Styling your iOS apps

UIAppearance and other tips

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Agenda

- Overview of design

- But I'm not a designer!?!

- UIAppearance

- Tricks

- References

"Your app shouldn't look like your database threw up."
Aral Balkan @ NDC Oslo
http://aralbalkan.com/

What is design?

- Means different things to different people

- To me, it's how an application works from the users perspective

- Includes how it looks, but not exclusively

- Think User Interaction or User Experience, not User Interface.

Where to begin?

Start on paper

- It's quick and easy to change

- You don't have to be a "designer", iOS is very systematic

- Gets you away from the desktop

- Search for "iphone template pdf" - lots of free ones.

iOS Visual Proportions - http://bit.ly/qzZfnR

Tip!

- Grab a larger, grid-lined Moleskine

- 10x15 squares is exactly an iPhone 4S screen size

- Take photos of it, and crop on the device. Swipe through to test your applications flow.

Work out what your app is

Sarah Parmenter | http://www.sazzy.co.uk/
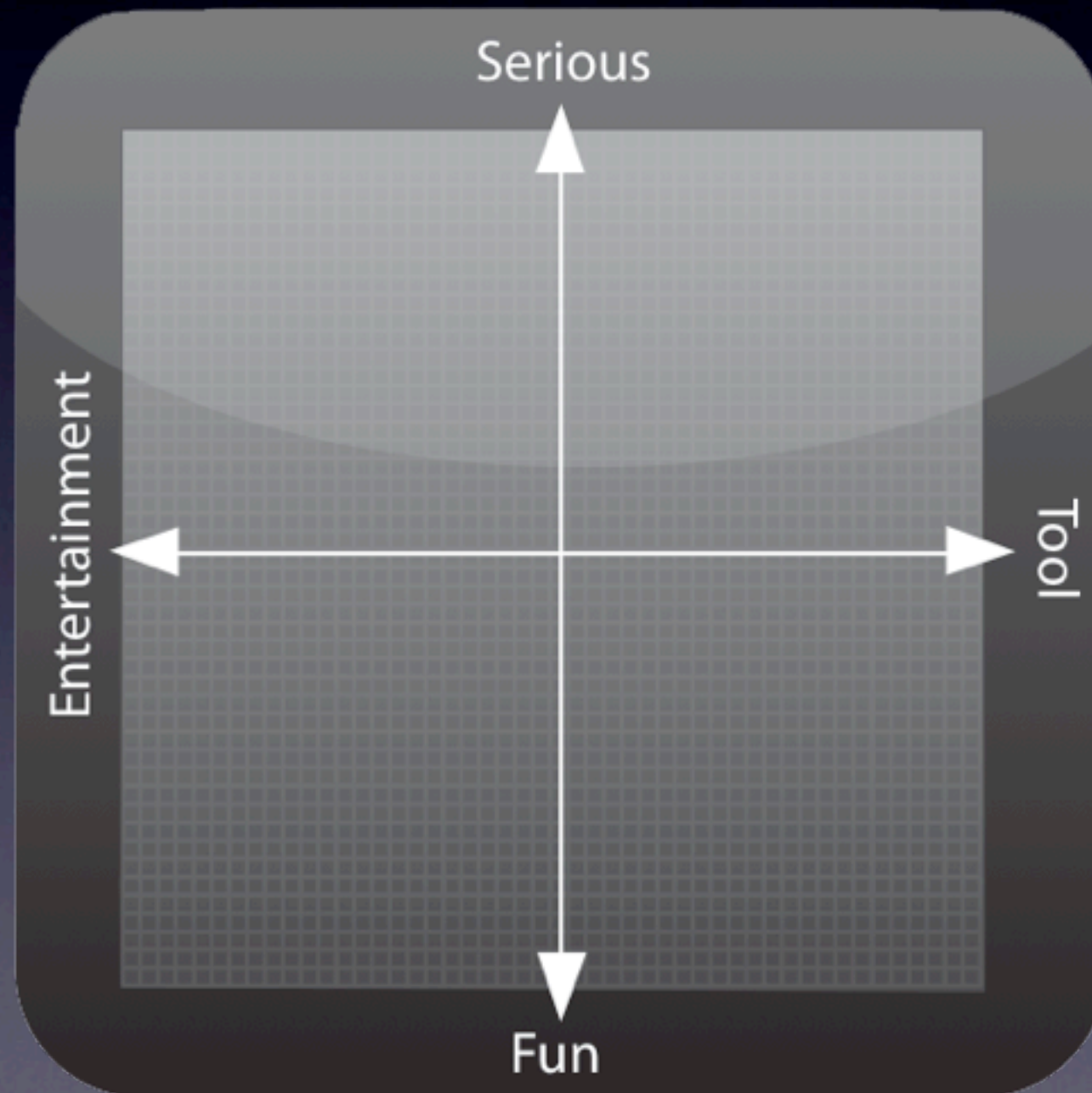
- Serious Tool: Mail, Dropbox
  - Apple UI. Limited colors; data is the most important thing;

