

Applicazioni per dispositivi mobili: Design Principles and Design Patterns

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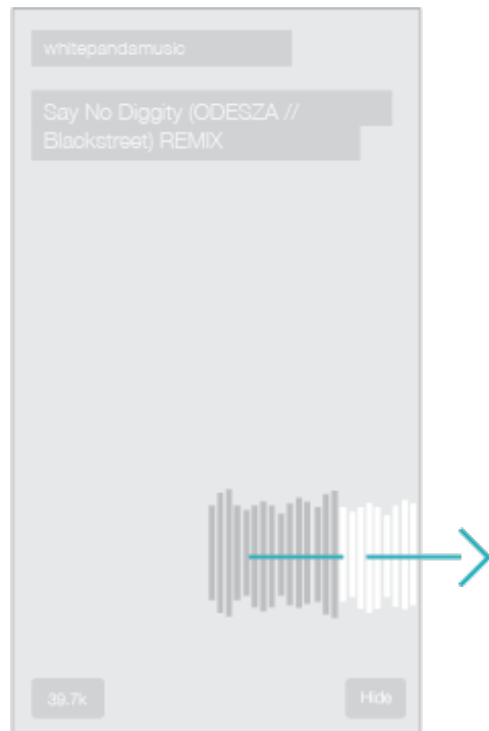
Design principles

» There are four main design principles

- Axis
- Symmetry
- Hierarchy
- Rhythm

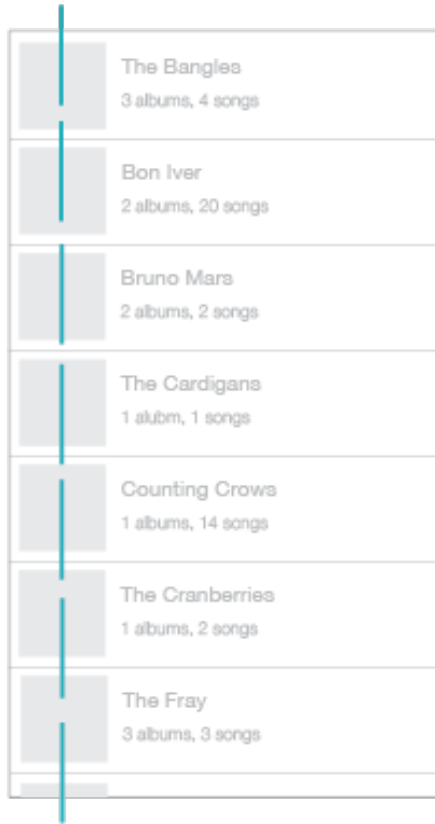
» <http://learndesignprinciples.com> by Melissa Mandelbaum

Axis



- » Axis is the most basic and most common organizing principle
- » Simply stated, axis is an imaginary line that is used to organize a group of elements in a design

Axis: Alignment



The Bangles 3 albums, 4 songs
Bon Iver 2 albums, 20 songs
Bruno Mars 2 albums, 2 songs
The Cardigans 1 album, 1 song
Counting Crows 1 album, 14 songs
The Cranberries 1 album, 2 songs
The Fray 3 albums, 3 songs

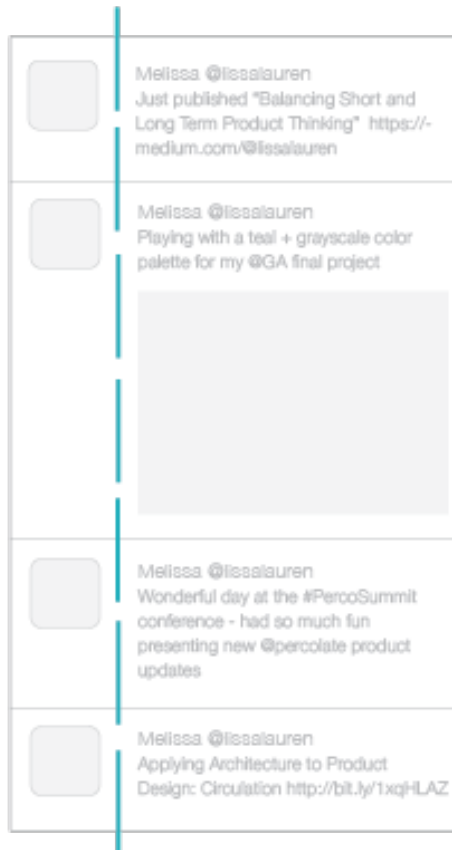
» Axis is mainly used to align elements

- When elements are arranged around an axis, the design feels ordered
- As with most things in life, we enjoy things that are ordered because they feel more stable, comfortable and approachable

