



Design
principles in
Building a
Digital
Experience
Platform

Design principles

	Principle	Statement	Implications for HCL	Remarks/Examples
1	Design must be user centric in approach	Use the 5-stage design process (Empathize, Define, Ideate, Prototype, Test) to understand the user's needs and create products that are aligned with user expectations.	<ul style="list-style-type: none">• Involve users in the design process from the very beginning. Evaluate critical design decisions based on how they work for end-users.• Align business requirements with user's needs.• Introduce user feedback loop in the product life cycle.• Make the design process iterative – Ideate, design, test and then tweak	<ul style="list-style-type: none">• Detailed UCD process is given in appendix
2	Design must be scalable	An enterprise application will keep evolving, the user interface therefore has to be scalable, easy to maintain and flexible enough to be extensible as and when required.	<ul style="list-style-type: none">• Make the design modular so that new features can be added without impacting the overall design.• Build a central repository of components and ensure designers and developers use these reusable components so that changes and additions to design can be made quickly without impacting the consistency of design• The reusable components should be made customizable	<ul style="list-style-type: none">• Components are elements that are designed, developed and used consistently across the interface of an application/product. These could be simple elements like dividers, buttons, and icons all the way to more complex ones like accordions, input fields, footer, and even a login page. They can be repeated not just within a product but also across the whole digital ecosystem
3	Design must be accessible	Design must be 100% accessible for all users, across all standards browsers and formfactors	<ul style="list-style-type: none">• Make the designs responsive, which means it can be easily viewed on different screen sizes• Ensure that the webpages are tested on all the relevant browsers- Chrome, IE, Safari, Firefox, Edge.• Ensure there are no broken links in the webpage..• Go for keyboard friendly layout and navigation so that the application screens can be read by speech recognition software, screen readers, etc.• Make accessibility testing a mandatory gate	<ul style="list-style-type: none">• Use cloud-based platform that enables you to perform cross browser testing on browsers installed on real devices – example – BrowserStack• You may use tools like Ahrefs or Screaming Frog to check your website and find all broken links thoroughly• WCAG guidelines should be followed by the designers and developers.

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4	Standardize design elements	Consistency and standards should be applied throughout the content, interactions, navigational mechanisms, organizational structure, design metaphors etc.	<ul style="list-style-type: none">• Reduce learning curve by using UI elements that are commonly and widely used to help users learn your interface quickly.• The overall look and feel of the screens, design elements icons, fonts, colour palate, style sheets) should be consistent for all the internal applications and tools across all touch points. Create a design system and enable designers/developers to leverage the same• Consider well-established conventions when deciding on layout, reserving commonly used locations for various graphical elements.• Define the guidelines for error messages and email templates	<ul style="list-style-type: none">• For Example, the use of specific colours (red for errors and blue for hyperlinks) and icons (envelopes for messages or trash can for delete bins).• Use a design system/component library to drive consistency across all design elements like – fonts, menu structure, date pickers, accordions, CTA buttons etc. Having a design system will ensure a scalable UI language and streamlined UX guidelines.
5	Design for quick performance	Enable performance-driven digital experience by practicing Performant Design	<ul style="list-style-type: none">• Make judicious use of social media buttons, dynamic elements, large JavaScript files and complex graphics• Manage user wait time by providing engaging animations, visual progress indicators etc	<ul style="list-style-type: none">• Use system fonts and Variable fonts rather than forcing the user to download heavy custom font files and their variations.• Another way to speed up page speed is by Lazy Loading offscreen elements
6	Provide app feedback	The design should always keep users informed about what is going on, through appropriate feedback within a reasonable amount of time.	<ul style="list-style-type: none">• Ensure all the interactions/transactions that the user does give accurate and timely feedback to the users through proper success and failure messages, colour cue and progress bars	<ul style="list-style-type: none">• Change the CTA button colour, add a checkmark to buttons on a selection screen to communicate that the system has registered the user's choices• If the task is in progress, then show the status to the user through a progress indicator bar