- Fun Tool: Speedtest.net, Twitter
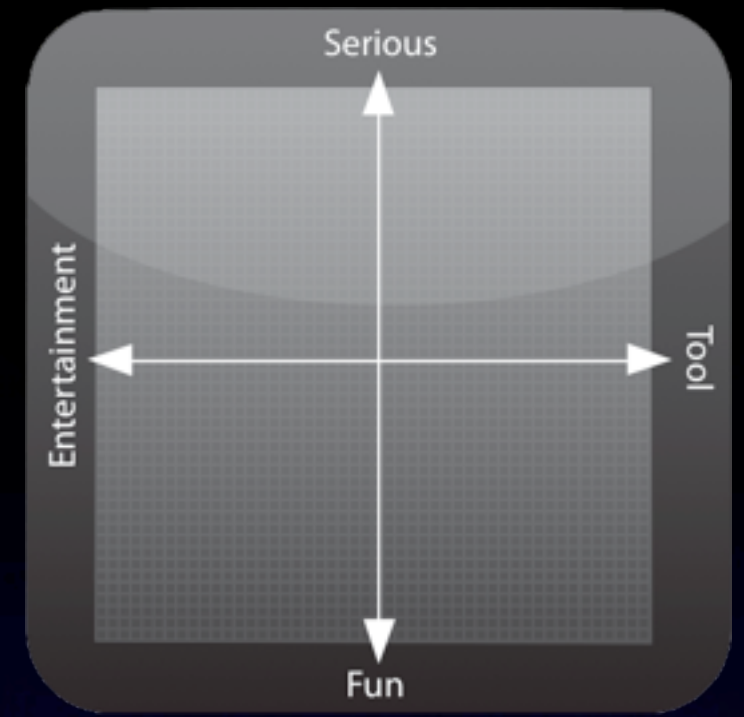 - Either Apple or custom, but moderate use of graphics.

- Fun Entertainment: Games
  - Everything custom. Learn to love OpenGL. Hire a designer. Or 2.

- Serious Entertainment: AppStore
  - Apple UI or some Custom UI. Very content heavy. Lots of tabs.

- Utility: Weather
  - Usually custom, but can be either. Single screen. Usually single tasking apps

But I'm a developer, not a designer!

- A lot of these tricks are easy

- Pay attention to details, compare yourself to other top apps

- Use existing tools and services

- Employ a designer, especially for icons

Customizations

- TintColor (iOS 2+)

- UIAppearance (iOS 5+)

Tint Color

Extremely simple, but limited


```
if (NavigationController != null)
{
  NavigationController.NavigationBar.TintColor = Resources.NavBarTintColor;
}
```

