



# iPad and iPhone User Interface Design

**Jay Capela**

Director of Productivity Application Design

**John Geleynse**

Director, Technology Evangelism

User Experience Evangelist

# Design Matters



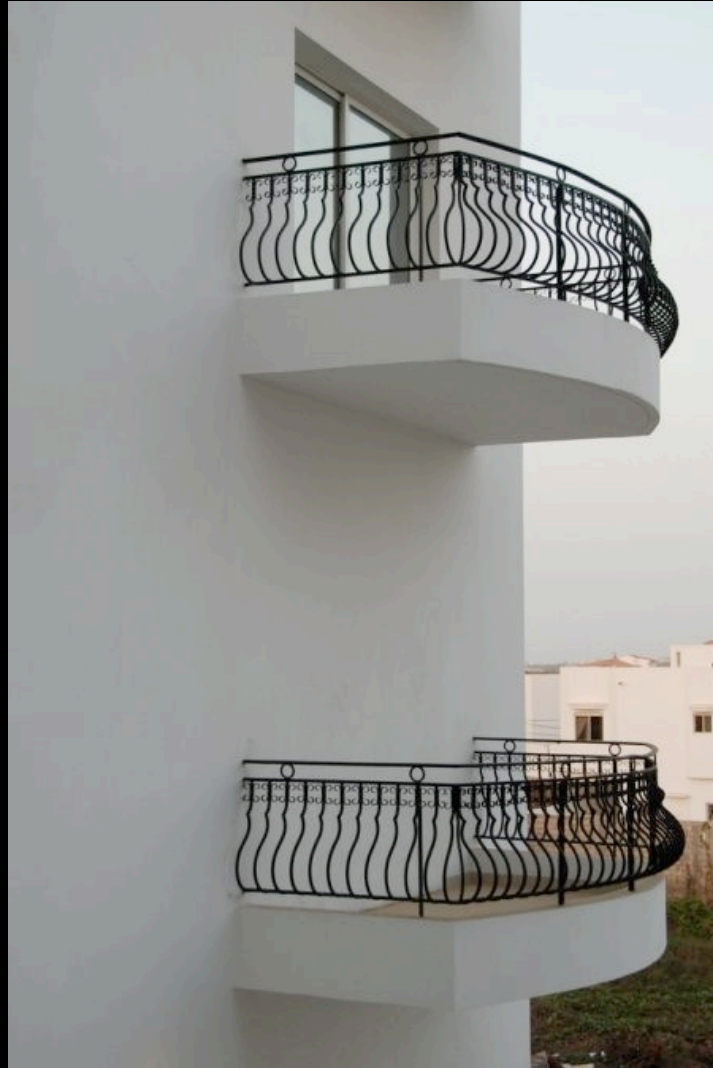


Without Design...















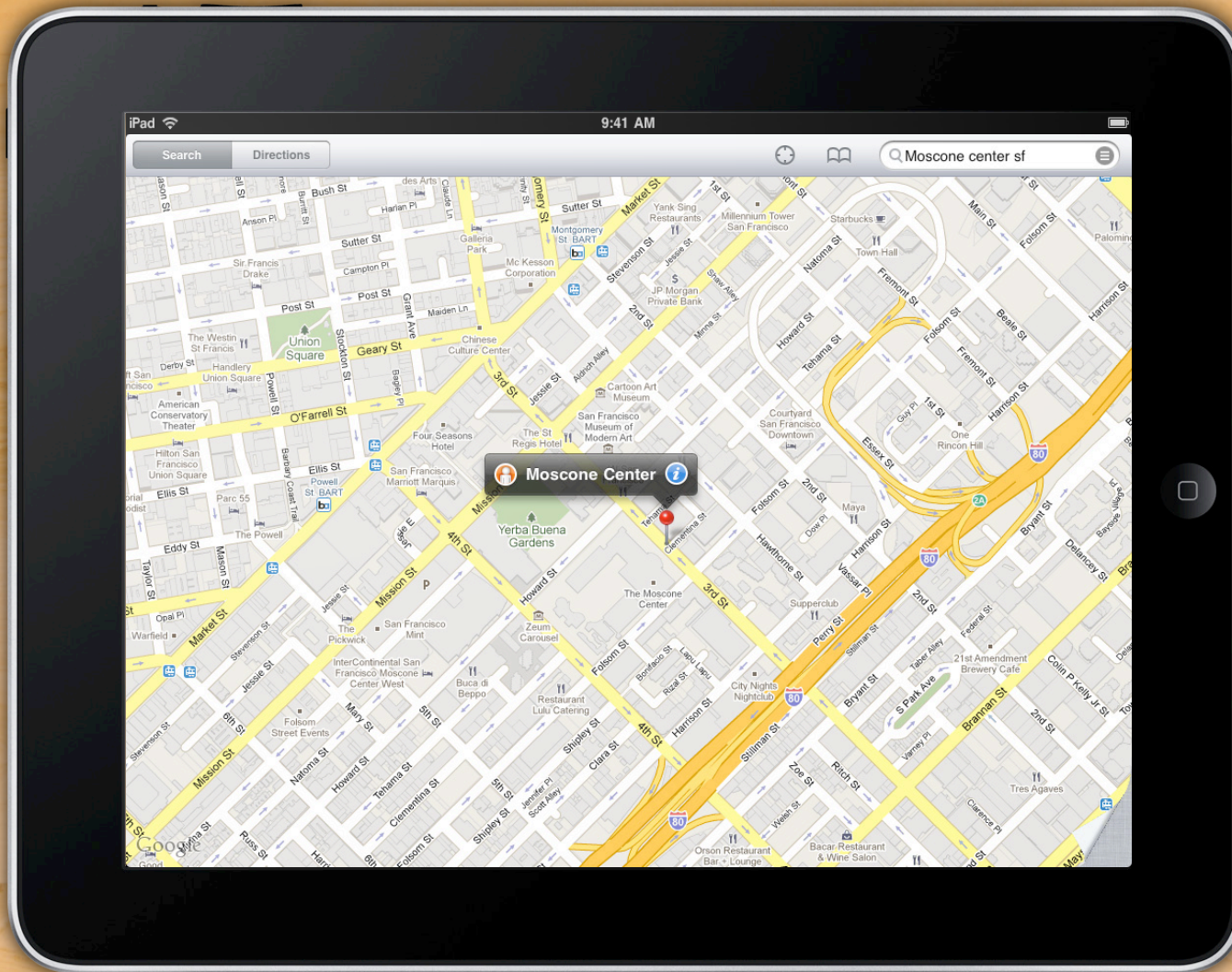
# Design Takes Planning

# Design Matters for Apps



**“...the iPad becomes the app you're using... Switch to another app and the iPad becomes that app. If that's not magic, I don't know what is...”**

Adam C. Engst, Tidbits









iPad 9:41 AM

Calendars Day Week Month List Search

27  
Wednesday, Jan 27  
2010

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

**Design Review**  
2nd floor conference room 11 AM to Noon

**Lunch with Lucy**  
1 PM to 2 PM

alert 1 hour before  
notes Bring check for bowling

**Customer Interviews**  
Palo Alto office - Building 2 2 PM to 4 PM

notes Don't forget to print out the resumes

**Expense Review**  
Dan's Office 4 PM to 5 PM

accepted, declined, maybe --  
no reply Daniel Vincent  
notes To review the expenses to date and discuss

