Essential Design Principles

Session 802

Mike Stern, Design Evangelism Manager
Human Interface
macOS Design Themes

Four primary themes differentiate macOS apps from iOS, tvOS, and watchOS apps. Keep these themes in mind as you imagine your app’s identity.

Flexible
People expect macOS apps to be intuitive, while at the same time being adaptable to their workflow needs.

Expansive
Large, high-resolution displays are typical for most Mac users, and people often extend their workspace by connecting additional displays. Apps can leverage this.
User
Human
Human
Human Interface Design
Everyone Needs to...

Feel safe
Everyone Needs to...

Feel safe

Understand
Everyone Needs to...

Feel safe

Understand

Achieve
Everyone Needs to...

Feel safe
Understand
Achieve
Experience beauty
Apps Should Provide...
Apps Should Provide...

Predictability and stability
Apps Should Provide...

Predictability and stability

Clear and helpful information
Apps Should Provide...

Predictability and stability
Clear and helpful information
Streamlined and simple workflows
Apps Should Provide...

- Predictability and stability
- Clear and helpful information
- Streamlined and simple workflows
- A delightful experience
Human
Humanity
Design Principles
Why, not How
Profound simplicity
Terminals  A B C D

Arrivals / Departures

Parking
Terminal 1

- Luau Air
- Volcano Airlines
- Kauai Air
- Snorkel Airways
Wayfinding
Wayfinding Answers...

“Where am I?”
Wayfinding Answers...

“Where am I?”

“Where can I go?”
Wayfinding Answers...

“Where am I?”

“Where can I go?”

“What will I find when I get there?”
Wayfinding Answers...

“Where am I?”

“Where can I go?”

“What will I find when I get there?”

“What’s nearby?”
Wayfinding Answers...

“Where am I?”

“Where can I go?”

“What will I find when I get there?”

“What’s nearby?”

“How do I get out?”
<table>
<thead>
<tr>
<th>Table View Cell Label</th>
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</tr>
</thead>
</table>

**Title**
Wayfinding Answers...

“Where am I?”

“What can I go?”

“What will I find when I get there?”

“What’s nearby?”

“How do I get out?”
Feedback
Feedback

Status
Feedback

Status

Completion

Warning
Feedback

Status

Completion

Warning

Errors
Time: 9:41
Trip: 67.0 km
Temp: 76°C
9:41 67.0 km 76°C
Time: 9:41
Trip: 67.0 km
Temp: 76°C
Inbox

- Doug LeMoine
  New apartment!
  Hey folks, we finally moved in to our new pad! We're looking forward to having everyone over...

- Lauren Strehlow
  Today's Meeting - Location Change
  Hi team, Today's meeting is going to be in the San Francisco conference room in IL1, 1st...

- Beam Seilaudom
  Trip logistics!
  Hey, John. How excited are you for this year’s camping trip?! Let’s try to connect today about...

- Hugo Verweij
  Check out this event!
  John, Here's a flyer for a very interesting modern art exhibit happening soon! We should try to...

- Amy Frost
  Re: Basketball Game
  You’re going down today. Got to make up for my...
Doug LeMoine
9:41 AM  
New apartment!
Hey folks, we finally moved in to our new pad! We’re looking forward to having everyone over...

Lauren Strehlow
9:30 AM  
Today’s Meeting - Location Change
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8:04 AM  
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Hey, John. How excited are you for this year’s camping trip?! Let’s try to connect today about...

Hugo Verweij
7:48 AM  
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Amy Frost
7:32 AM  
Re: Basketball Game
You’re going down today. Get to make up for my
Design Review
Apple Inc.
1 Infinite Loop, Cupertino, CA 95014-2083, United States

Monday, June 9, 2017
from 2 PM to 3 PM

Calendar
- Apple

Invittees
- Doug LeMoine

Alert
- Time to Leave

Map of location
It's all good!
Mike Stern
Out of Office Today
Hey team, I’m going to take a day off to decompress after WWDC. Will be in tomorrow...

Doug LeMoine
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Ivy Calhoun
Check out this event!
John, Here’s a flyer for a very interesting...
No! You always pay for us. Let me do something nice for a change.

If you insist. $28

CHASE VISA DEBIT
(*** 1234)

FROM APPLE PAY CASH
FROM CHASE VISA DEBIT
$0
$28

PAY PHILIP WARD
$28

Pay with Touch ID
No! You always pay for us. Let me do something nice for a change.

If you insist. $28

Pay with Touch ID
Feedback

Status
Completion
Warning
Errors
Feedback

Status

Completion

Warning

Errors
Sign Up

First Name  Required
Last Name  Required
Email  Required
Password  Required
First Name  Mike
Last Name   Stern
Email       Required
Password    Required
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<thead>
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<tbody>
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<td>First Name</td>
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<tr>
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</tr>
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<td>@apple.com</td>
</tr>
<tr>
<td>Password</td>
<td>**********</td>
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*Email is missing user account name*
Thu, Jun 1 14:00
Good Feedback Answers...
Good Feedback Answers...

What can I do?
Good Feedback Answers...

What can I do?

What just happened?
Good Feedback Answers...

What can I do?

What just happened?

What’s happening?
Good Feedback Answers...

What can I do?
What just happened?
What’s happening?
What will happen in the future?
What can I do?
What can I do?
What’s happening?
What will happen in the future?
What just happened?