» Example: the albums list in the iTunes app

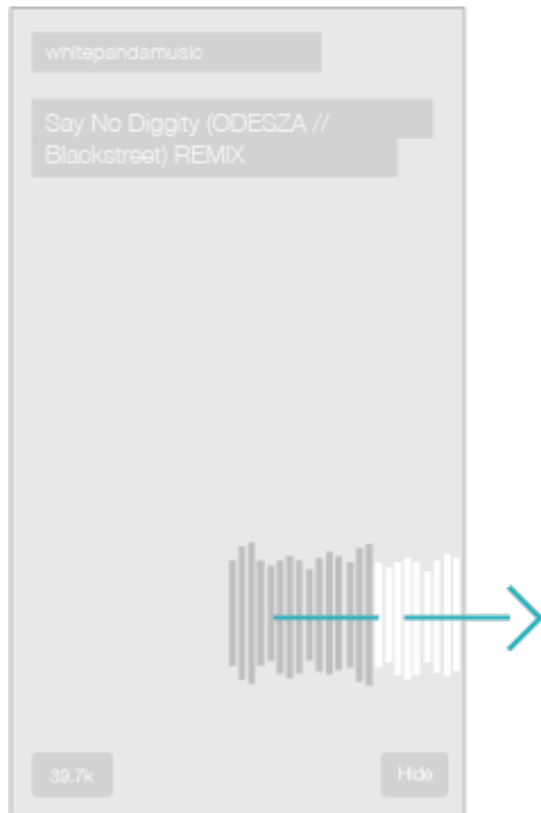
- A vertical axis neatly aligns album covers on the left side of the screen

Axis: Reinforcement



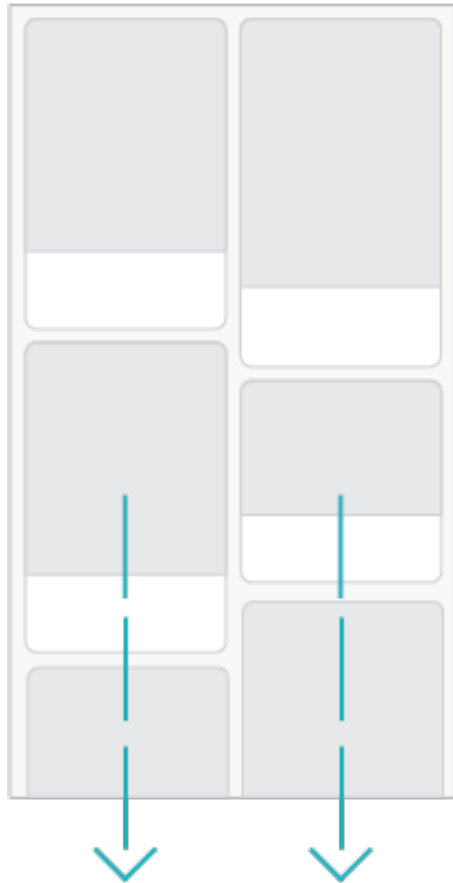
- » Although axis is an imaginary line, you can make it more apparent if the edges of surrounding elements are well defined
 - A common example of this concept in architecture is a city street. The city street is an axis that is reinforced by the buildings on both sides. If a portion of the street is missing a building on one or both sides, the street's axis would not feel as strong
- » Example: timeline in the Twitter
 - In this design, a vertical axis helps define a section for avatars on the left and a section for tweet content on the right