all-day events

10 AM

11 AM  
Design Review  
2nd floor conference room

Noon

1 PM  
Lunch with Lucy

2 PM  
Customer Interviews  
Palo Alto office - Building 2

3 PM

4 PM  
Expense Review  
Dan's office

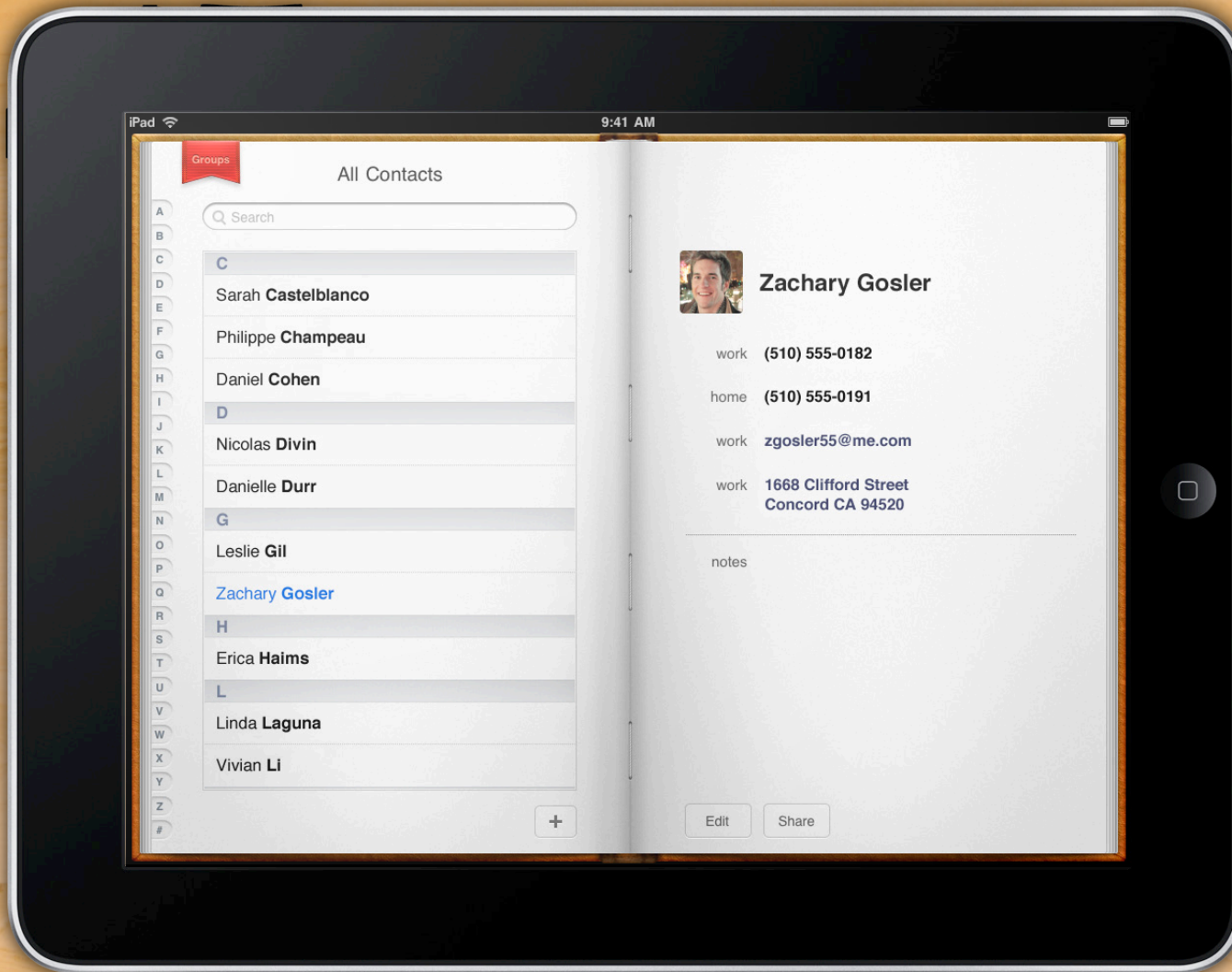
5 PM

6 PM  
Elle's Soccer Game  
School Field

7 PM

Today Dec Jan 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Feb +















1 Structure

2 Navigation

3 Reduction

4 Appearance

5 Feedback

6 Optimization

1 Structure

2 Navigation

3 Reduction

4 Appearance

5 Feedback

6 Optimization



# User Mental Model

The Way a Task is  
User Mental Model  
Perceived by People









# User Mental Model

Objects

Tasks

Concepts



# User Mental Model

Objects

Tasks

Concepts

- ✓ Identify relationships
- ✓ Identify dependencies
- ✓ Identify frequencies



# Things Users Think About

## Objects

Calendars

Days

Weeks

Months

Appointments

Reminders

## Tasks

Filter

Create

Edit

Search

Manage

Change date

## Concepts

Scheduling

Searching

Managing



# Relationships

## Objects

Calendars

~~Days~~

~~Weeks~~

~~Months~~

~~Appointments~~

~~Reminders~~

## Tasks

Scheduling

~~Create~~

~~Edit~~

~~Search~~

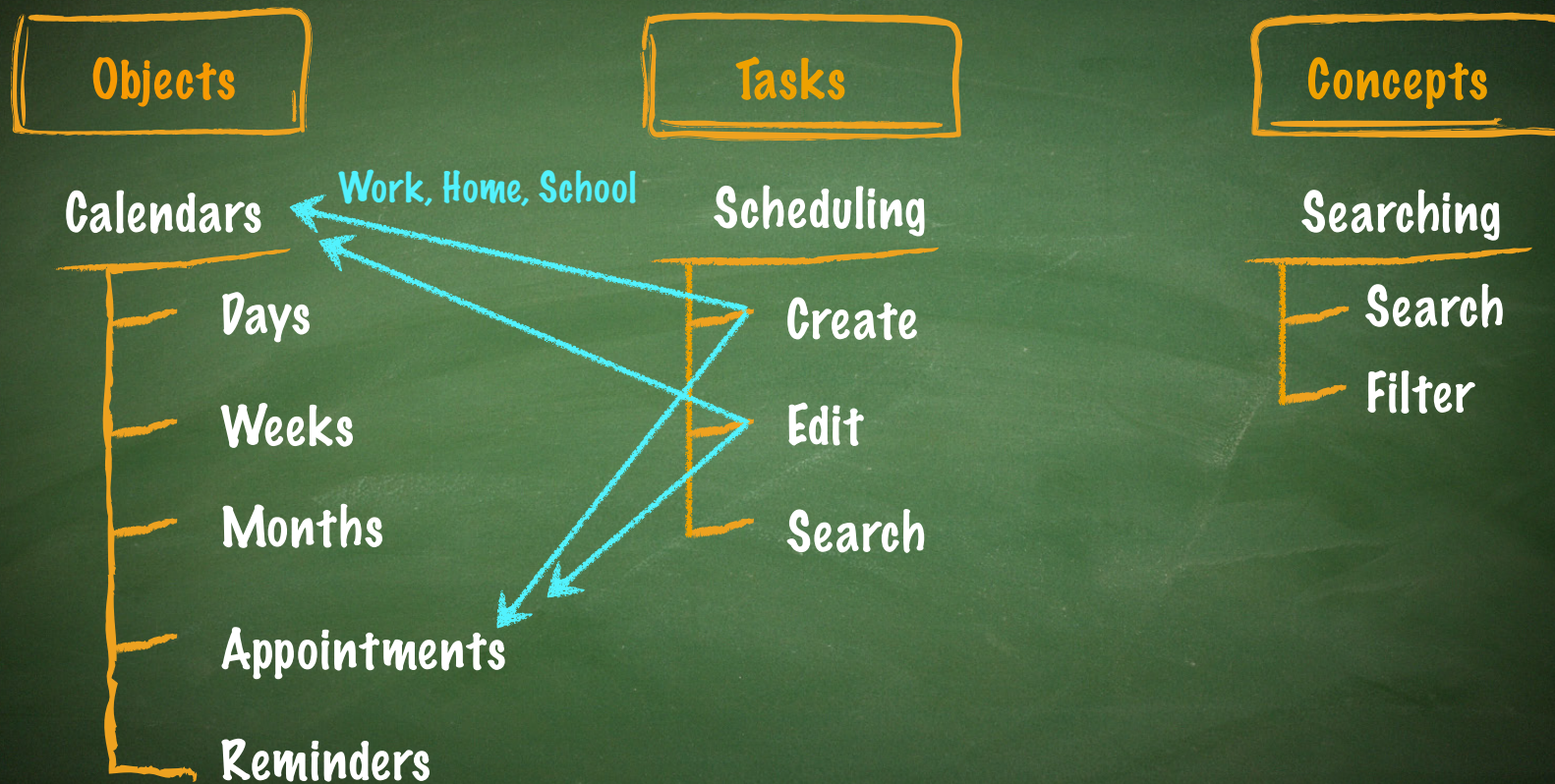
## Concepts

~~Searching~~

~~Filter~~

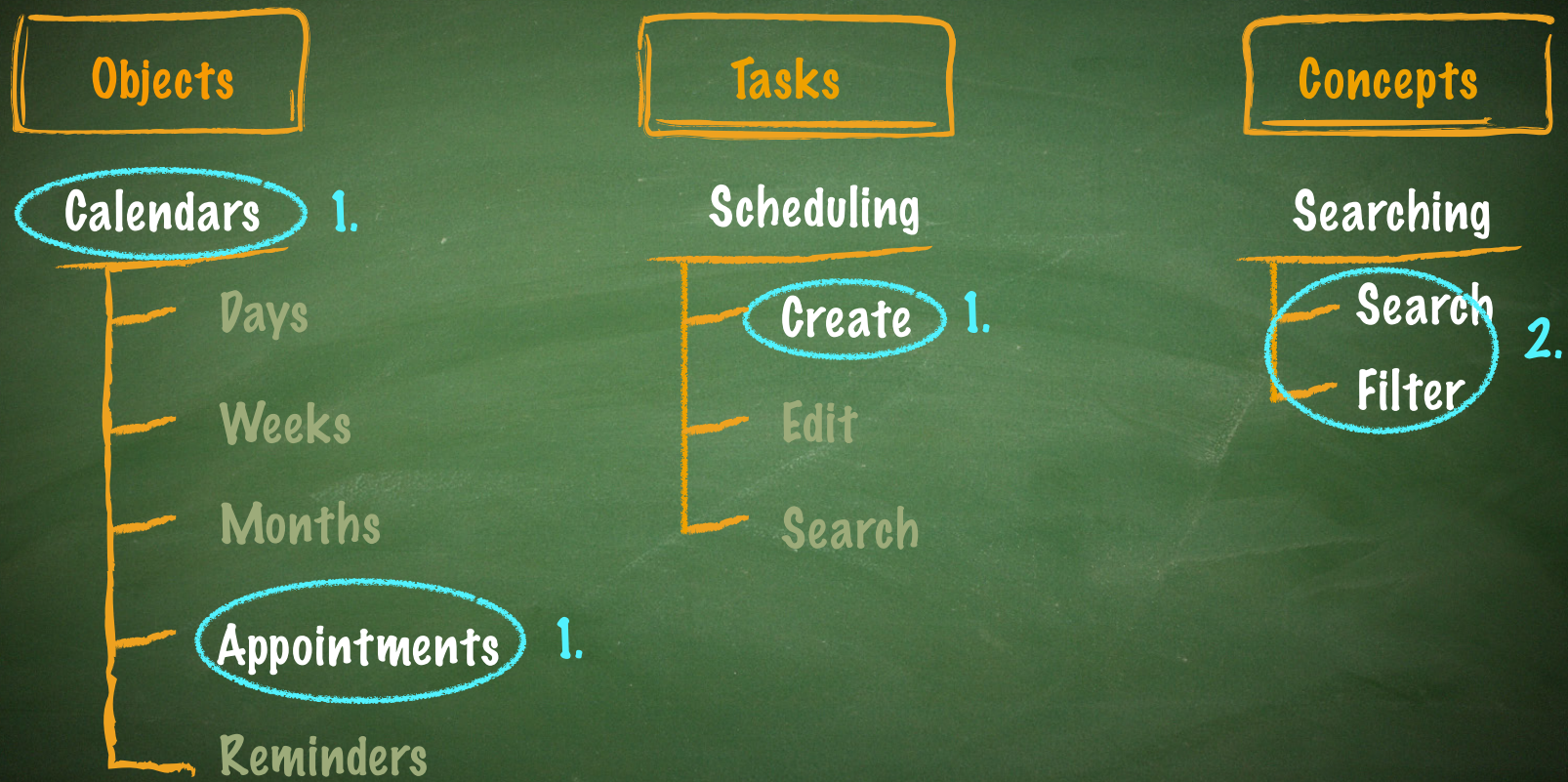


# Dependencies





# Prioritization







1 Structure

2 Navigation

3 Reduction

4 Appearance

5 Feedback

6 Optimization

1 Structure

2 Navigation

3 Reduction

4 Appearance

5 Feedback

6 Optimization

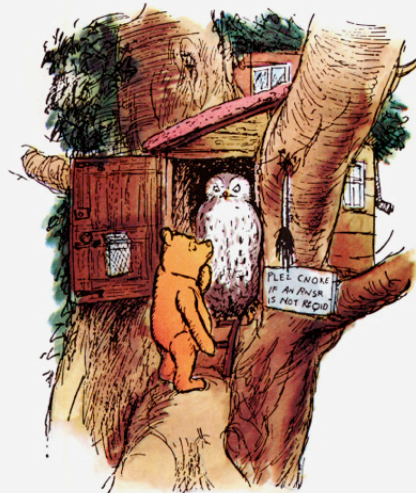


**Structure**  
**Impacts**  
**Navigation**









Pooh nodded.

"It reminds me of something," he said, "but I can't think what. Where did you get it?"

"I just came across it in the Forest. It was hanging over a bush, and I thought at first somebody lived there, so I rang it, and nothing happened, and then I rang it again very loudly, and it came off in my hand, and as nobody seemed to want it, I took it home, and—"

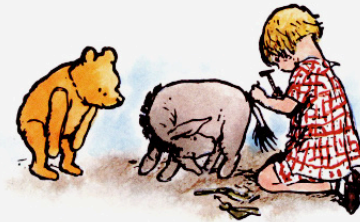
"Owl," said Pooh solemnly, "you made a mistake. Somebody did want it."

"Who?"

"Eeyore. My dear friend Eeyore. He was—he was fond of it."

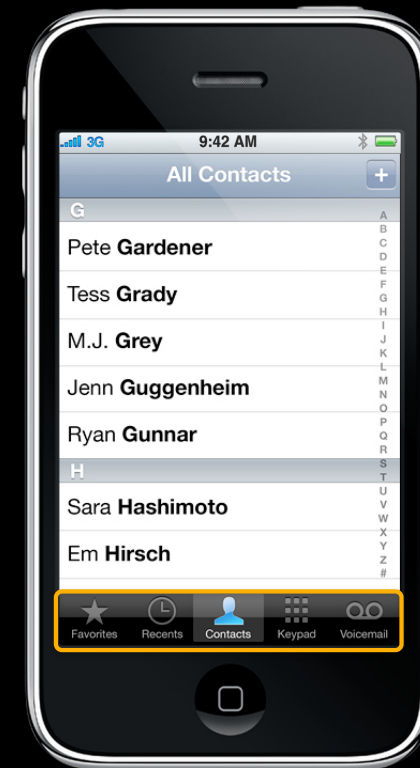
"Fond of it?"

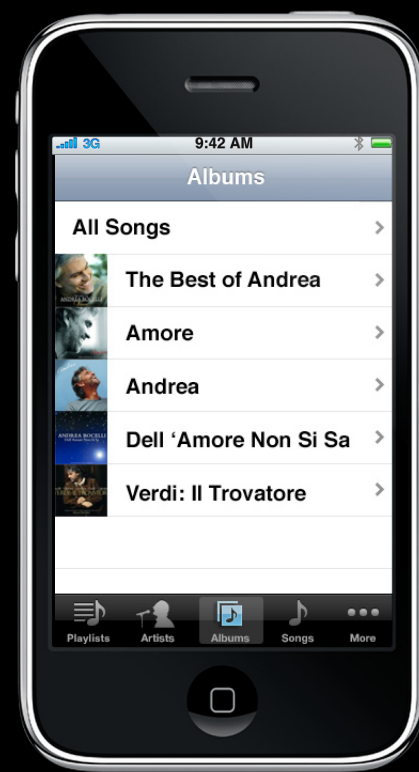
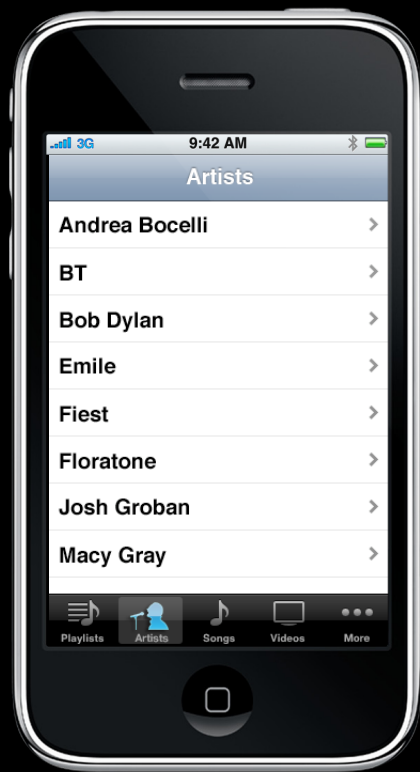
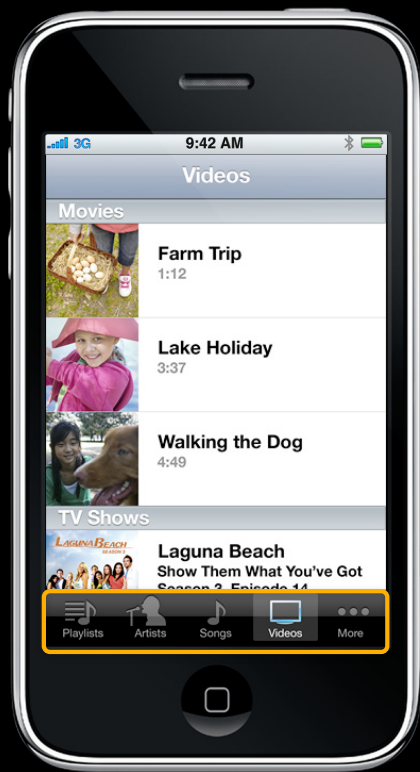
"Attached to it," said Winnie-the-Pooh sadly.



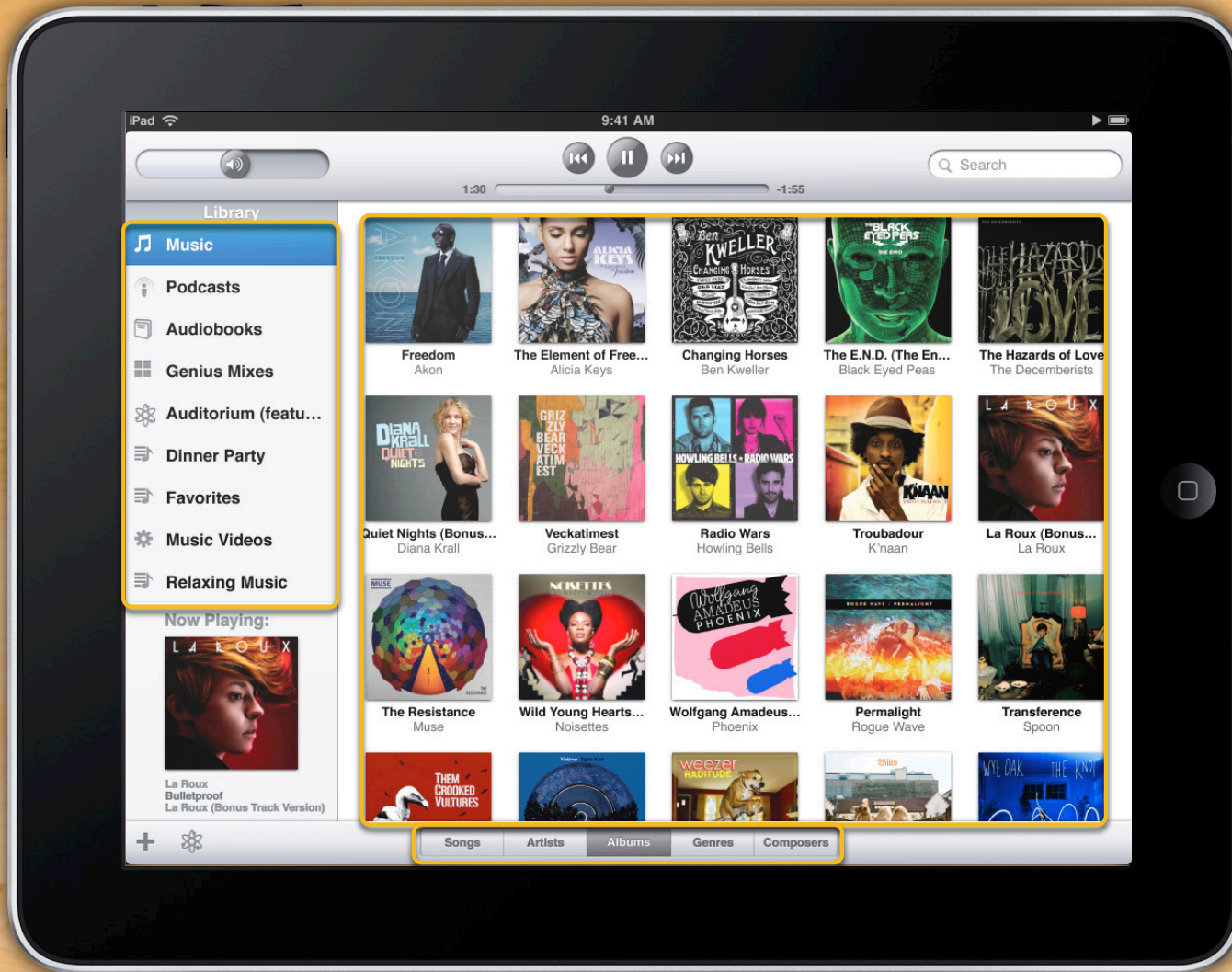
# Tabs

- Manage complexity
- Increase efficiency
- Switch between modes and collections
- Mostly permanent
- Customizable







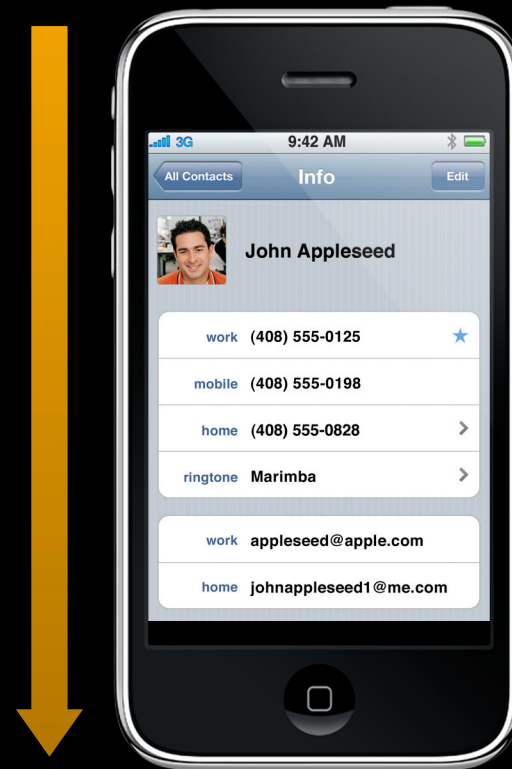


**Navigation is about  
Movement and Placement**

# Visual Design

- Each part of your app should be fine tuned for it's purpose
- Placement is a function of
  - Frequency of use
  - Importance to the user
  - Use visual emphasis and position
- Focus on purpose of each screen
  - Is **this** important now?
- How does **this** add to or take away?

