to pages?
- 27 If a user scrolls a list, browses to an item and then returns back, do they return to the position in the list where they left off?
- <sup>28</sup> For image galleries, does the "Back" button bring a user to the previous images?
- 29 For variations on a product page, does the "Back" button bring a user to the previous variation?
- 30 If a user scrolled down the page smoothly, does the "Back" button bring them to a previous page?
- 31 If a user jumps abruptly on the page, does the "Back" button bring them to the previous spot on the same page?











- o1 Do we prompt a larger selector view on imprecise taps to avoid rage clicks?
- 02 Do we allow users to pause auto-play (carousels, videos)?
- <sup>03</sup> Do we provide a language/country selector that overrides IP geolocation?
- 04 Do we allow customers to switch currency (€/\$/£)?
- os Do we provide an option to switch between monthly/annual pricing?
- o6 Do we allow users to toggle between dark and light modes?
- o7 Do we include an option to proceed in a form even if inline validation fails?
- OB Is it possible to type a date or time in an input field directly (additionally to widgets),
- •• For autocomplete, do we also accept alternative manual input?





- 10 Can customers define flexible dates and times rather than fixed time slots?
- 11 Can we ask for a full name instead of first, middle, and last names?
- 12 When asking for a title, do we provide a way out (e.g "Human!")?
- <sup>13</sup> When asking for gender, do we provide a way out (e.g. "I'd rather not say")?
- 14 When asking for age, do we provide a way out ("Forever young!")?
- 15 When asking for a phone number, do we provide a way out ("Optional")?
- 16 Do we really need date of birth, or do we need age confirmation or birthday (day/month)?
- 17 Can we allow customers to choose the frequency of notifications?
- 18 If we anticipate a high volume of notifications, can users snooze/pause them (24h)?





- 19 For audio/video, do we provide proper captioning and transcripts as well?
- 20 For audio/video, do we provide an input fallback to jump to a specific point in time?
- 21 Is it possible to skip some portions of the audio/video ("skip" link)?
- 22 Is it possible to link to a specific part of the video?
- 23 Do we avoid hidden fees/processing costs and show the final amount up front?
- 24 Can customers purchase an item or a variant if it's temporarily out of stock?
- 25 Do we suggest email notification if an item is unavailable?
- 26 Do we allow users to copy URL/jump to a particular portion of the page?
- 27 Do we keep disabled buttons focusable and show hints or help on tap/click/tab?





- 28 Do we display a distribution of values to avoid dead ends (Airbnb pricing graph)?
- 29 In a list view, is it easy to find the cheapest, earliest, latest, best-rated etc. options?
- 30 Do we include the option "Any" by default for each of the filters used?
- 31 Can users easily reset their filters selection ("Reset all")?
- 32 Do we display a number of available options for every defined filter?
- <sup>33</sup> Do we keep all sorting and filter settings on refresh?
- 34 Do we avoid blocking the entire UI on every new added filter?
- 35 For tables, do we allow users to display all columns/rows if they want to?
- 36 Do we allow users to move columns around when comparing features in a table?





- 87 For sliders, do we use steppers (+/-) and text input fields for more precise input?
- SB Do we complement or replace long <select> menus with autocomplete?
- <sup>39</sup> In onboarding, do we provide useful templates and example content?
- 40 For complex input, do we allow users to save input and continue later?
- 41 Can we persist a user's data on refresh and never ever lose it?
- 42 For 2-factor-auth, can we complement the SMS option with QR, app, email?
- 43 Do we really need CAPTCHA, or can we use honeypot technique/time traps instead?
- 44 Is it easy to adjust privacy settings (revoke consent, modify permissions)?





- 45 Do we allow users to download their data (orders, projects, etc.)?
- 46 Do users have an option to restore an account (or plan/subscription) within 30 days?
- 47 Do users have an option to snooze emails or notifications (for 24/48/72h)?





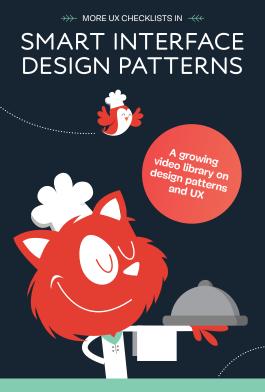
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