Axis: Movement



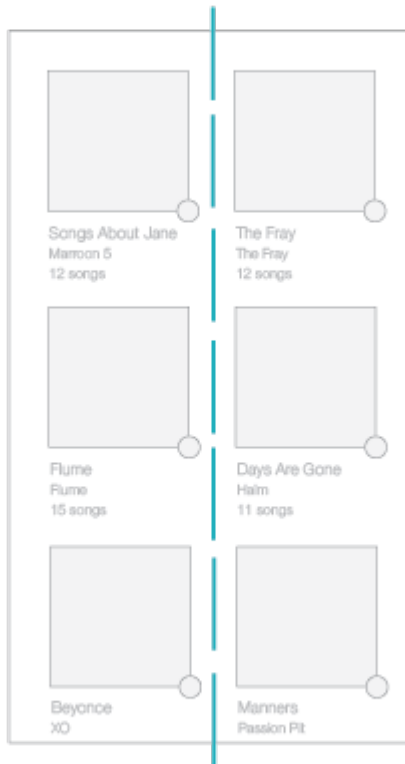
- » When we encounter something linear, such as an axis, we naturally follow the line in a direction
 - If we arrive on a street, we walk down the street
 - If we open an elevator into a long hallway, we walk down the hallway
 - Lines prompt movement and interactions. The direction of movement depends on the end points. A defined end point signals a place to start or stop
- » Example: the music scrubber in the SoundCloud app
 - In this design, you recognize the scrubber as a left-right axis, and naturally slide the scrubber to the right until you reach the end of the song

Axis: Continuous



- » If an end point is undefined, you will follow the axis until you reach something of interest or are tired of interacting with the axis
 - While the concept of an undefined end point in architecture is uncommon since it's difficult for something architectural to go on forever, it's becoming more popular in product design with infinite scrolls.
- » Example: the main feed in the Pinterest app
 - In this design, the vertical axis starts at the top of the screen then continues downwards without a stopping point
 - This encourages you to scroll down the page for as long as you're interested in viewing pins

Symmetry



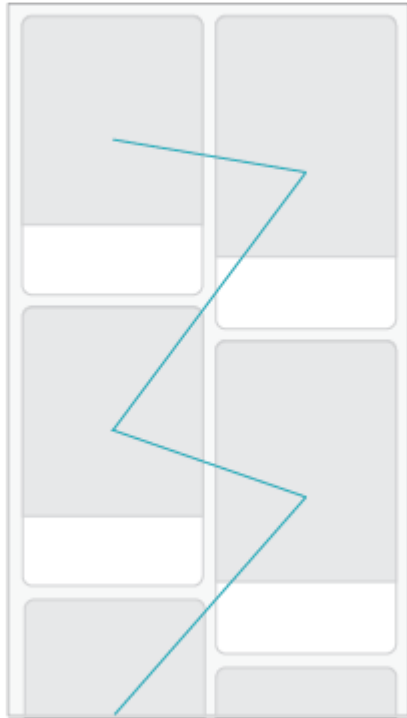
- » Symmetry is when elements are arranged in the same way on both sides of an axis
- » Perfect symmetry is when elements are mirrored over the axis and exactly the same on both sides

Symmetry: Balance



- » Symmetry adds balance to a design. When elements are the same on both sides of an axis, the design feels harmonious
 - If we design a street with five houses on one side and five on the other, walking down the street would feel comfortable because the arrangement of homes is balanced
- » Example: the arrangement of music covers in the Rdio app
 - Elements on both sides of the screen are the same format

Symmetry: Asymmetry



- » Designs are asymmetrical if the arrangement of elements are different on both sides of an axis
 - If we design a street with five houses on one side and one on the other, the street will feel unbalanced and perhaps uncomfortable
- » Example: the feed in the Pinterest app
 - Although the left and right columns are the same width, the height of elements in each column varies
 - The variances make it difficult to scan from left-right
 - Even the slightest bit of asymmetry can throw off the balance and comfort in a design

Hierarchy

Applying Architecture to Product Design blog.peroostite.com	
Our Values blog.peroostite.com	
Design Details itunes.apple.com	
Monument Valley / Making the Game of the Year itunes.apple.com	
The Architecture of Product Design: Sketch Tools archdaily.com	
Typeface Mechanics 001 freerjones.com	
My New Book is called "How they	