Not to worry, I’ll walk you through this. I can help you figure this all out.
What would you say?
Then say it!
Visibility
Visibility improves usability
Time: 9:41
Trip: 67.0 km
Temp: 76°C
Inbox

Search

- **Doug LeMoine** 9:41 AM
  - New apartment!
  - Hey folks, we finally moved in to our new pad! We're looking forward to having everyone over...

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You’re going down today. Got to make up for my...
Visibility has its limits
Consistency
Park  Drive  Reverse

Neutral  Brake  Signal
Consistency improves usability
Inconsistency undermines usability
“Sharrow"
I just gotta be me!
Internal Consistency
LABEL
Label
Label
Provides Cohesion
Latency
Mental Model
System Model
Interaction Model
System Model
Interaction Model
Mental Model
MORTIMER SPOUT
DESIGNER OF DELIGHTFUL FAUCET EXPERIENCES

408-555-0167
Standard Faucet
The Morty Faucet
Proximity
Grouping
Design

#WWDC17

Essential Design Principles

Session 000

Mike Stern, Design Evangelism Manager

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Design

#WWDC17

Essential Design Principles

Session 000

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Essential Design Principles
Session 000

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Mapping
ABC
ABC
ABC
Food
Food

#PutFoodOnIt
Affordance
Food
Perceived Affordance
Put finger here to lift screen
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<th>Description</th>
<th>Now</th>
<th>12PM</th>
<th>1PM</th>
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<td>71°</td>
<td>72°</td>
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<tr>
<td>Wednesday</td>
<td></td>
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<td></td>
<td>81</td>
<td>55</td>
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Affordance
Progressive Disclosure
Simple
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<tr>
<th>Doneness</th>
<th>Cheese</th>
<th>Extras</th>
<th>Sides</th>
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<tr>
<td>Extra Rare</td>
<td>Cheddar</td>
<td>Bacon</td>
<td>Salad</td>
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<tr>
<td>Rare</td>
<td>Swiss</td>
<td>Egg</td>
<td>Fries</td>
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<tr>
<td>Medium Rare</td>
<td>Gruyere</td>
<td>Avocado</td>
<td>Onion Rings</td>
</tr>
<tr>
<td>Medium</td>
<td>Jack</td>
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<tr>
<td>Medium Well</td>
<td>Cottage</td>
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<tr>
<td>Well Done</td>
<td></td>
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<tr>
<td>Overcooked</td>
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</table>
80% Benefit  
20% Actions
Reduce clutter
Simplify decision-making
Progressive Disclosure
Jenner
Sunny

63°

Sunday  Today  |  66  51
Now  1PM  2PM  3PM  4PM
63°  63°  64°  65°  65°

Monday  |  70  50
Tuesday  |  68  51
Wednesday |  66  51
Thursday  |  70  51
Friday    |  73  51
Saturday  |  74  52
<table>
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<tr>
<th>Day</th>
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<td>48</td>
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</tr>
</tbody>
</table>

Jenner
Sunny
63°
Cupertino 66°
San Francisco 57°
Jenner 63°
Lihue 78°
Berlin 80°
Stockholm 67°
Tokyo 64°
FLIGHT: 0193 A32
DEPART: KOA 07.JUN17
BOARDING: 4:54 PM
GROUP: PRIORITY
SEAT: 3F
PASSENGER: ALL OF Y'ALL
TSA Pre✓®
DGNUHJ/SEQ54
Design Principles
Design Principles

- Wayfinding
- Feedback
- Mental Model
- Affordance
- Symmetry
- Visibility
- Proximity
- Grouping
- Progressive Disclosure
- Consistency
- Mapping
- 80/20 Rule
Everyone Needs to...

Feel safe
Understand
Achieve
Experience beauty
Challenges Applying Design Principles

Resolving differences
Challenges Applying Design Principles

They can conflict with each other

Too much of a good thing
Challenges Applying Design Principles

They can conflict with each other

Too much of a good thing

Their relevance varies
Design Principles

Wayfinding
  Visibility
  Consistency

Feedback

Mental Model
  Proximity
  Grouping
  Mapping

Affordance
  Progressive Disclosure
  80/20 Rule

Symmetry
Human
Humanity
More Information

https://developer.apple.com/wwdc17/802
<table>
<thead>
<tr>
<th>Session</th>
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<th>Date/Time</th>
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<td>Grand Ballroom B</td>
<td>Wednesday 4:10PM</td>
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<tr>
<td>Design For Everyone</td>
<td>Hall 3</td>
<td>Thursday 11:00AM</td>
</tr>
<tr>
<td>Design Studio Shorts 2</td>
<td>Hall 3</td>
<td>Thursday 1:50PM</td>
</tr>
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<td>Designing Across Platforms</td>
<td>Hall 3</td>
<td>Thursday 4:10PM</td>
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<tr>
<td>Planning a Great Apple Watch Experience</td>
<td>Hall 2</td>
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<tr>
<td>Design Studio Shorts 3</td>
<td>Executive Ballroom</td>
<td>Friday 11:00PM</td>
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<tr>
<td>Course</td>
<td>Room</td>
<td>Time</td>
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<tr>
<td>User Interface Design by Appointment Lab</td>
<td>Lab A</td>
<td>Thursday 9:00AM–6:00PM</td>
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<tr>
<td></td>
<td></td>
<td>Friday 9:00AM–3:30PM</td>
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