More frequently used or read items



Less frequently used or read items





iWork





9:41 AM  
My Documents Undo Serengeti Report

## Life in the Serengeti

The wilderness of the Serengeti Plains was uninhabited for centuries until the 1900s, when the Masai, a nomadic tribe of fierce warriors, came down from the north with their cattle. Later, explorer and naturalist Dr. Oscar Baumann, a member of the German Anti-Slavery Committee's Masai Expedition, became the first European in the area. His companions followed him and built Fort Ikoma, used as an administrative center until 1917, when it was taken over by the British.

Language Groups

Language Group	Percentage
Khoisan	12%
Cushitic	13%
Nilotic	34%
Bantu	41%

In 1913, professional hunters came to the Serengeti, where there was plenty of

wildlife. In 1920, news of the Serengeti reached the outside world. By this time, lions were scarce due to hunting, so in 1921, an 800-acre partial game reserve was set up. In 1929 it became a full reserve and formed the basis of a national park that in 1951 covered 3.6 million acres.

The park was added to the UNESCO (United Nations Educational, Scientific, and Cultural Organization) World Heritage List in 1981.

The Masai were moved to the Ngorongoro highlands when the park was created. To this day, controversy surrounds this move, with speculation of coercion and deceit by the colonial authorities. Some think the relocation was completely ill-advised, since the Masai were never a threat to the wildlife.

ALLISON RITTER THE SERENGETI 6

9:41 AM  
My Presentations Undo Seven Wonders

## Seven Wonders of the World

Jason Russell — Midterm Report.

9:41 AM  
My Spreadsheets Undo Wildcats Soccer

Players Statistics Budget

## WILDCATS SOCCER TEAM STATISTICS 2010

Player	Goals	Assists	Scoring	Saves	Goals Allowed	Playing Time
John	10	2	25%			3h 12m
Tim	9	4	23%			3h 54m
Andrew	1	6	3%			1h 54m
Matthew	8	6	20%			3h 18m
Jill	4	5	10%			3h 12m
Paul	2	3	5%	23	10	4h 21m
Hanna	3	5	8%	8	11	2h 34m
Chris	3	2	8%	16	12	2h 54m
<b>Team Totals</b>	<b>40</b>	<b>33</b>	<b>100%</b>	<b>47</b>	<b>33</b>	<b>30h 17m</b>

9:41 AM  
Serengeti Report

## Life in the Serengeti

The wilderness of the Serengeti Plains was uninhabited for centuries until the 1900s, when the Masai, a nomadic tribe of fierce warriors, came down from the north with their cattle. Later, explorer and naturalist Dr. Oscar Baumann, a member of the German Anti-Slavery Committee's Masai Expedition, became the first European in the area. His companions followed him and built Fort Roma, used as an administrative center until 1917, when it was taken over by the British.

wildlife. In 1920, news of the Serengeti reached the outside world. By this time, lions were scarce due to hunting, so in 1921, an 800-acre partial game reserve was set up. In 1929 it became a full reserve and formed the basis of a national park that in 1951 covered 3.6 million acres.

The park was added to the UNESCO (United Nations Educational, Scientific, and Cultural Organization) World Heritage List in 1981.

The Masai were moved to the Ngorongoro highlands when the park was created. To this day, controversy surrounds this move, with speculation of coercion and deceit by the colonial authorities. Some think the relocation was completely ill-advised, since the Masai were never a threat to the wildlife

**Language Groups**

Language Group	Percentage
Khoisan	12%
Gushitic	13%
Nilotic	34%
Bantu	41%

In 1913, professional hunters came to the Serengeti, where there was plenty of

ALLISON RITTER THE SERENGETI 6

9:41 AM  
Seven Wonders

Seven Wonders of the World  
*Jason Russell — Midterm Report.*

9:41 AM  
Wildcats Soccer

## WILDCATS SOCCER TEAM STATISTICS 2010

Player	Goals	Assists	Scoring	Saves	Goals Allowed	Playing Time
John	10	2	25%			3h 12m
Tim	9	4	23%			3h 54m
Andrew	1	6	3%			1h 54m
Matthew	8	6	20%			3h 18m
Jill	4	5	10%			3h 12m
Paul	2	3	5%	23	10	4h 21m
Hanna	3	5	8%	8	11	2h 34m
Chris	3	2	8%	16	12	2h 54m
<b>Team Totals</b>	<b>40</b>	<b>33</b>	<b>100%</b>	<b>47</b>	<b>33</b>	<b>30h 17m</b>

9:41 AM  
My Documents Undo Serengeti Report

**Life in the Serengeti**

The wilderness of the Serengeti Plains was uninhabited for centuries until the 1900s, when the Masai, a nomadic tribe of fierce warriors, came down from the north with their cattle. Later, explorer and naturalist Dr. Oscar Baumann, a member of the German Anti-Slavery Committee's Masai Expedition, became the first European in the area. His companions followed him and built Fort Ikoma, used as an administrative center until 1917, when it was taken over by the British.

wildlife. In 1920, news of the Serengeti reached the outside world. By this time, lions were scarce due to hunting, so in 1921, an 800-acre partial game reserve was set up. In 1929 it became a full reserve and formed the basis of a national park that in 1951 covered 3.6 million acres.

The park was added to the UNESCO (United Nations Educational, Scientific, and Cultural Organization) World Heritage List in 1981.

The Masai were moved to the Ngorongoro highlands when the park was created. To this day, controversy surrounds this move, with speculation of coercion and deceit by the colonial authorities. Some think the relocation was completely ill-advised, since the Masai were never a threat to the wildlife.

**Language Groups**

Kisumu	12%
Guthrie	13%
Nilotic	34%
Bantu	41%

In 1913, professional hunters came to the Serengeti, where there was plenty of

ALLISON RITTER THE SERENGETI 6

9:41 AM  
My Presentations Undo Seven Wonders

1  
2  
3  
4  
5  
6  
7  
8  
9

**Seven Wonders of the World**

*Jason Russell — Midterm Report*

9:41 AM  
My Spreadsheets Undo Wildcats Soccer

Players Statistics Budget +

**WILDCATS SOCCER TEAM STATISTICS 2010**

Player	Goals	Assists	Scoring	Saves	Goals Allowed	Playing Time
John	10	2	25%			3h 12m
Tim	9	4	23%			3h 54m
Andrew	1	6	3%			1h 54m
Matthew	8	6	20%			3h 18m
Jill	4	5	10%			3h 12m
Paul	2	3	5%	23	10	4h 21m
Hanna	3	5	8%	8	11	2h 34m
Chris	3	2	8%	16	12	2h 54m
<b>Team Totals</b>	<b>40</b>	<b>33</b>	<b>100%</b>	<b>47</b>	<b>33</b>	<b>30h 17m</b>

Goals Assists Saves

John	10	2	
Tim	9	4	
Andrew	1	6	
Matthew	8	6	
Jill	4	5	
Paul	2	3	23
Hanna	3	5	8
Chris	3	2	16

Saves

Chris	34%
Paul	49%
Hanna	17%



My Presentations

Undo

Seven Wonders



My Documents

Undo

Serengeti Report



My Spreadsheets

Undo

Wildcats Soccer



























9:41 AM  
My Documents Undo **Serengeti Report**

## Life in the Serengeti

The wilderness of the Serengeti Plains was uninhabited for centuries until the 1900s, when the Masai, a nomadic tribe of fierce warriors, came down from the north with their cattle. Later, explorer and naturalist Dr. Oscar Baumann, a member of the German Anti-Slavery Committee's Masai Expedition, became the first European in the area. His companions followed him and built Fort Ikoma, used as an administrative center until 1917, when it was taken over by the British.

Life in the Serengeti was harsh. In 1920, news of the Serengeti reached the outside world. By this time, lions were scarce due to hunting, so in 1921, an 800-acre partial game reserve was set up. In 1929 it became a full reserve and formed the basis of a national park that in 1951 covered 3.6 million acres.

The park was added to the UNESCO (United Nations Educational, Scientific, and Cultural Organization) World Heritage List in 1981.

The Masai were moved to the Ngorongoro highlands when the park was created. To this day, controversy surrounds this move, with speculation of coercion and deceit by the colonial authorities. Some think the relocation was completely ill-advised, since the Masai were never a threat to the wildlife.

### Language Groups

Language Group	Percentage
Khoisan	12%
Cushitic	13%
Nilotic	34%
Bantu	41%

In 1913, professional hunters came to the Serengeti, where there was plenty of

ALLISON RITTER THE SERENGETI 6

9:41 AM  
My Presentations Undo **Seven Wonders**

## Seven Wonders of the World

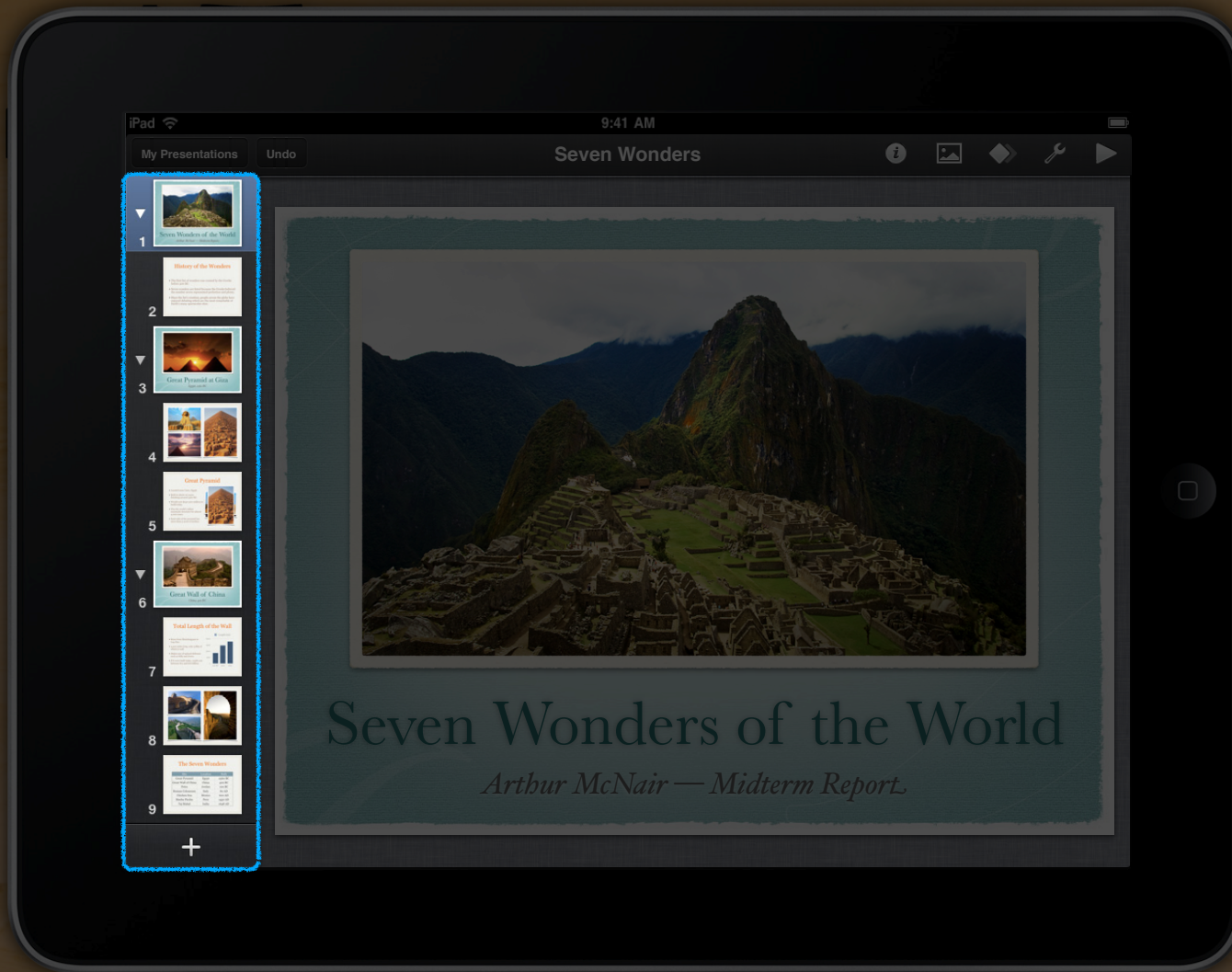
*Jason Russell — Midterm Report.*

9:41 AM  
My Spreadsheets Undo **Wildcats Soccer**

Players Statistics Budget

## WILDCATS SOCCER TEAM STATISTICS 2010

Player	Goals	Assists	Scoring	Saves	Goals Allowed	Playing Time
John	10	2	25%			3h 12m
Tim	9	4	23%			3h 54m
Andrew	1	6	3%			1h 54m
Matthew	8	6	20%			3h 18m
Jill	4	5	10%			3h 12m
Paul	2	3	5%	23	10	4h 21m
Hanna	3	5	8%	8	11	2h 34m
Chris	3	2	8%	16	12	2h 54m
<b>Team Totals</b>	<b>40</b>	<b>33</b>	<b>100%</b>	<b>47</b>	<b>33</b>	<b>30h 17m</b>





iPad 9:41 AM  
 My Documents Undo Serengeti Report

Body Small B I U [List Icons] [Right Arrow] [Close]

1 2 3 4 5 6 7 8

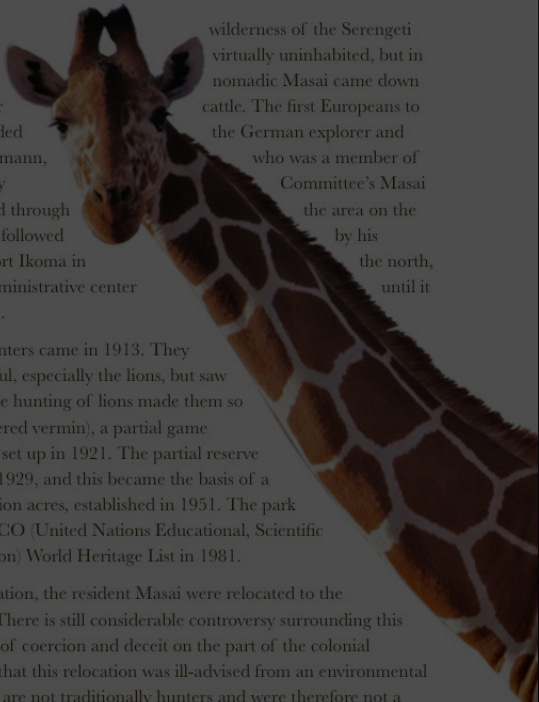
## Park History

For centuries, the vast Plains remained the early 1900s the from the north with their set foot in the area included naturalist Dr. Oscar Baumann, the German Anti-Slavery Expedition, which passed through way to Burundi. He was followed compatriots who built Fort Ikoma in which was used as an administrative center fell to the British in 1917.

wilderness of the Serengeti virtually uninhabited, but in nomadic Masai came down cattle. The first Europeans to the German explorer and who was a member of Committee's Masai the area on the by his the north, until it

The first professional hunters came in 1913. They found the wildlife plentiful, especially the lions, but saw no elephants. Because the hunting of lions made them so scarce (they were considered vermin), a partial game reserve of 800 acres was set up in 1921. The partial reserve became a full reserve in 1929, and this became the basis of a national park of 3.6 million acres, established in 1951. The park was added to the UNESCO (United Nations Educational, Scientific and Cultural Organization) World Heritage List in 1981.