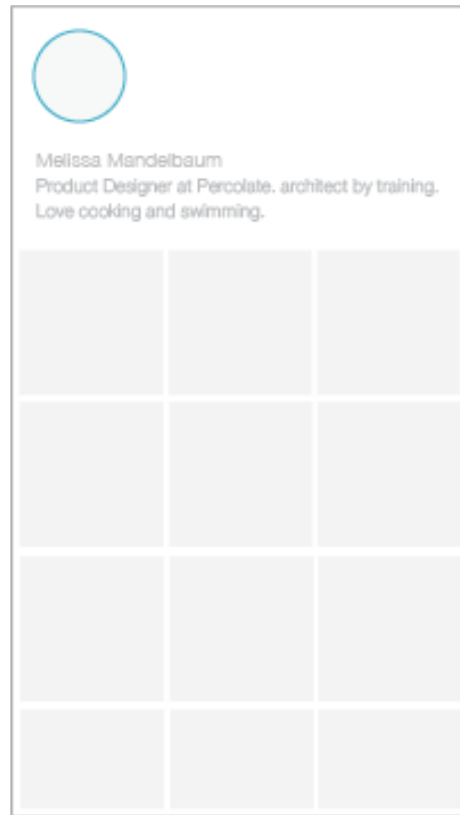
» Hierarchy is when an element appears more important in comparison to other elements in a design

Hierarchy: Size

Applying Architecture to Product Design blog.peroolate.com	
Our Values blog.peroolate.com	
Design Details itunes.apple.com	
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The Architecture of Product Design: Sketch Tools archdaily.com	
Typeface Mechanics 001 frenjones.com	
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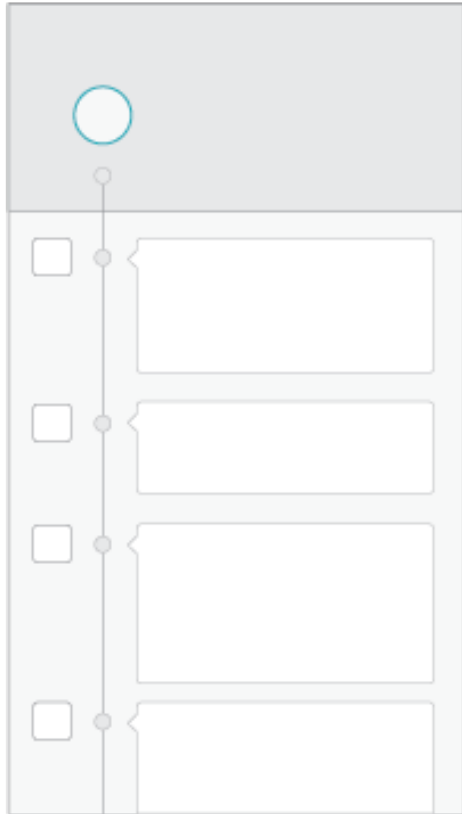
- » An element will appear more hierarchical if it is larger than other elements in a design. We naturally look first at the largest element in a design. If there are five windows on the front of a building, and one is twice the size of the others, our attention will focus on the biggest window first
- » Example: the article list in the Pocket app
 - The header article is featured at the top, with a larger picture

Hierarchy: Shape



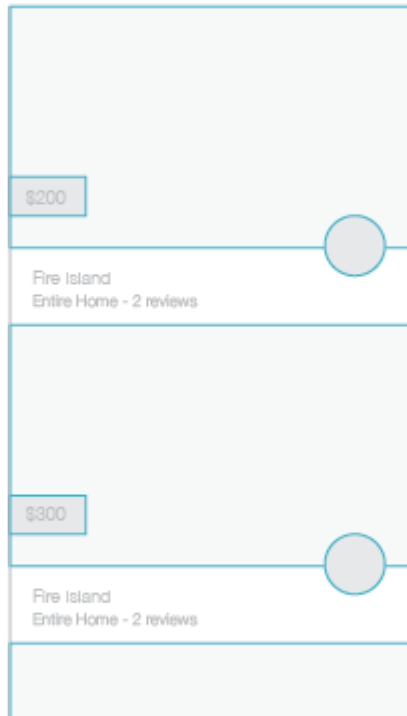
- » An element can also appear more hierarchical if it is different than other elements in a design. We naturally look first at the irregular shape in a design. If there are five of the same windows and one door on the front of a building, our attention will focus on the door first
- » Example: the profile page in the Instagram app
 - The circular profile picture is distinctly different than the square instagrams
 - We recognize the profile picture as something unique and more important