Works in iOS2+
https://gist.github.com/2874588

UIAppearance


```
public static void SetAppearance()
{
  if (Util.IsIOS5OrBetter)
  {
    UINavigationBar.Appearance.SetBackgroundImage(
      Resources.NavBarHeaderBackground,
      UIBarMetrics.Default);

    UIBarButtonItem.Appearance.SetBackgroundImage(
      Resources.BarButtonNormal.CreateResizableImage(new UIEdgeInsets(0,5,0,5)),
      UIControlState.Normal,
      UIBarMetrics.Default);
    UIBarButtonItem.Appearance.SetBackButtonBackgroundImage(
      Resources.BarButtonBackNormal.CreateResizableImage(new UIEdgeInsets(0,15,0,5)),
      UIControlState.Normal,
      UIBarMetrics.Default);
  }
}
```
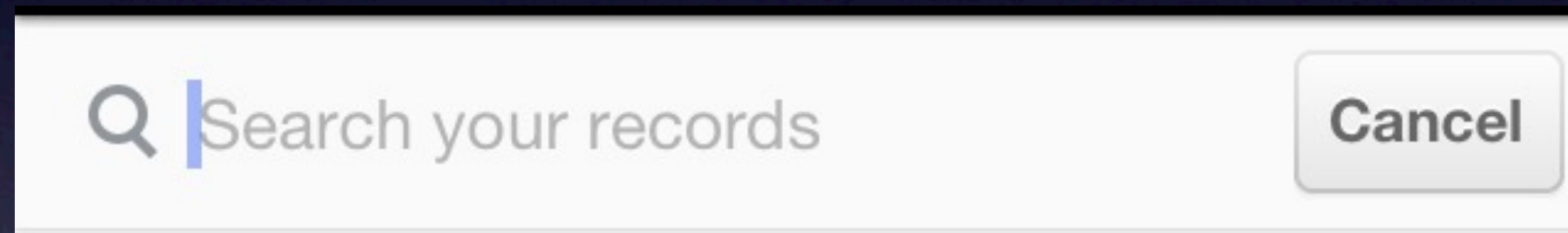
iOS5+ only (80%+ of all devices)
https://gist.github.com/2874948

You can also set the style when X is contained in Y

All buttons are UIBarButtonItem


```
//Only if the UIBarButtonItem is in a UISearchBar
UIBarButtonItem.AppearanceWhenContainedIn(typeof(UISearchBar)).SetBackgroundImage (
    Resources.BarButtonCancelNormal.CreateResizableImage(new UIEdgeInsets(5,5,5,5)),
    UIControlState.Normal,
    UIBarMetrics.Default);
```

(You are going to want to look up
UIImage.CreateResizableImage)

UIAppearance

- A lot more than just background images

- Most customisable properties can be set via UIAppearance

  - The ones you can't appear to be oversights

- Like everything in iOS, it's a case of working out which property changes the thing you want to change

Where can I use it?

- MonoTouch wraps it up in nice discoverable classes (better than ObjC!)

- Most iOS controls support UIAppearance

- It persists to system items you call

  - e.g. ABPeoplePickerNavigationController

- Expect more to be added in iOS6, some glaring holes

- Makes your app degrade nicely on old hardware.

Tip!

Apple WWDC videos are available to all registered developers*

https://developer.apple.com/videos/wwdc/2012/

Sessions of special note: 211; 216.
Also: 221; 238; 230
Remember video is available in SD if you hunt a little. And all slide decks are in PDF format.

* Registration is free! It is all under NDA though...

Managing assets

- Try to keep them all in one folder

  - Not all in the root folder

- If you have 2 assemblies, both with /images, they will be merged (which may be fine)

- Consider a single static class which contains a reference to all the images, colors, and other resources

```csharp
namespace MyApp
{
  public static class Resources
  {
    public static UIImage Overview = UIImage.FromFile("images/tabbar_overview.png");
    public static UIImage Records = UIImage.FromFile("images/tabbar_records.png");
    public static UIImage Deadlines = UIImage.FromFile("images/tabbar_deadlines.png");
    public static UIImage You = UIImage.FromFile("images/tabbar_you.png");


    public static UIColor UIGreen = UIColor.FromRGBA(96,152,0,255);
    public static UIColor UIRed = UIColor.FromRGBA(202,29,29,255);
    public static UIColor UIBlack = UIColor.FromRGBA(82,82,82,255);
    public static UIColor UIGrey = UIColor.FromRGBA(155,155,155,255);
    public static UIColor UIWhite = UIColor.FromRGBA(250,250,250,255);
    public static UIColor UIBlue = UIColor.FromRGBA (19,96,139,255);
    public static UIColor UISectionTitleColor = UIColor.FromRGBA(102,102,102,255);
    public static UIColor NavBarTintColor = UIColor.FromRGBA(25,80,120,255);
    public static UIColor CancelButtonEnabled = UIColor.FromRGBA(102,102,102,255);
    public static UIColor CancelButtonDisabled = UIColor.FromRGBA(187,187,187,255);

    public static UIImage HeaderTearoff = UIImage.FromFile("images/headertearoff.png");
    public static UIImage FooterTearoff = UIImage.FromFile("images/footertearoff.png");
    public static UIImage InvoiceBody = UIImage.FromFile("images/invoicebackground.png");

    //lots more here

  }
}
```