As part of the park's creation, the resident Masai were relocated to the Ngorongoro highlands. There is still considerable controversy surrounding this move, with claims made of coercion and deceit on the part of the colonial authorities. Some assert that this relocation was ill-advised from an environmental standpoint, as the Masai are not traditionally hunters and were therefore not a threat to the wildlife.





iPad 9:41 AM  
My Documents Undo Serengeti Report

Body Small B I U


## Park History

For centuries, the vast Plains remained the early 1900s the from the north with their set foot in the area included naturalist Dr. Oscar Baumann, the German Anti-Slavery Expedition, which passed through way to Burundi. He was followed compatriots who built Fort Ikoma in which was used as an administrative center fell to the British in 1917.

The first professional hunters came in 1913. They found the wildlife plentiful, especially the lions, but saw no elephants. Because the hunting of lions made them so scarce (they were considered vermin), a partial game reserve of 800 acres was set up in 1921. The partial reserve became a full reserve in 1929, and this became the basis of a national park of 3.6 million acres, established in 1951. The park was added to the UNESCO (United Nations Educational, Scientific and Cultural Organization) World Heritage List in 1981.

As part of the park's creation, the resident Masai were relocated to the Ngorongoro highlands. There is still considerable controversy surrounding this move, with claims made of coercion and deceit on the part of the colonial authorities. Some assert that this relocation was ill-advised from an environmental standpoint, as the Masai are not traditionally hunters and were therefore not a threat to the wildlife.

JASON RUSSELL THE SERENGETI 6



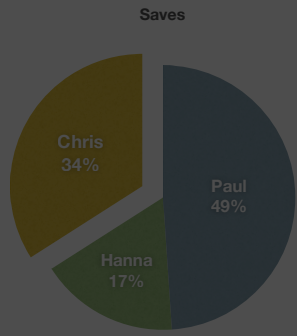
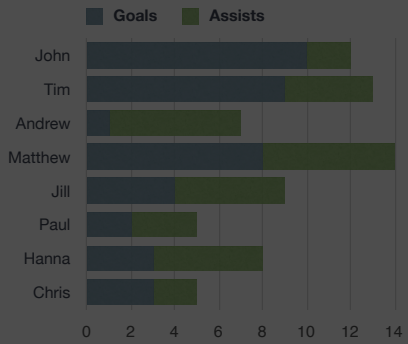
**Chart: The Top Five Species**

Species	Count
Lions	100
Zebras	80
Elephants	60
Antelopes	40
Wildebeests	20

## WILDCATS SOCCER TEAM STATISTICS 2010



Player	Goals	Assists	Scoring	Saves	Goals Allowed	Playing Time
John	10	2	25%			3h 12m
Tim	9	4	23%			3h 54m
Andrew	1	6	3%			1h 54m
Matthew	8	6	20%			3h 18m
Jill	4	5	10%			3h 12m
Paul	2	3	5%	23	10	4h 21m
Hanna	3	5	8%	8	11	2h 34m
Chris	3	2	8%	16	12	2h 54m
<b>Team Totals</b>	<b>40</b>	<b>33</b>	<b>100%</b>	<b>47</b>	<b>33</b>	<b>30h 17m</b>



9:41 AM  
My Documents Undo Serengeti Report

## Life in the Serengeti

The wilderness of the Serengeti Plains was uninhabited for centuries until the 1900s, when the Masai, a nomadic tribe of fierce warriors, came down from the north with their cattle. Later, explorer and naturalist Dr. Oscar Baumann, a member of the German Anti-Slavery Committee's Masai Expedition, became the first European in the area. His companions followed him and built Fort Ikoma, used as an administrative center until 1917, when it was taken over by the British.

Life in the Serengeti was harsh. In 1920, news of the Serengeti reached the outside world. By this time, lions were scarce due to hunting, so in 1921, an 800-acre partial game reserve was set up. In 1929 it became a full reserve and formed the basis of a national park that in 1951 covered 3.6 million acres.

The park was added to the UNESCO (United Nations Educational, Scientific, and Cultural Organization) World Heritage List in 1981.

The Masai were moved to the Ngorongoro highlands when the park was created. To this day, controversy surrounds this move, with speculation of coercion and deceit by the colonial authorities. Some think the relocation was completely ill-advised, since the Masai were never a threat to the wildlife.

### Language Groups

Khoisan	12%
Gusii	13%
Niloite	34%
Bantu	41%

In 1913, professional hunters came to the Serengeti, where there was plenty of

ALLISON RITTER THE SERENGETI 6

9:41 AM  
My Presentations Undo Seven Wonders

## Seven Wonders of the World

Jason Russell — Midterm Report

9:41 AM  
My Spreadsheets Undo Wildcats Soccer

## WILDCATS SOCCER TEAM STATISTICS 2010

Player	Goals	Assists	Scoring	Saves	Goals Allowed	Playing Time
John	10	2	25%			3h 12m
Tim	9	4	23%			3h 54m
Andrew	1	6	3%			1h 54m
Matthew	8	6	20%			3h 18m
Jill	4	5	10%			3h 12m
Paul	2	3	5%	23	10	4h 21m
Hanna	3	5	8%	8	11	2h 34m
Chris	3	2	8%	16	12	2h 54m
<b>Team Totals</b>	<b>40</b>	<b>33</b>	<b>100%</b>	<b>47</b>	<b>33</b>	<b>30h 17m</b>

1 Structure

2 Navigation

3 Reduction

4 Appearance

5 Feedback

6 Optimization



- ✓ Support the User Mental Model
- ✓ Presents the Main workflows
- ✓ Efficient and Uncluttered
- ✓ Easy to Read and Understand