Hierarchy: Placement



- » We can place elements in more hierarchical positions. Within a circle, the center is the most hierarchical. The end of an axis is naturally more hierarchical than points along the line
- » Example: the timeline in the Path app
 - The avatar is the starting point of a long axis, and therefore has a higher level of importance than the avatars on the left in the stream

Rythm



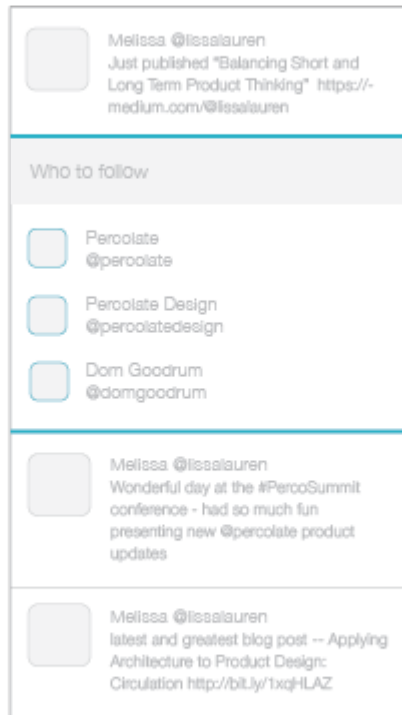
» Rhythm is the movement created by a repeated pattern of forms

Rythm: Pattern



- » The best way to understand rhythm is to think of a song. Songs have rhythm when a piece of the song repeats. When listening to a song with good rhythm, we recognize the pattern and begin to expect beats
- » Example: product design in the Airbnb app
 - In this feed, each listing is displayed with a picture, price, location and owner avatar
 - When scanning the feed, you begin familiar with the rhythm and know exactly where to look for elements in the pattern, such as price

Rythm: Break



» A break in rhythm will appear more hierarchical. Think about a song. When a song has a repeated rhythm and the rhythm is broken, something quite special usually happens

» Example: Twitter

- The profile feed has a rhythm and is broken by a section with suggestions of people to follow
- This break appears more hierarchical and is a good way of grabbing your attention

<https://www.thinkwithgoogle.com>



<https://www.thinkwithgoogle.com/intl/it-it/strategie/app-e-mobile/principi-di-progettazione-delle-app-dispositivi-mobili-coinvolgi-gli-utenti-e-incrementa-le-conversioni/>

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<https://www.thinkwithgoogle.com/future-of-marketing/creativity/principles-of-mobile-app-design-engage-users-and-drive-conversions/>

Principi di progettazione delle app per dispositivi mobili

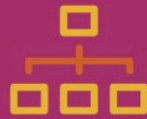


Elenco di controllo dei principi di progettazione delle app per dispositivi mobili

 <p>Navigazione ed esplorazione delle app</p>	<ul style="list-style-type: none"><input type="checkbox"/> Mostra fin dall'inizio i vantaggi dell'app.<input type="checkbox"/> Organizza ed etichetta le categorie dei menu per renderle intuitive.<input type="checkbox"/> Fai in modo che gli utenti possano tornare facilmente al passaggio precedente.<input type="checkbox"/> Offri la possibilità di cambiare manualmente la posizione.<input type="checkbox"/> Crea transizioni fluide tra l'app per dispositivi mobili e il Web mobile.
 <p>Ricerca in-app</p>	<ul style="list-style-type: none"><input type="checkbox"/> Metti in evidenza il campo di ricerca.<input type="checkbox"/> Ottimizza l'indicizzazione della ricerca.<input type="checkbox"/> Offri opzioni di filtro e ordinamento.
 <p>E-commerce e conversioni</p>	<ul style="list-style-type: none"><input type="checkbox"/> Fornisci informazioni sulle ricerche e sugli acquisti precedenti.<input type="checkbox"/> Consenti di visualizzare e filtrare le recensioni degli utenti.<input type="checkbox"/> Offri la possibilità di confrontare i prodotti.<input type="checkbox"/> Fornisci più opzioni di pagamento di terze parti.<input type="checkbox"/> Semplifica l'aggiunta e la gestione dei metodi di pagamento.
 <p>Registrazione</p>	<ul style="list-style-type: none"><input type="checkbox"/> Prima di chiedere agli utenti di registrarsi, presenta chiaramente l'utilità dei tuoi servizi.<input type="checkbox"/> Distingui bene tra "accesso" e "registrazione".<input type="checkbox"/> Ottimizza il processo di autenticazione tramite password.
 <p>Compilazione dei moduli</p>	<ul style="list-style-type: none"><input type="checkbox"/> Crea moduli intuitivi.<input type="checkbox"/> Indica gli errori del modulo in tempo reale.<input type="checkbox"/> Visualizza una tastiera adattata al testo da inserire.<input type="checkbox"/> Fornisci informazioni utili nei moduli in base al contesto.
 <p>Usabilità e comprensione</p>	<ul style="list-style-type: none"><input type="checkbox"/> Parla la stessa lingua degli utenti.<input type="checkbox"/> Fornisci etichette di testo e una legenda per chiarire le informazioni visive.<input type="checkbox"/> Crea app reattive aggiungendo un feedback visivo dopo azioni importanti.<input type="checkbox"/> Consenti all'utente di controllare lo zoom.<input type="checkbox"/> Inserisci nell'app una richiesta di autorizzazione contestuale.