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7	Provide easy navigation	Navigating from one part to the next has to be frictionless.	<ul style="list-style-type: none">• Make it consistent<ul style="list-style-type: none">✓ The structure of your primary navigation should be simple.✓ If a secondary navigation is implemented, the design should also clearly differentiate between parent/child and sibling links and be cohesive with the primary navigation.✓ Design a navigation that works across all devices or consider two similar navigations that don't require people to adjust to a different mental model when moving from desktop to mobile.✓ The visual design—such as font styles, font sizes, font weights, and/or font colours, etc.—should all establish the different navigation levels and should be consistent across the navigation.• Make it visible<ul style="list-style-type: none">✓ Use breadcrumbs on every page so that users can remember their navigation trail.✓ Add a search bar near the top of your site so that visitors can easily search by keywords.✓ Global menus should not be hidden in a drop down, but be visible on every page of the application✓ Make menu links look interactive✓ Use link text colours that contrast with the background colour• Make it easy to use<ul style="list-style-type: none">✓ Make the link labels relevant and familiar, avoid using jargons✓ Use mega menus for large websites so that user can scan through lower-level content✓ Ensure that dropdowns are not too short or or too big✓ Consider sticky menus for long pages so that the users don't have to keep scrolling to the top of the page

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8	Error prevention and easy exits	Make user interaction smooth and stress free by proactively preventing errors and providing easy undo options	<ul style="list-style-type: none">• Give proactive indication or put constraint on choices if there are certain restrictions on data inputs or potential dead ends, and guide users to successful interactions.• Eliminate error-prone conditions and present users with a confirmation option before they commit to the action.• Use standard design conventions while designing so that the interactive elements and graphical elements look and work in an expected and accepted way• Communicate affordances to show how an object can be interacted with. If there isn't a clear signifier that communicates the affordance, users may not understand how to use a control, and make mistakes• Give a preview option so that users get a chance to revise what they have selected and get a chance to understand the effect of the action • No one and nothing can prevent all errors. Ensure that if people make mistakes, they are able to easily fix them. Always give an Undo/Reset/Cancel option. Exits allow users to remain in control of the system and avoid getting stuck and feeling frustrated.	<ul style="list-style-type: none">• While you cannot prevent a user from making typos (which are slip-type errors), you can preempt typos from turning into problems by offering contextual suggestions while the user types• Whenever you're creating forms, allow users to click the <Back> button and go back to the page they were last on. Don't take them all the way back to the homepage or the start of the form• Users are accustomed to clickable buttons looking like they have a subtle amount of shadow on the outside. This effect makes a button look like it is rising up out of the page, and you can push it. Conversely, form fields are also rectangular, but have a small amount of shadow on the inside of the shape, to indicate that they're empty and can be filled.

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9	Design for efficiency	Design should be clean, simple and effective so that users are not distracted and are able to focus on the task at hand without having their attention diverted to less critical tasks.	<ul style="list-style-type: none">• Create a visual hierarchy that matches the user's needs and mental model by giving the most critical elements the greatest prominence• Follow 80-20 rule while prioritizing information and functionality to be displayed on a webpage. 20% of the features that are most frequently used should be the most accessible. Remaining 80% of its features should be hidden and accessible on demand.• Design tasks to be carried out consecutively instead of concurrently in order to keep people in the moment.• Use visual cues like use images, symbols, colours, contrasts and groupings to subtly draw users' attention to areas of importance on the page.• Make sure the app has multiple ways of getting to a certain page or perform a specific job; provide shortcuts for expert users• Use appropriate defaults: Provide preselected or predetermined options is one of the ways to minimize decisions and increase efficiency.• UI has to be consistent, using similar design patterns, identical terminology in prompts, homogenous menus and screens, and consistent commands throughout the interface.• User testing has to become part of mainstream testing