1 Structure

2 Navigation

3 Reduction

4 Appearance

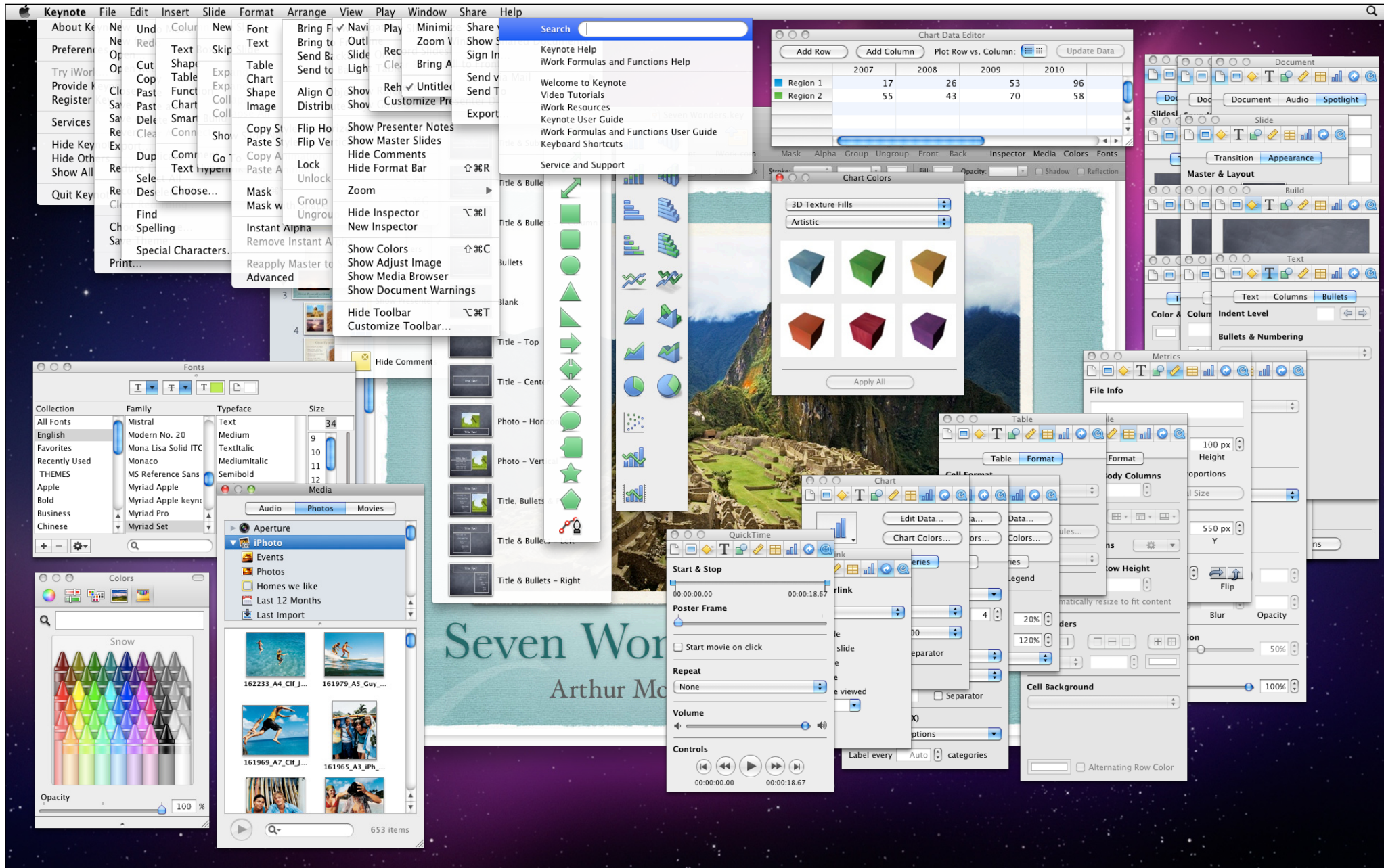
5 Feedback

6 Optimization

**Simplify**  
**Prioritize**  
**Innovate**

Simplify





335+

Menu Items

150+

Format Bar Items

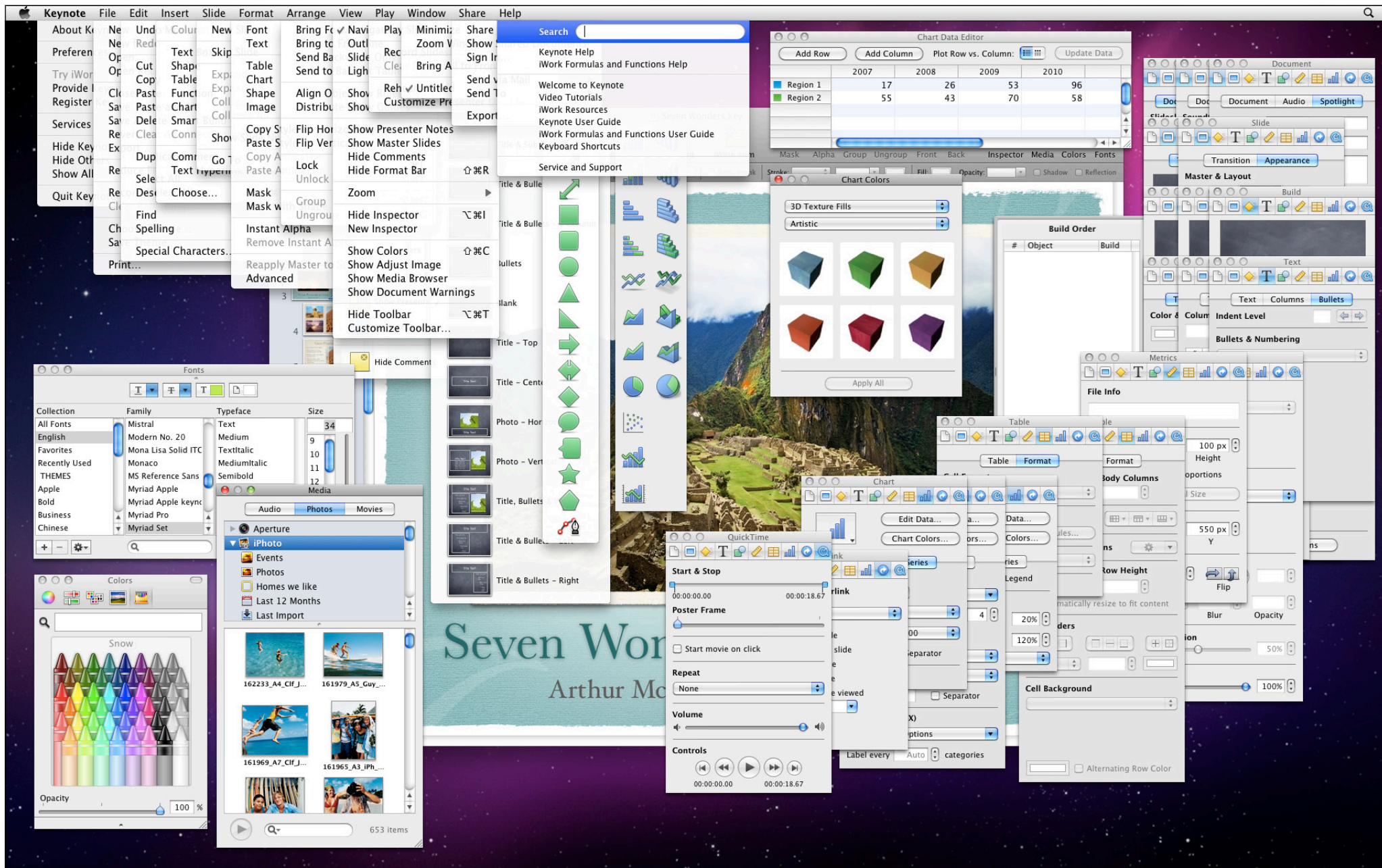
64+

Shortcuts



1,100+

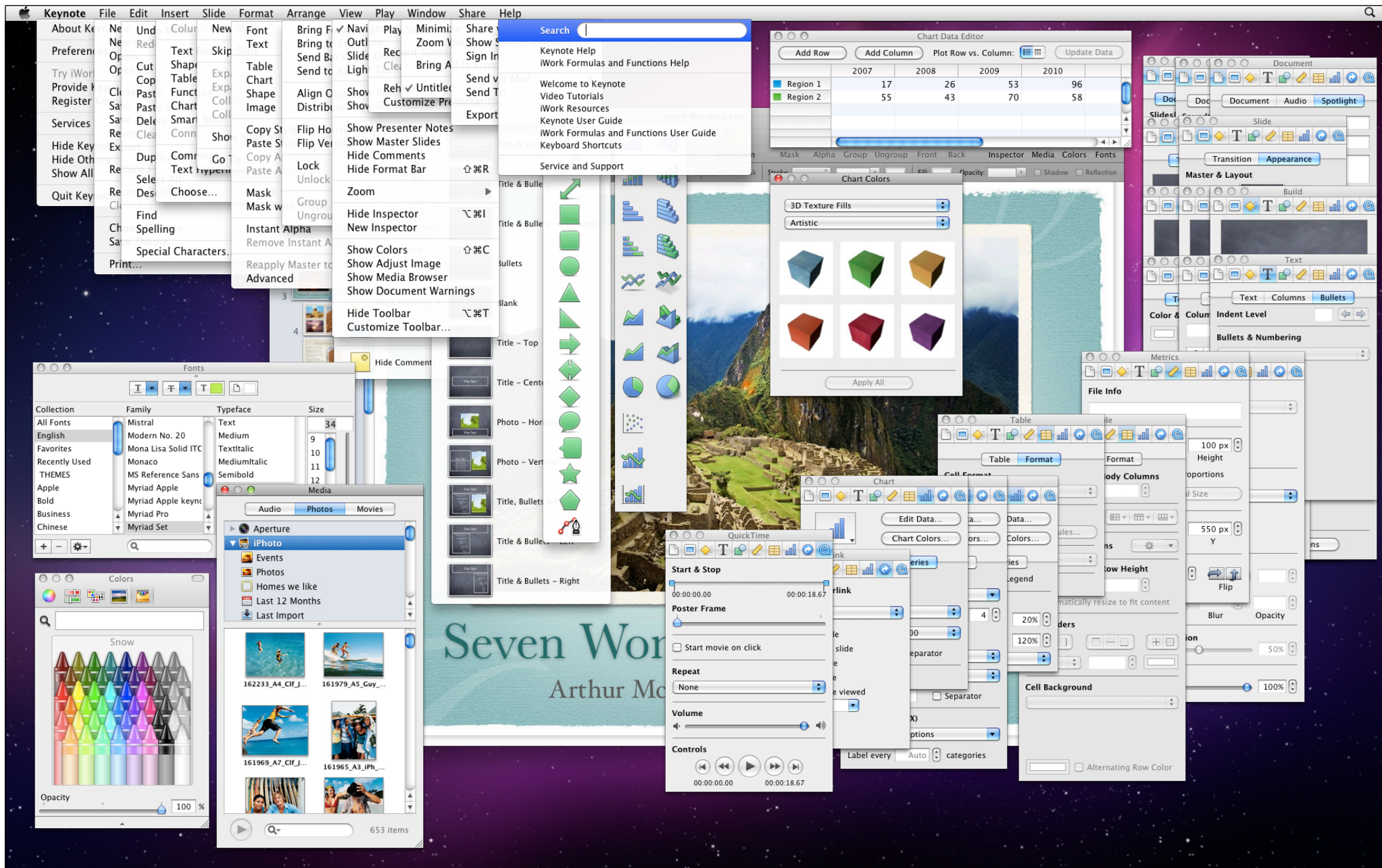
Places to Click













The image displays a complex arrangement of overlapping windows from the Keynote application, illustrating various settings and editing options. The windows are organized into several columns and rows:

- Document Settings:** Includes 'Document', 'Audio', and 'Spotlight' tabs. The 'Document' window shows 'Slideshow Settings' (e.g., 'Automatically play upon open', 'Loop slideshow'), 'Presentation' (Normal), 'Slide Size' (1024 x 768), and 'Require password to open'. The 'Audio' window shows 'Soundtrack' (Play Once, iTunes Library) and 'Slideshow Recording' (Record, Clear, Volume). The 'Spotlight' window shows fields for Author, Title, Keywords, and Comments.
- Slide Settings:** Includes 'Transition' and 'Appearance' tabs. The 'Transition' window shows 'Effect' (None), 'Duration', and 'Direction'. The 'Appearance' window shows 'Master & Layout' (Blank), 'Background' (Image Fill, Scale to Fit), and 'File Info' (Size: 100 px Width, 100 px Height).
- Build Settings:** Includes 'Build In', 'Build Out', and 'Action' tabs. The 'Build In' window shows 'Effect' (None), 'Direction', 'Order', and 'Delivery'. The 'Build Out' window shows 'Effect' (None), 'Direction', 'Order', and 'Delivery'. The 'Action' window shows 'Effect' (None), 'Direction', 'Order', and 'Delivery'.
- Text Settings:** Includes 'Text', 'Columns', and 'Bullets' tabs. The 'Text' window shows 'Color & Alignment' (Character, Line, Spacing), 'Before Paragraph', 'After Paragraph', and 'Inset Margin'. The 'Columns' window shows 'Columns' (Equal column width) and a table with columns for '#', 'Column', and 'Gutter'. The 'Bullets' window shows 'Bullets & Numbering' and 'Indent Level'.
- Graphic Settings:** Includes 'Graphic' and 'Hyperlink' tabs. The 'Graphic' window shows 'Fill', 'Stroke' (None), 'Shadow', 'Reflection' (50%), and 'Opacity' (100%). The 'Hyperlink' window shows 'Enable as a hyperlink' and 'Link To' (Next slide).
- Chart Settings:** Includes 'Chart' and 'Series' tabs. The 'Chart' window shows 'Edit Data...', 'Chart Colors...', and 'Value Axis (Y)' (Max: Auto, Min: Auto, Steps: 4). The 'Series' window shows 'Format' (Number), 'Decimals' (Auto), and 'Suffix'.
- Table Settings:** Includes 'Table' and 'Format' tabs. The 'Table' window shows 'Body Rows', 'Body Columns', 'Headers & Footer', and 'Edit Rows & Columns'. The 'Format' window shows 'Column Width', 'Row Height', 'Cell Borders', and 'Cell Background'.
- QuickTime Settings:** Includes 'Start & Stop', 'Repeat', 'Volume', and 'Controls' tabs. The 'Start & Stop' window shows 'Start movie on click'. The 'Repeat' window shows 'Repeat' (None). The 'Volume' window shows a volume slider. The 'Controls' window shows playback controls (Play, Stop, Previous, Next) and a progress bar.















Prioritize























Innovate

























- 1 Structure
- 2 Navigation
- 3 Reduction**
- 4 Appearance
- 5 Feedback
- 6 Optimization

- ✓ Simplify
- ✓ Prioritize
- ✓ Innovate



- 1 Structure
- 2 Navigation
- 3 Reduction
- 4 Appearance**
- 5 Feedback
- 6 Optimization

**It's your Apps Identity**

**Structure  
Influences  
Appearance**



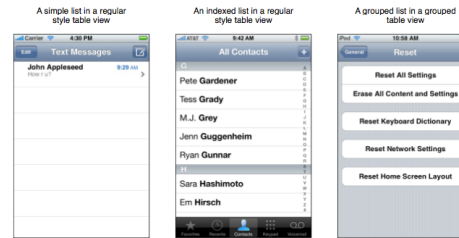
## Table Views, Text Views, and Web Views

Table views, text views, and web views are versatile elements that lend themselves to different uses in your iPhone application. For example, table views can be configured to display short lists of choices, grouped lists of detailed information, or long, indexed lists of items. Text views and web views are relatively unconstrained containers you can use to accept and display content. This chapter provides guidance for using these elements in your iPhone application.

### Table Views

A **table view** presents data in a single-column list of multiple rows. Each row can contain some combination of text, images, and controls, and rows can be divided into sections or groups. Users flick or drag to scroll through large numbers of rows or groups of rows. Figure 8-1 shows how different styles of table views can display lists in different ways.

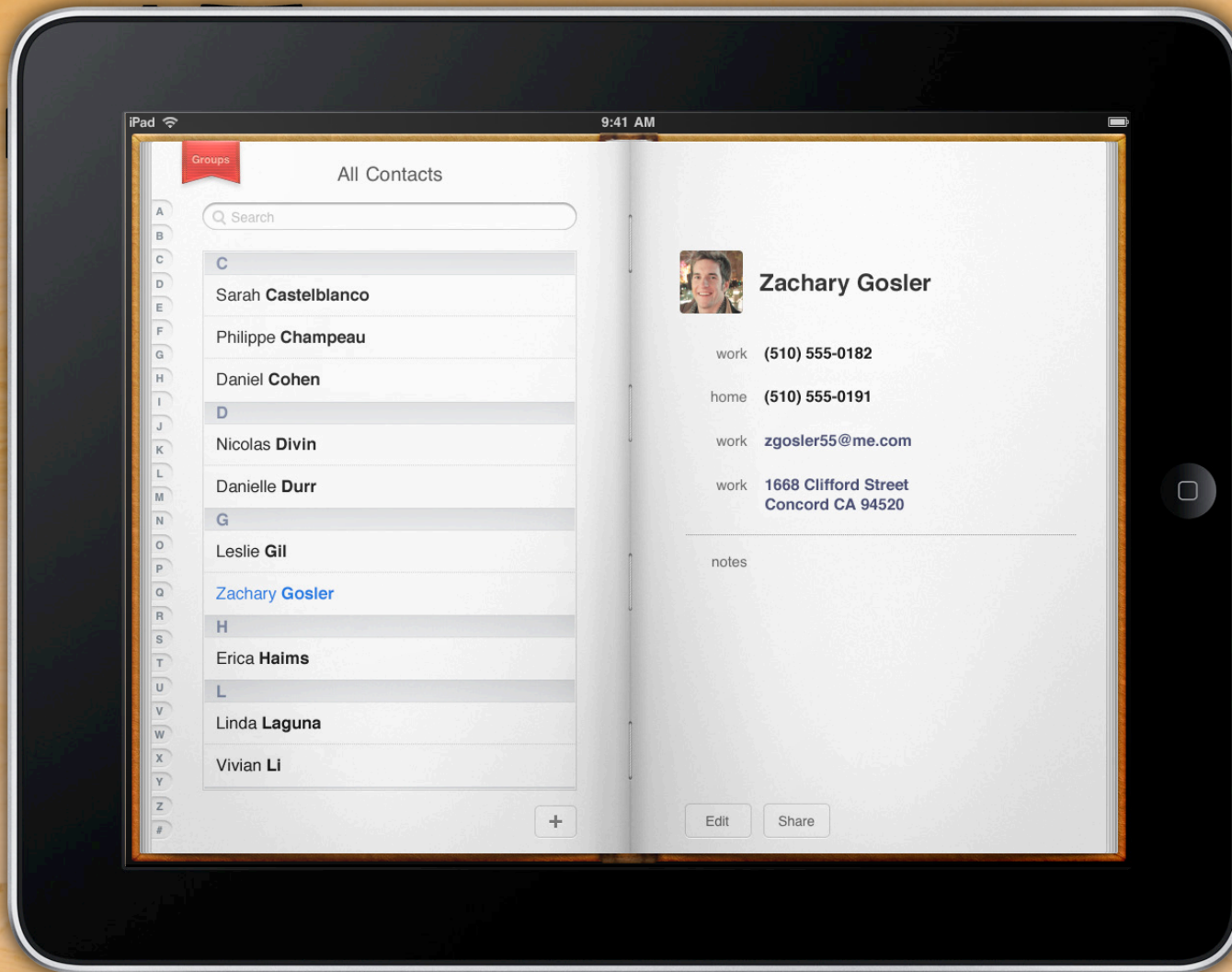
**Figure 8-1** Three ways to display lists using table views



This section covers what table views support and how to use them in your application. Then, it describes two styles of table view: the regular style (two variations of which are shown in on the left and in the middle in Figure 8-1) and the grouped style (shown on the right in Figure 8-1).

# The HIG





iPad 9:41 AM

Groups All Contacts

Q Search

**C**

- Sarah Castelblanco
- Philippe Champeau
- Daniel Cohen

**D**

- Nicolas Divin
- Danielle Durr

**G**

- Leslie Gil
- Zachary Gosler**


**H**

- Erica Haims

**L**

- Linda Laguna
- Vivian Li

+

 **Zachary Gosler**

work (510) 555-0182

home (510) 555-0191

work zgosler55@me.com

work 1668 Clifford Street  
Concord CA 94520

notes

Edit Share



# Alla Turca (Piano Sonata No. 11)

Mozart

Musical notation for measures 1-3 in 2/4 time. A red vertical line is positioned at the start of measure 1. Below the staff is a TAB section with a vertical label 'TAB' on the left. The TAB contains the following fret numbers: 7 5 4 5 8 10 8 7 8 12 13 12 11 12.

Musical notation for measures 4-7. Below the staff is a TAB section with the following fret numbers: 19 17 16 17 19 17 16 17 20 17 20 20 17 19 17 15 17 19 17 19 15 17 19 17 15 17.

Musical notation for measures 8-11. Below the staff is a TAB section with the following fret numbers: 15 17 19 17 15 14 19 17 16 17 16 14 13 14 13 15 13 12 13 12 13 12 11 12.

Musical notation for measures 12-15. Below the staff is a TAB section with the following fret numbers: 19 17 16 17 19 17 16 17 20 17 20 20 17 19 17 15 17 19 15 17 19 17 15 17.

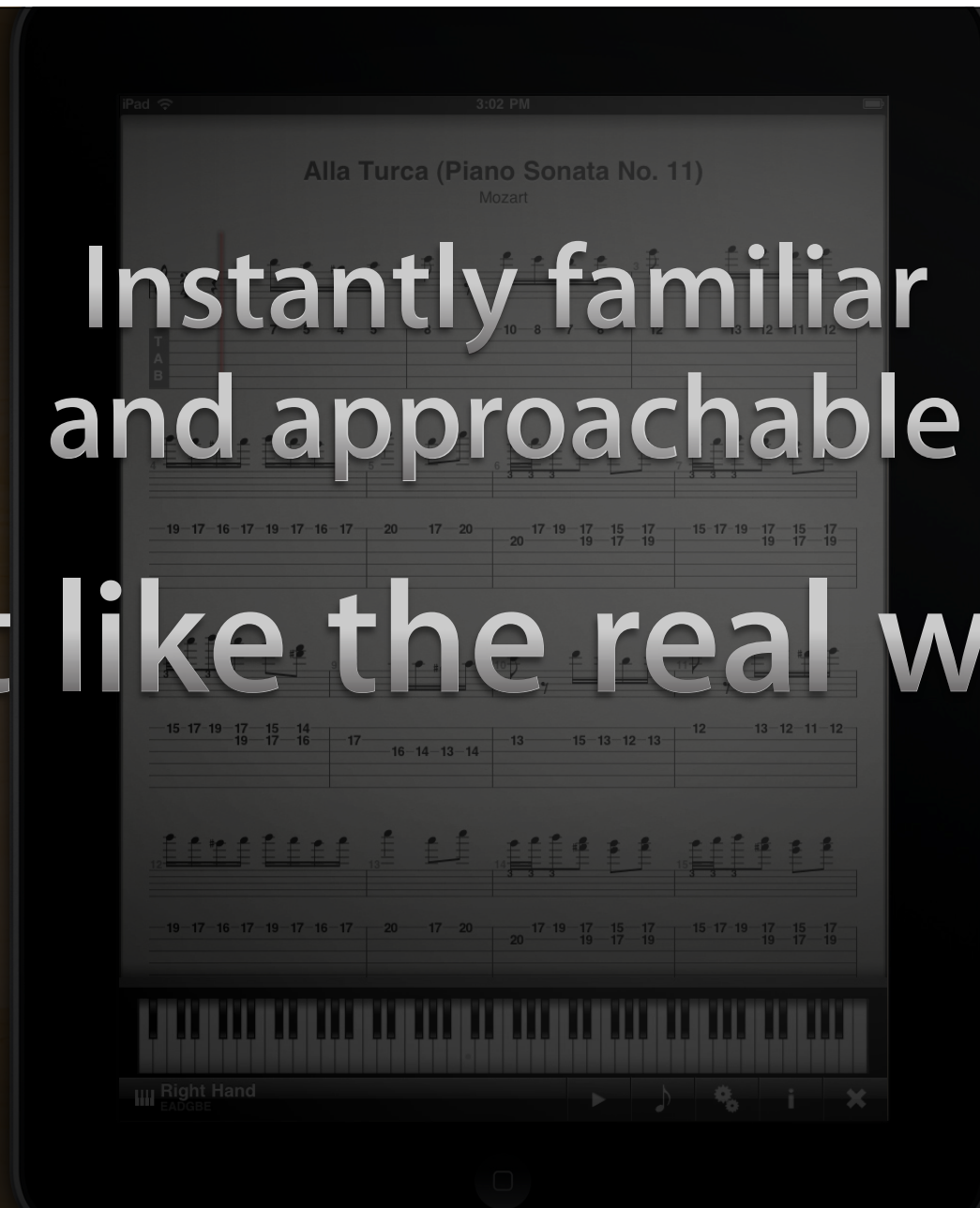


Right Hand  
EADGBE

Navigation icons: play/pause, music note, settings gear, information 'i', and close 'x'.