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Principi di progettazione delle app per dispositivi mobili: Esempio 1



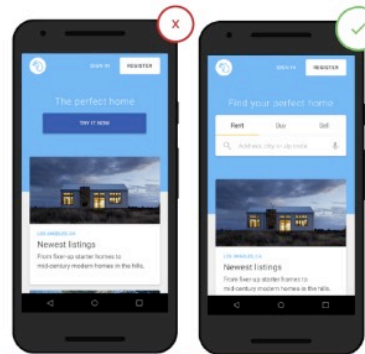
Capitolo 1:

Navigazione ed esplorazione delle app

Gli utenti devono essere guidati rapidamente ai contenuti che cercano. Applicando questo principio essenziale, puoi proporre una navigazione efficace e piacevole nella tua app.

1 Mostra fin dall'inizio i vantaggi dell'app.

Per suscitare l'interesse degli utenti, indica loro chiaramente ciò che possono fare grazie a inviti all'azione ben visibili. Metti in evidenza le novità e le funzionalità chiave della tua app nel contesto e nella posizione appropriata. Fai in modo che siano interessanti e attraenti per gli utenti e non fonte di frustrazione e confusione.



X L'invito all'azione "Provalo ora" è vago e non è orientato a un'azione precisa.

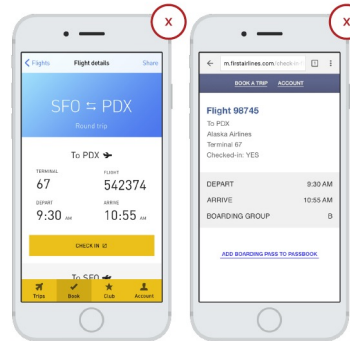
✓ "Noleggia", "Acquista" e "Vendi" rappresentano inviti all'azione chiari.

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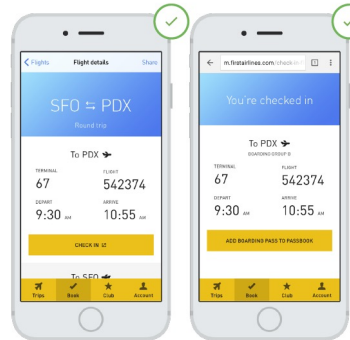
Principi di progettazione delle app per dispositivi mobili: Esempio 2

5 Crea transizioni fluide tra l'app per dispositivi mobili e il Web mobile.

L'utente può irritarsi se l'app lo indirizza al sito web per dispositivi mobili per proporgli altri contenuti o per indurlo a effettuare un'azione specifica. Ad esempio, un layout o un aspetto diverso tra le due piattaforme può generare confusione. La situazione può risultare frustrante anche se il passaggio tra le due piattaforme è lento e se l'utente è costretto ad attendere che la pagina web si carichi. Se è necessario reindirizzare l'utente al Web mobile, fai in modo che la presentazione sia coerente al fine di ottimizzare la transizione. Inoltre, è buona norma garantire una transizione rapida e far sì che il passaggio al Web mobile sia proficuo, per compensare l'eventuale carenza di fluidità.