https://gist.github.com/2876233
http://docs.xamarin.com/ios/tutorials/Working_with_Images
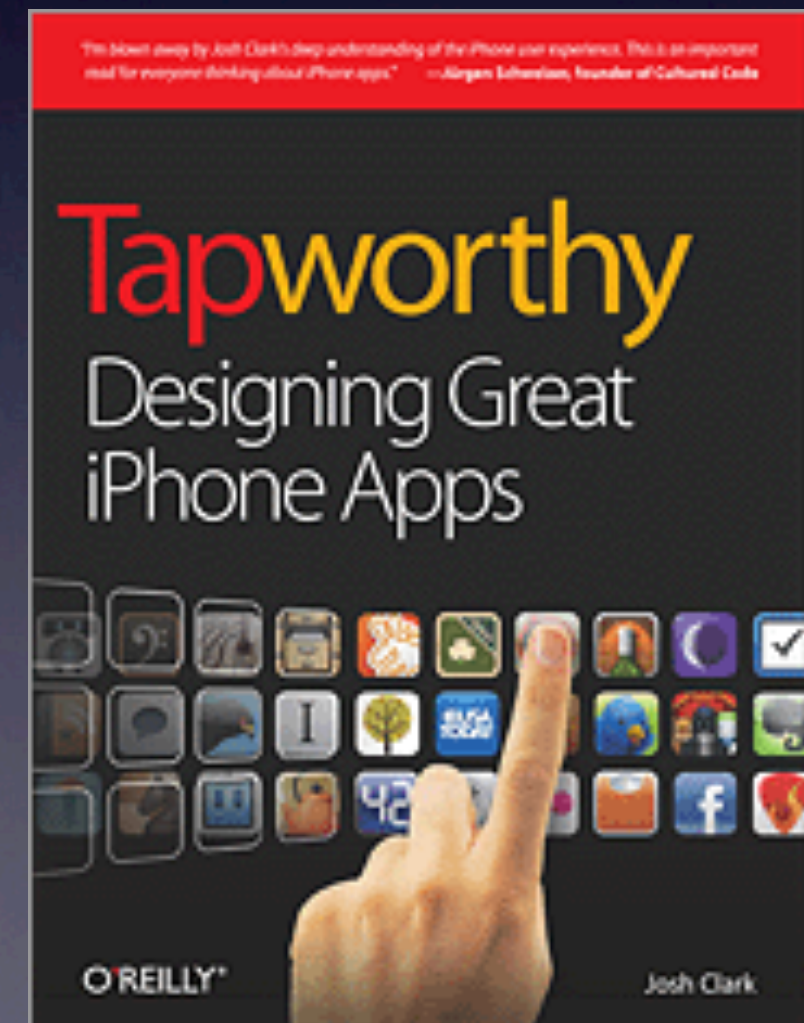
Demo

Source code is at

https://github.com/nicwise/xaminar-uiappearance

Essentials

- A good graphics editor

  - Photoshop ($$$) or Pixelmator ($). PaintCode if you have some skill.

- Glyphish and Symbolicon icon packs

  - http://glyphish.com / http://symbolicons.com/ - $25-$40

- Unretina (auto-scales @2x to normal)

  - https://github.com/stuartkhall/Unretiner (free on github)

  - Prepo, Screentaker

- AppDesignVault

  - Great skins to get you started, from $70 each

References

- iOS Visual Proportions

  - http://aentan.com/design/new-visual-proportions-for-the-ios-user-interface/

- CreateResizableImage

  - http://tirania.org/monomac/archive/2012/Jan-30.html

- Sample source is on GitHub

  - https://github.com/nicwise/xaminar-uiappearance

- Josh Clark - Tapworthy.

Summary

- Always think your application through before you start (paper and coffee are good!)

- Hiring a designer isn't that expensive, especially for icons

- You can go a long way without even opening an image editor. Just look at what Apple and your favourite apps have done

- Start with the Apple Human Interface Guidelines (HIG).

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http://bit.ly/xamfeedback

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