Instantly familiar  
and approachable

Just like the real world



File Edit Styles Opt. Play Lyrics Melody Soloist Audio GM User Harmony Not'n Help

Combo
  Bass
  Piano
  Drums
  Guitar
  String
  Melody
  Soloist
  Thru

Instrument: Acoustic Piano
 Volume: 90
 Pan: 0
 Reverb: 40
 Chorus: 0
 Bank: 0
 LSB: 0
 M: f
 T: f

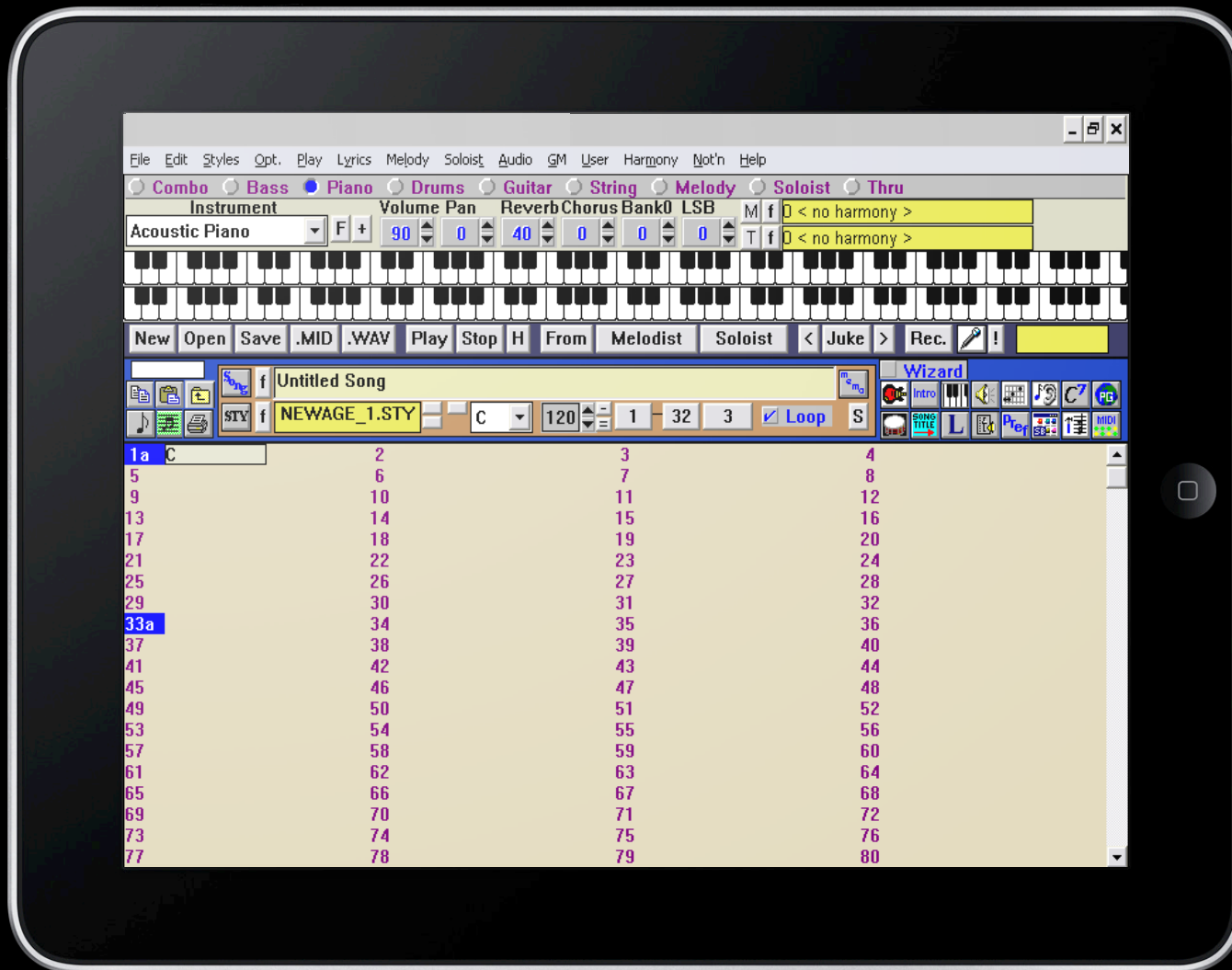
New Open Save .MID .WAV Play Stop H From Melodist Soloist < Juke > Rec. !

f Untitled Song
 Wizard
 Intro
 SING TITLE L Per MIDI

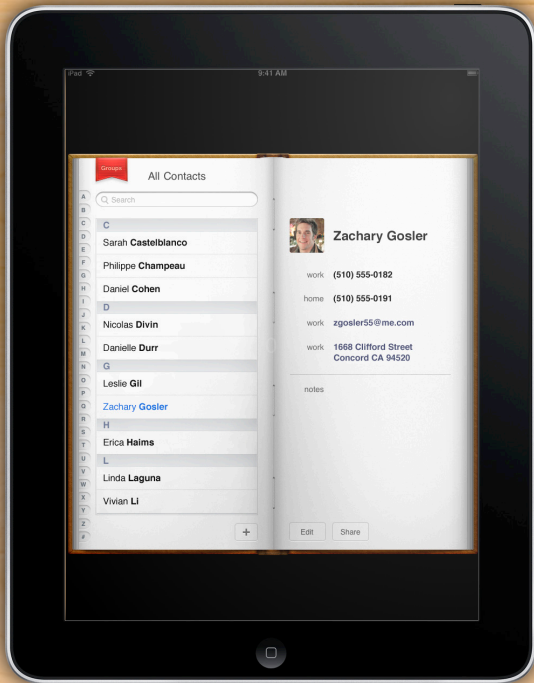
STY f NEWAGE\_1.STY
 C 120 1 32 3 Loop S

1a	C	2	3	4
5		6	7	8
9		10	11	12
13		14	15	16
17		18	19	20
21		22	23	24
25		26	27	28
29		30	31	32
33a		34	35	36
37		38	39	40
41		42	43	44
45		46	47	48
49		50	51	52
53		54	55	56
57		58	59	60
61		62	63	64
65		66	67	68
69		70	71	72
73		74	75	76
77		78	79	80











# Metaphors

- Be careful to not force them
- Enhance the understanding of your app
- Real world is limited sometimes
- It's a frame of reference
- Doesn't need to be a literal interpretation





# Real Visual Scenes

# Non-straight Lines

9 Notes

Q Search

Chocolate Chip Cookie Rec... 9:41 am

To Do List 11:32 am

Book club ideas Yesterday

Holiday shopping Sunday

Restaurants in Paris Saturday

Travel Information Friday

Kids soccer schedule Thursday

Poker standings Thursday

Fantasy football... Jan 11 2010

Chocolate Chip Cookie...



Today

Jan 27 9:41 AM

### Chocolate Chip Cookie Recipe

- 2 1/4 cups all-purpose flour
- 1 teaspoon baking soda
- 1 teaspoon salt
- 1 cup butter (softened)
- 1/4 cup granulated sugar
- 1 cup packed brown sugar
- 2 teaspoons vanilla extract
- 2 eggs
- 1 cup oatmeal
- 2 cups chocolate chips

Optional: 1 cup chopped nuts

Combine flour, baking soda and salt in a small bowl. Beat butter, sugar and vanilla in a large mixing bowl. Add eggs, mix well. Add flour gradually. Stir in oatmeal, chips and nuts. Drop by rounded tablespoon onto baking sheet. Bake at 375 degrees for 9 to 11 minutes. Let stand for 2 minutes. Enjoy!