X L'esperienza visiva e interattiva non è identica tra l'app e il sito.




✓ La transizione tra l'app e il sito è fluida grazie all'uniformità del design e all'ottimizzazione della velocità di caricamento.

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http://material.io


Make beautiful products, faster. Material is a design system – backed by open-source code – that helps teams build digital experiences

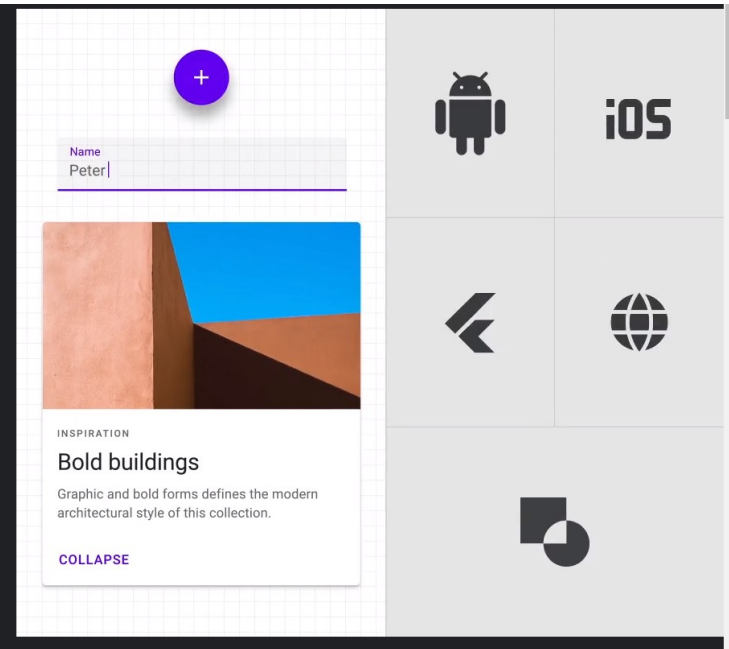
 Design flexibly

 Develop across platforms

Everything you need to start building – including open-source code, documentation, and tutorials for cross-platform development.

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 Collaborate seamlessly



Human Interface Guidelines

Human Interface Guidelines Overview Resources Videos What's New

▼ iOS

Themes

Interface Essentials

> App Architecture

> User Interaction

> System Capabilities

> Visual Design

> Icons and Images

> Bars

> Views

> Controls

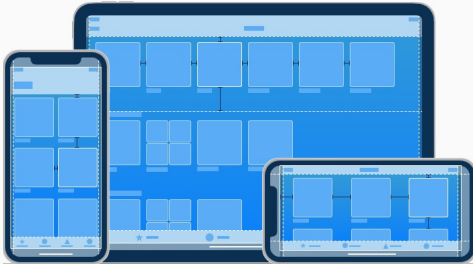
> Extensions

macOS

tvOS

watchOS

> Technologies



iOS Design Themes

As an app designer, you have the opportunity to deliver an extraordinary product that rises to the top of the App Store charts. To do so, you'll need to meet high expectations for quality and functionality.

Three primary themes differentiate iOS from other platforms:

- **Clarity.** Throughout the system, text is legible at every size, icons are precise and lucid, adornments are subtle and appropriate, and a sharpened focus on functionality motivates the design. Negative space, color, fonts, graphics, and interface elements subtly highlight important content and convey interactivity.
- **Deference.** Fluid motion and a crisp, beautiful interface help people understand and interact with content while never competing with it. Content typically fills the entire screen, while translucency and blurring often hint at more. Minimal use of bezels, gradients, and drop shadows keep the interface light and airy, while ensuring that content is paramount.
- **Depth.** Distinct visual layers and realistic motion convey hierarchy, impart vitality, and facilitate understanding. Touch and discoverability heighten delight and enable access to functionality and additional content without losing context. Transitions provide a sense of depth as you navigate through content.

<https://developer.apple.com/design/human-interface-guidelines/ios/overview/themes/>

Design patterns references

» inspired-ui.com

» mobile-patterns.com