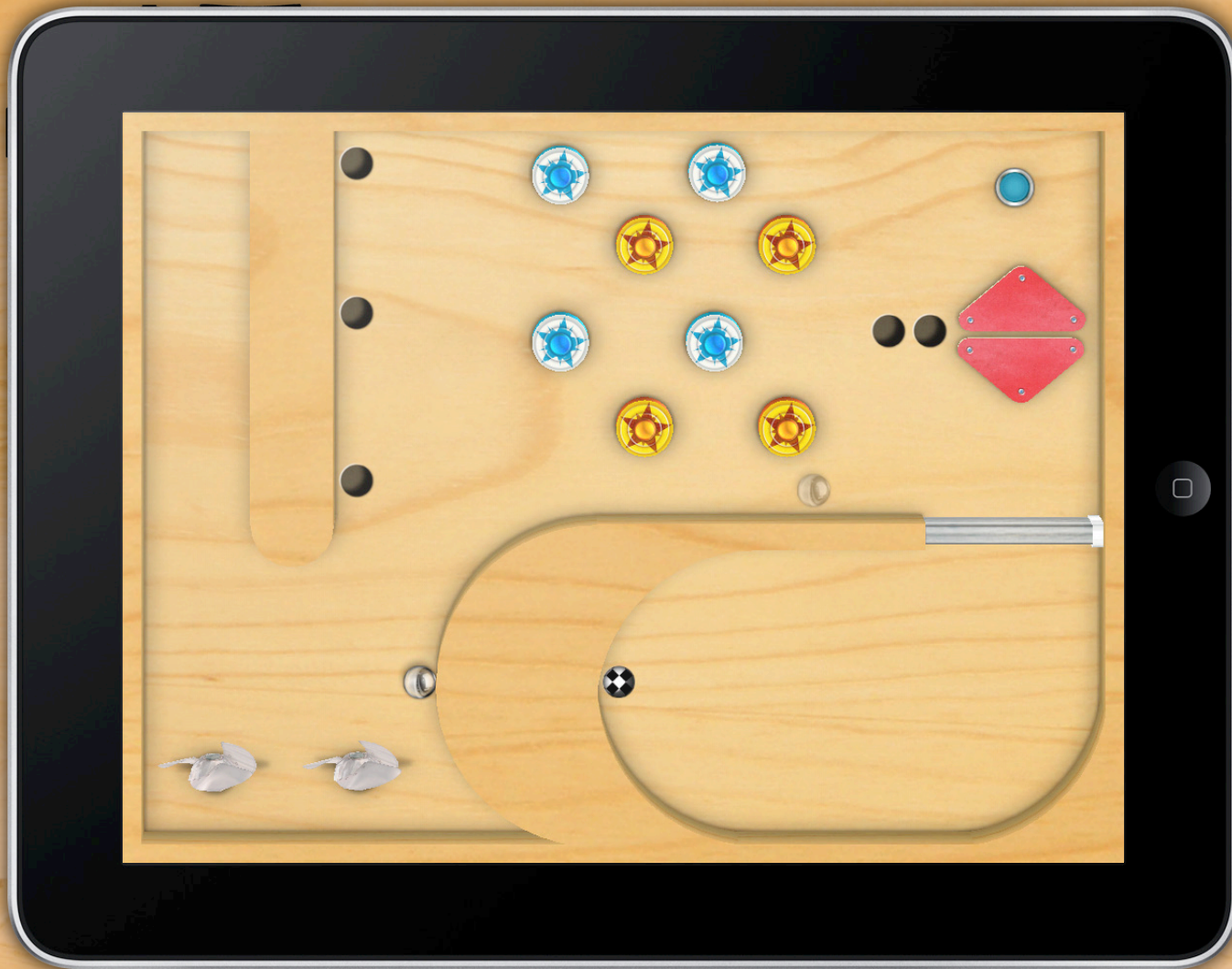
# Gradients and Textures

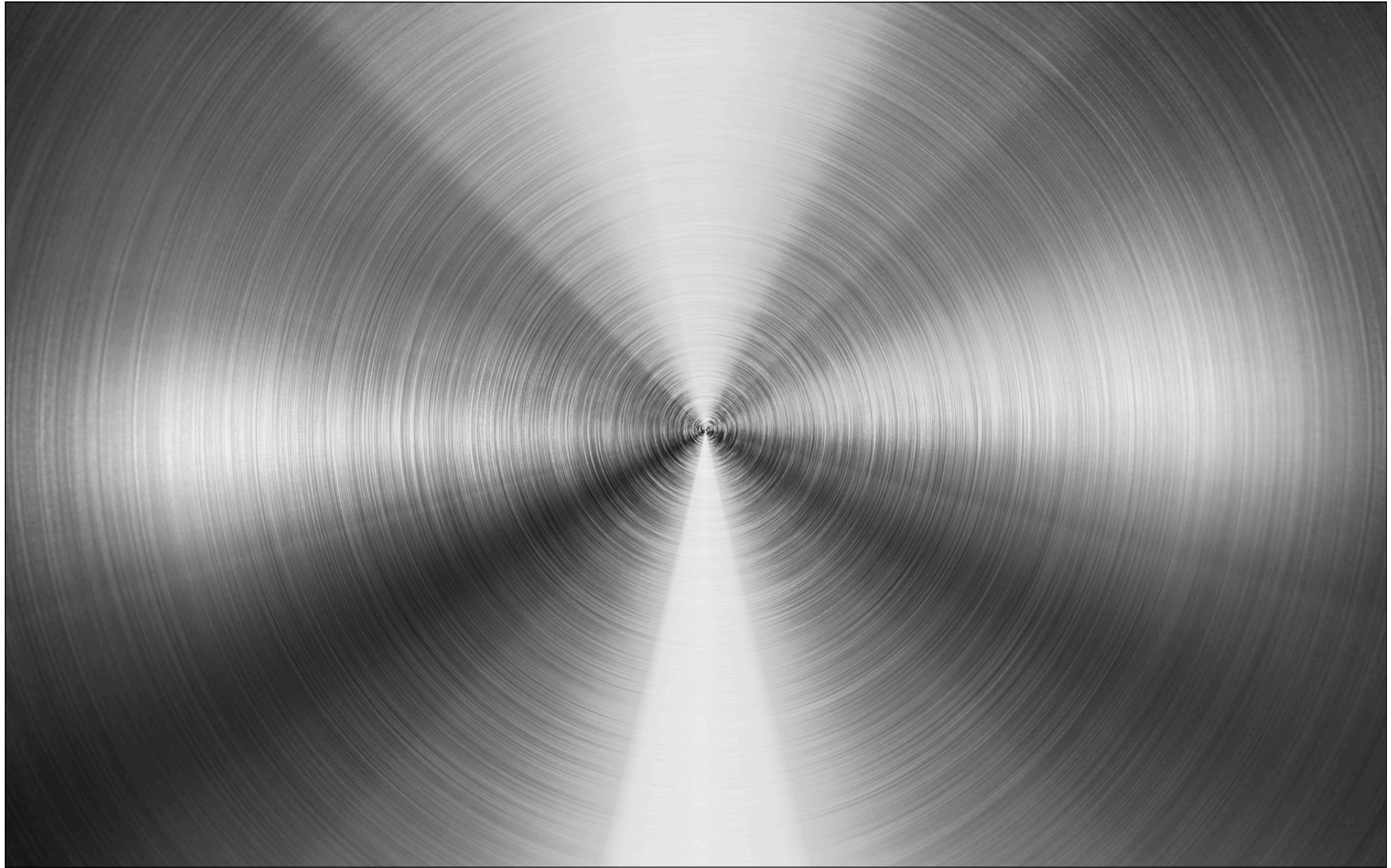




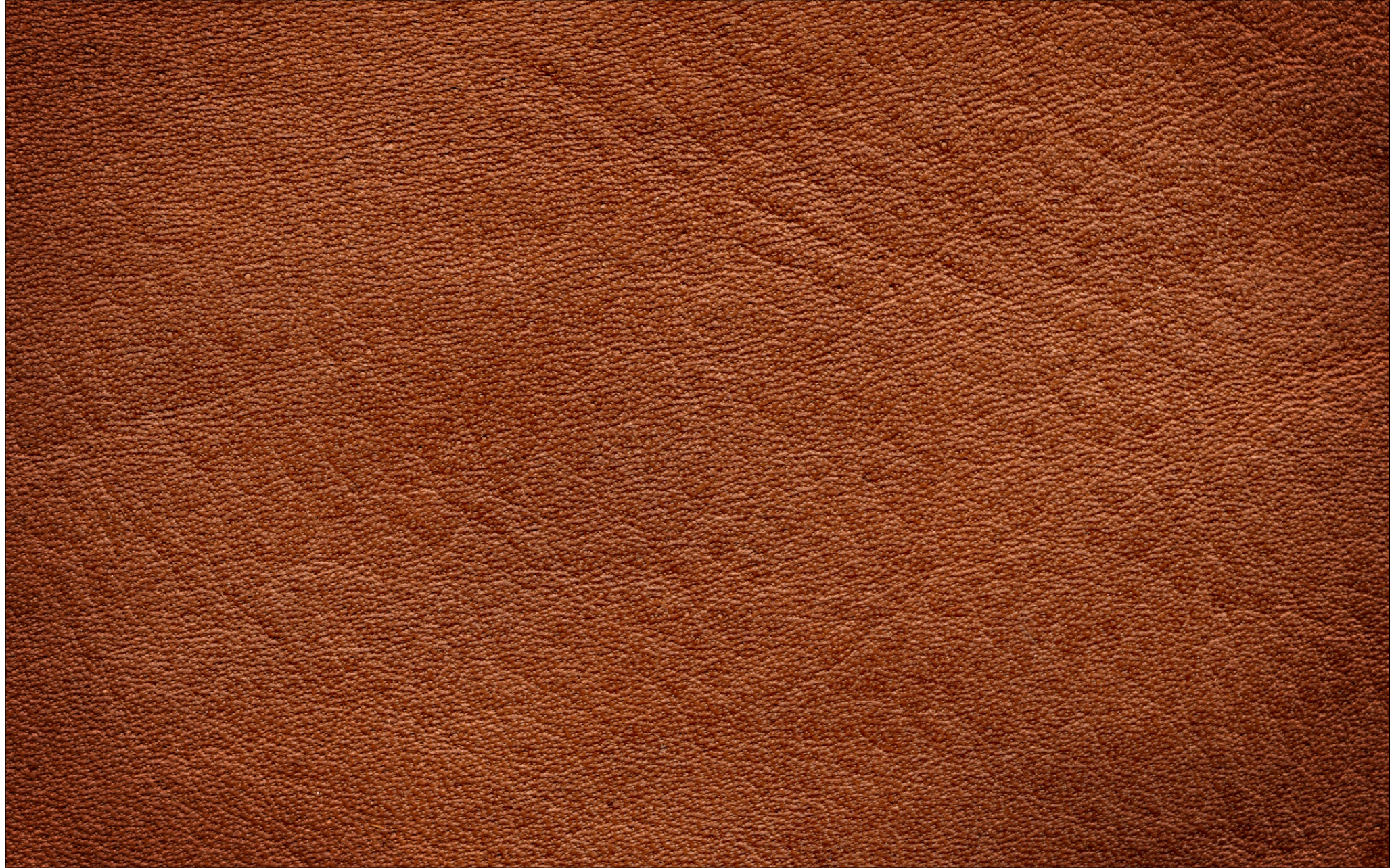








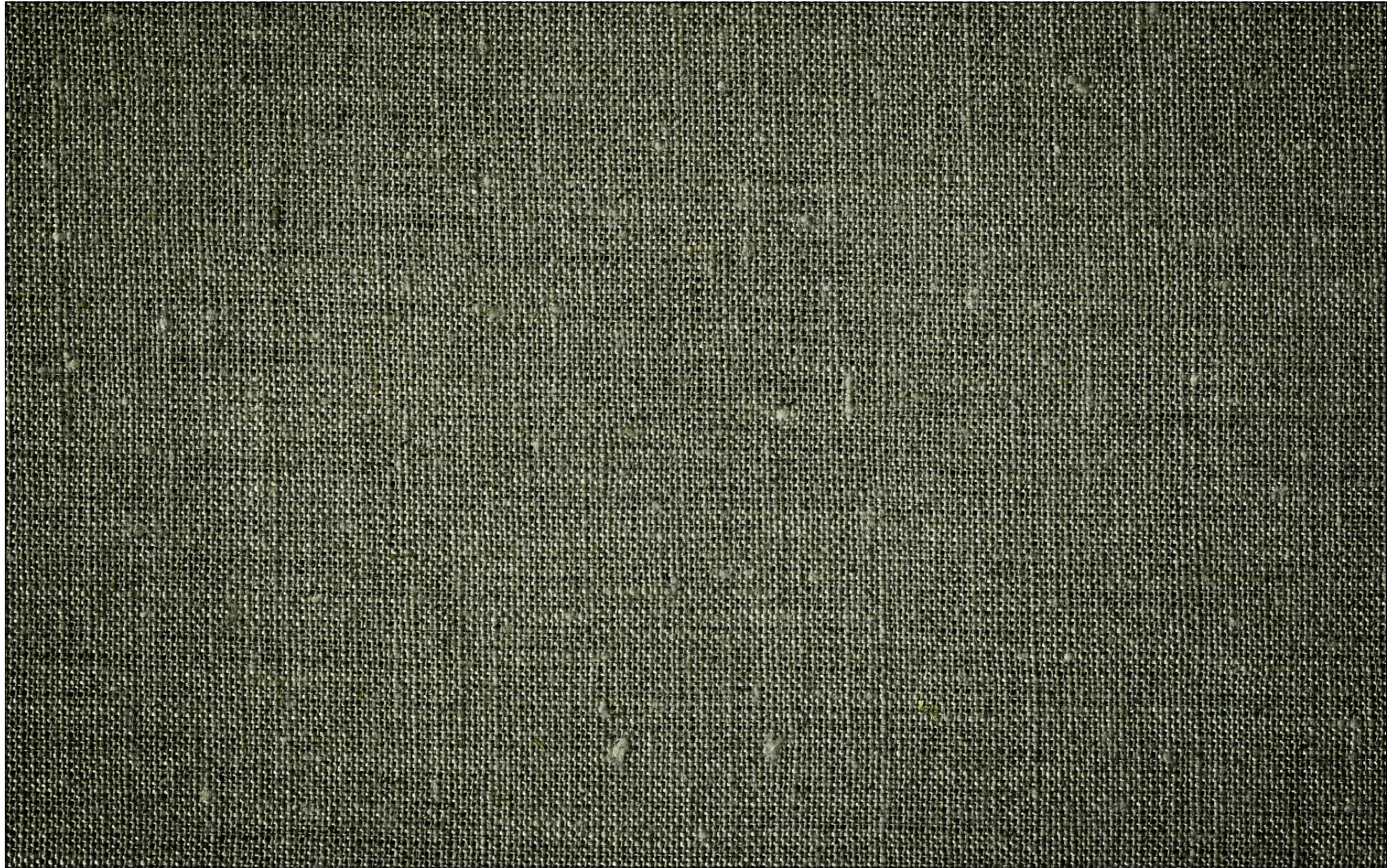














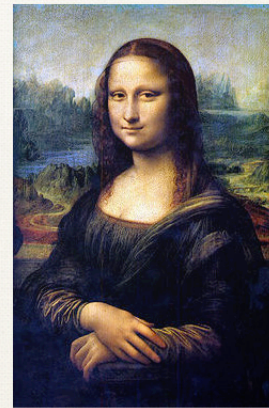
◀ ▶ 📄 📖 + 🔍 Search Wikipedia ↻

## Mona Lisa

***Mona Lisa*** (also known as ***La Gioconda*** or ***La Joconde***) is a **sixteenth-century portrait** painted in **oil** on a poplar panel in **Florence, Italy** by **Leonardo di ser Piero da Vinci** during the **Renaissance**. The work is currently owned by the **Government of France** and is on display at the **Louvre museum** in **Paris** under the title *Portrait of Lisa Gherardini, wife of Francesco del Giocondo*. Arguably, it is the most famous and iconic painting in the world.

The painting is a half-length portrait and depicts a woman whose facial expression is frequently described as enigmatic. Others believe that the slight smile is an indication that the subject is hiding a secret. The

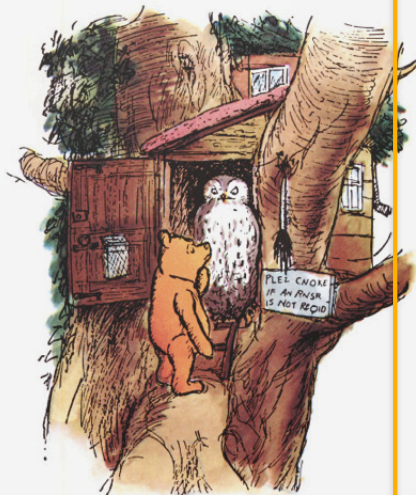
Italian: *La Gioconda*, French: *La Joconde*





# Shadows

A. A. Milne



Pooh nodded.  
"It reminds me of something," he said, "but I can't think what. Where did you get it?"

85 of 240

Winnie-the-Pooh

"I just came across it in the Forest. It was hanging over a bush, and I thought at first somebody lived there, so I rang it, and nothing happened, and then I rang it again very loudly, and it came off in my hand, and as nobody seemed to want it, I took it home, and—"

"Owl," said Pooh solemnly, "you made a mistake. Somebody did want it."

"Who?"

"Eeyore. My dear friend Eeyore. He was—he was fond of it."

"Fond of it?"

"Attached to it," said Winnie-the-Pooh sadly.



86 of 240







# Perspective



- ✓ Use metaphors when appropriate
- ✓ Mimic the real world
- ✓ Deliver high fidelity art



- 1 Structure
- 2 Navigation
- 3 Reduction
- 4 Appearance**
- 5 Feedback
- 6 Optimization

- 1 Structure
- 2 Navigation
- 3 Reduction
- 4 Appearance
- 5 Feedback**
- 6 Optimization

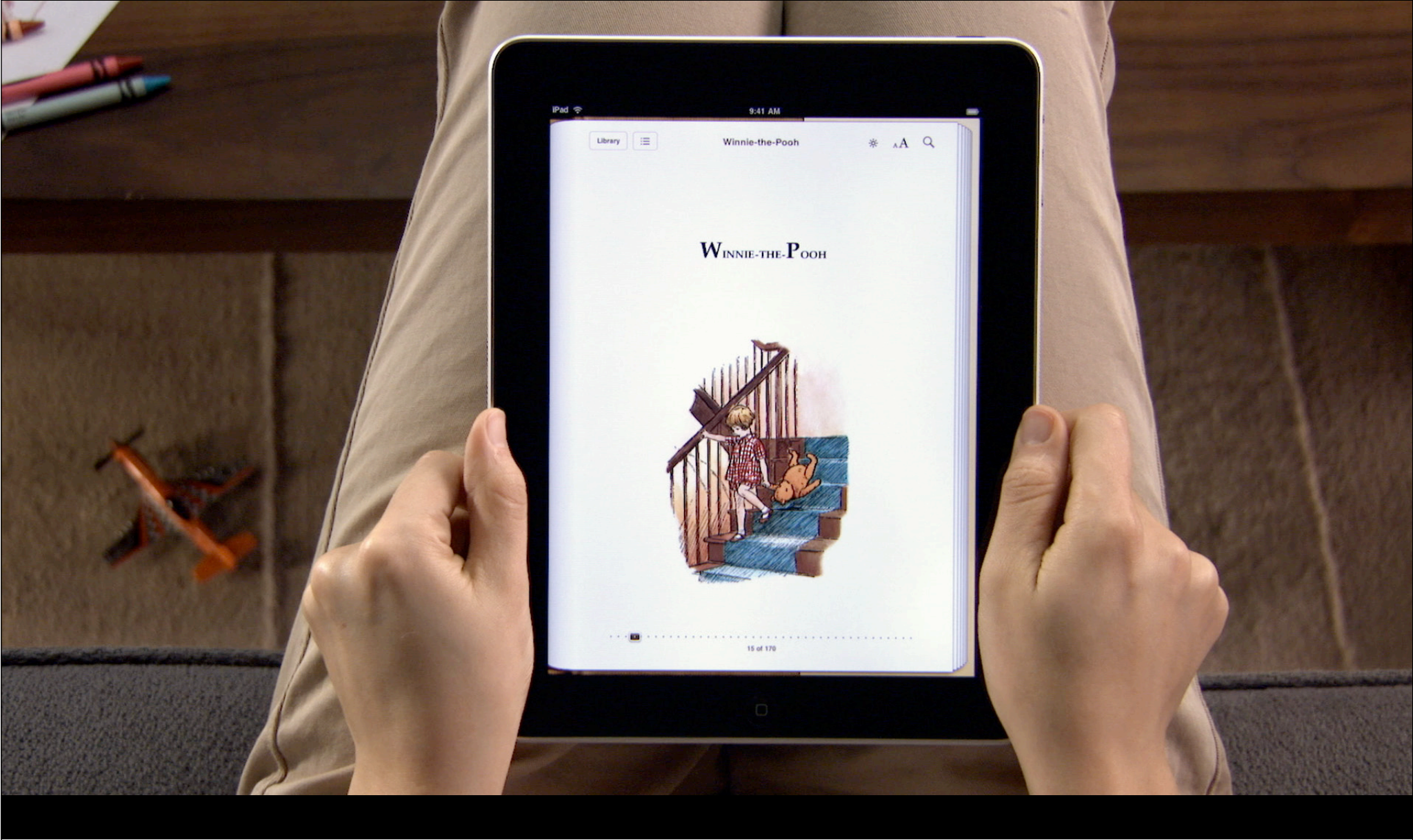
Immediate  
Cinematic  
Appropriate





Immediate







# Cinematic

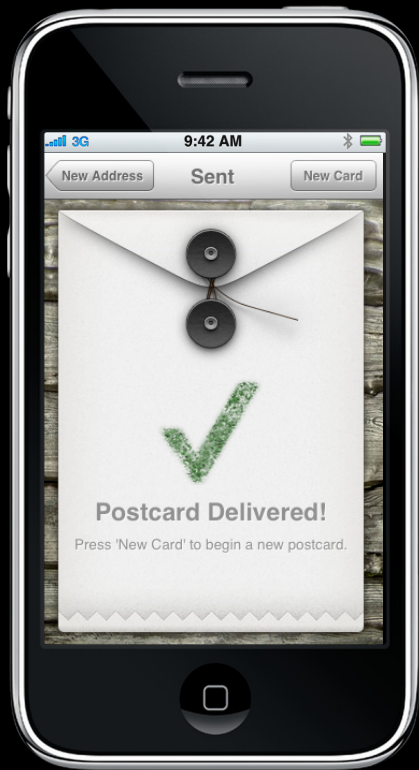




Listen



Appropriate





## History of the Wonders

- \* The first list of wonders was created by the Greeks before 400 BC.
- \* Seven wonders are listed because the Greeks believed the number seven represented perfection and plenty.
- \* Since the list's creation, people across the globe have enjoyed debating which are the most remarkable of Earth's many spectacular sites.



Jay...tie in with the audience



- 1 Structure
- 2 Navigation
- 3 Reduction
- 4 Appearance
- 5 Feedback**
- 6 Optimization

- ✓ Immediate
- ✓ Cinematic
- ✓ Appropriate



- 1 Structure
- 2 Navigation
- 3 Reduction
- 4 Appearance
- 5 Feedback
- 6 Optimization

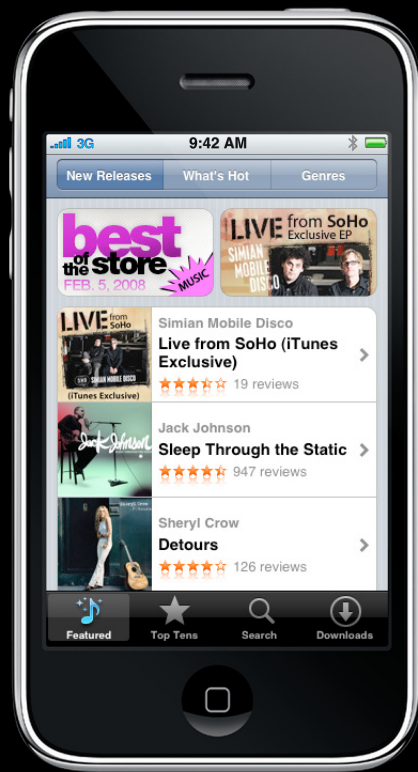
Respond  
Obsess  
Facilitate  
Invent





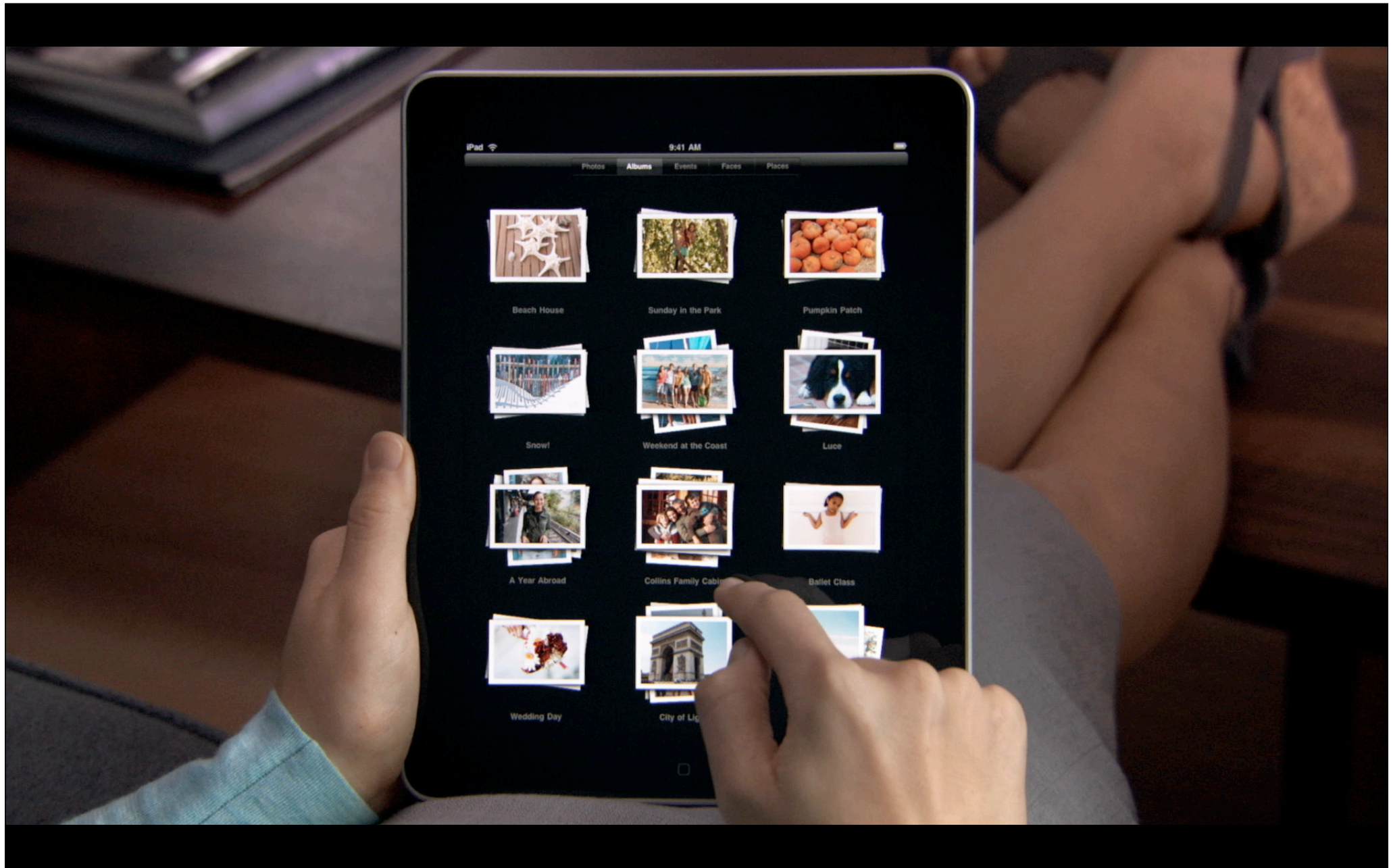
Respond







Obsess



Facilitate





Jay



Invent





COMPANY NAME

# Expense Report

EMPLOYEE:

TO:

PURPOSE:

DEPARTMENT:

DATE

SUBMITTED:

DATE	EXPENSE TYPE	ESTABLISHMENT	LOCATION	COST	NOTES
6/7/10	Travel	Hotel	SF	\$250.00	Business
6/8/10	Travel	Hotel	SF	\$250.00	Business
6/9/10	Travel	Hotel	SF	\$250.00	Business
6/10/10	Travel	Hotel	SF	\$250.00	Business
6/11/10	Travel	Hotel	SF	\$250.00	Business
6/12/10	Travel	Hotel	SF	\$250.00	Business
6/13/10	Travel	Hotel	SF	\$250.00	Business
6/14/10	Travel	Hotel	SF	\$250.00	Business
6/15/10	Travel	Hotel	SF	\$250.00	Business

**TOTAL DUE: \$2,250.00**

EMPLOYEE SIGNATURE:

Date:

APPROVED:

Date:



# Expense Report

EMPLOYEE:

TO:

PURPOSE:

DEPARTMENT:

DATE  
SUBMITTED:

DATE	EXPENSE TYPE	ESTABLISHMENT	LOCATION	COST	NOTES
6/7/10	Travel	Hotel	SF	\$250.00	Business
6/8/10	Travel	Hotel	SF	\$250.00	Business
6/9/10	Travel	Hotel	SF	\$250.00	Business
6/10/10	Travel	Hotel	SF	\$250.00	Business
6/11/10	Travel	Hotel	SF	\$250.00	Business
6/12/10	Travel	Hotel	SF	\$250.00	Business
6/13/10	Travel	Hotel	SF	\$250.00	Business
6/14/10	Travel	Hotel	SF	\$250.00	Business
6/15/10	Travel	Hotel	SF	\$250.00	Business

**TOTAL DUE: \$2,250.00**

EMPLOYEE SIGNATURE:

APPROVED:

Date:

Date:





# Expense Report

COMPANY NAME

EMPLOYEE:  
TO:  
PURPOSE:  
DEPARTMENT:  
DATE SUBMITTED:

DATE	EXPENSE TYPE	ESTABLISHMENT	LOCATION	COST	NOTES
6/7/10	Travel	Hotel	SF	\$250.00	Business
6/8/10	Travel	Hotel	SF	\$250.00	Business
6/9/10	Travel	Hotel	SF	\$250.00	Business
6/10/10	Travel	Hotel	SF	\$250.00	Business
6/11/10	Travel	Hotel	SF	\$250.00	Business
6/12/10	Travel	Hotel	SF	\$250.00	Business
6/13/10	Travel	Hotel	SF	\$250.00	Business
6/14/10	Travel	Hotel	SF	\$250.00	Business
6/15/10	Travel	Hotel	SF	\$250.00	Business

TOTAL DUE: \$2,250.00

42 Jun 7 2010 12 00 00 AM Done

Date & Time

Jan 1 Feb 2 Mar 3

Apr 4 May 5 Jun 6

Jul 7 Aug 8 Sep 9

Oct 10 Nov 11 Dec 12

next→

next←



iPad 2:21 PM 25%  
 My Spreadsheets Undo Expense Report

Expense Report +

Expense Report

COMPANY NAME

EMPLOYEE:  
 TO:  
 PURPOSE:  
 DEPARTMENT:  
 DATE SUBMITTED:

DATE	EXPENSE TYPE	ESTABLISHMENT	LOCATION	COST	NOTES
6/7/10	Travel	Hotel	SF	\$250.00	Business
6/8/10	Travel	Hotel	SF	\$250.00	Business
6/9/10	Travel	Hotel	SF	\$250.00	Business
6/10/10	Travel	Hotel	SF	\$250.00	Business
6/11/10	Travel	Hotel	SF	\$250.00	Business
6/12/10	Travel	Hotel	SF	\$250.00	Business
6/13/10	Travel	Hotel	SF	\$250.00	Business
6/14/10	Travel	Hotel	SF	\$250.00	Business
6/15/10	Travel	Hotel	SF	\$250.00	Business
<b>TOTAL DUE:</b>				<b>\$2,250.00</b>	

42 \$ 250 Done

Date: Date:

\$ 7 8 9 ✕  
 % 4 5 6 next→  
 ★★★★★ 1 2 3  
 ☑ +/- 0 . next←

My Spreadsheets    Undo    Expense Report    2:22 PM    25%

Expense Report

COMPANY NAME

EMPLOYEE:  
TO:  
PURPOSE:  
DEPARTMENT:  
DATE SUBMITTED:

	A	B	C	D	E	F
1	DATE	EXPENSE TYPE	ESTABLISHMENT	LOCATION	COST	NOTES
2	6/7/10	Travel	Hotel	SF	\$250.00	Business
3	6/8/10	Travel	Hotel	SF	\$250.00	Business
4	6/9/10	Travel	Hotel	SF	\$250.00	Business
5	6/10/10	Travel	Hotel	SF	\$250.00	Business
6	6/11/10	Travel	Hotel	SF	\$250.00	Business
7	6/12/10	Travel	Hotel	SF	\$250.00	Business
8	6/13/10	Travel	Hotel	SF	\$250.00	Business
9	6/14/10	Travel	Hotel	SF	\$250.00	Business
10	6/15/10	Travel	Hotel	SF	\$250.00	Business
11	TOTAL DUE:				\$2,250.00	

SUM Cost

Date:    Date:

( ) , 7 8 9 functions

% x + 4 5 6 "abc" →

^ ÷ - 1 2 3

& ≤ ≠ SUM 0 . true/false ↵

- 1 Structure
- 2 Navigation
- 3 Reduction
- 4 Appearance
- 5 Feedback
- 6 Optimization**



✓ Respond

✓ Obsess

✓ Facilitate

✓ Invent

1 Structure

2 Navigation

3 Reduction

4 Appearance

5 Feedback

6 Optimization

Lastly...



1 Structure

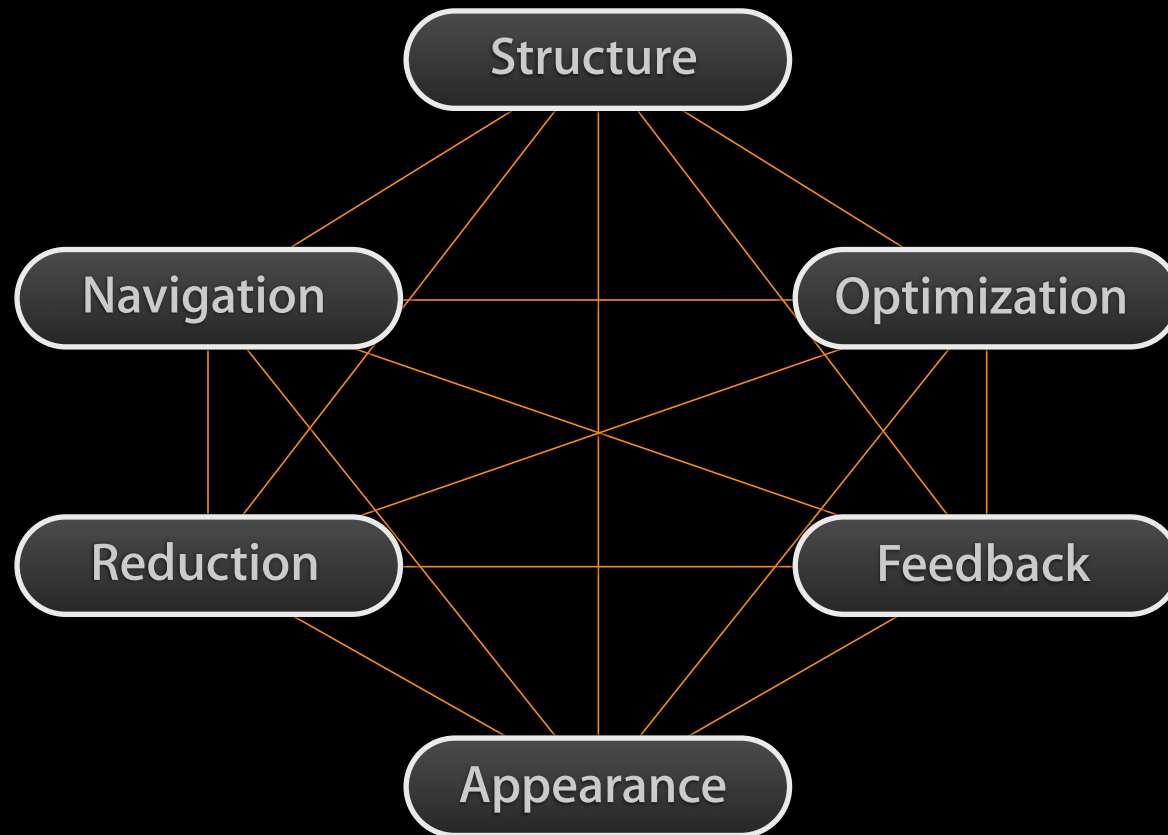
2 Navigation

3 Reduction

4 Appearance

5 Feedback

6 Optimization



**Make it Great**



# More Information

**John Geary**

User Experience Evangelist

[geary@apple.com](mailto:geary@apple.com)

## Documentation

iPad and iPhone Human Interface Guidelines

<http://developer.apple.com/iphone>



The last slide  
after the logo is  
intentionally  
left blank for  
all



