

Good & Bad User Interfaces

Individual Assignment Nr.1 by Ben Moritz Castello

Introduction

For most people, the digital user interface they use the most is that of their operating system. In this essay, I will discuss two examples: Windows Phone 10, which was released by Microsoft, and iOS for the iPhone.

To provide an understanding of the purpose of a phone operating system's user interface, I have compiled a list of general goals. These will all be explained, and then we will iterate through them to see how iOS and Windows Phone overcome these challenges. I must admit that I am biased, as someone who has always had to explain phone-related issues to their parents, a task which became much easier once they switched to iOS.

Windows Phone 10 was discontinued in 2020, as was its store in 2025. Therefore, I will use screenshots from general iOS versions around 2020, as the core of the system has not changed much since then, to explain the core functions.

What are the goals of a good Mobile Operating System UI?

Goal Nr. 1: Being Simple, not confusing

Mobile operating systems really don't have it easy. The user interface has to be intuitive so that people instantly understand what to do. It must be simple enough to enable people to accomplish necessary tasks and handle hundreds of notifications each day, while also making them feel good about using it. The interface must become so intuitive that users can use their phones at any time without ever feeling lost.

Goal Nr. 2: Good Navigation

The system must be clean and intuitive so that users always know where they are. This applies to terminology, design and the layout of menus.

Goal Nr. 3: Labels & Terminology

Terminology is often overlooked, but I think it is key to easy usability. Using real-world analogies such as 'Desktop' or 'Settings' helps to explain what they are for in just a single word.

Goal Nr. 4: Buttons

It sounds so easy: create a button that does exactly what it says. It also needs to be reasonably sized and visually appealing, ideally revealing the function in many different ways (colour, font, pictograms).

Goal Nr. 5: Visual Layout

Important things should be easy to spot. Users should not have to think about which button takes them back to the previous page. The functional differences between the elements on the screen should generally be self-explanatory. Can I click this?

Goal Nr. 6: Consistent Look

The colour theme and the one of single elements must have significant meaning. If the appearance changes, there must be a reason for it. Font sizes should be reasonable.

Goal Nr. 7: Fitted to the Hardware

Acknowledge that the device on which the system runs has unique capabilities and make use of them. Experiment with them, but don't work against them.

Main Goal: UI is a Game of Rules

The operating system must teach users the rules and react accordingly if they follow them. User interfaces (UIs) and games have much in common as they are both formal systems.¹

Does iOS achieve those goals?

Goal Nr. 1: Being Simple, not confusing.



Image Source ²

The iOS home screen is a dream come true for anyone who loves minimalist user experiences. The standard app icons resemble real-world objects, and everything looks nice and tidy.

Goal Nr. 2: Good Navigation

- The back button is always in the same place.
 - The most important apps are centred in the middle of the dock.
 - The most important settings are always accessible via the Notification and Control Centres.
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Goal Nr. 3: Labels & Terminology



Every app in the iOS system refers to a real-life context and helps us to make sense of things.
Example: The Wallet app.

Image Source [3](#)

Goal Nr. 4: Buttons: Should do what they say, reasonably usable.

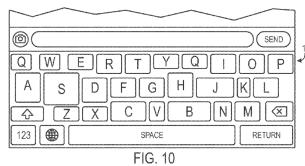


FIG. 10

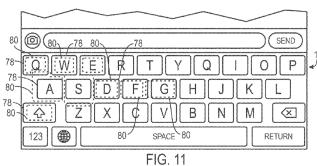


FIG. 11

The iOS keyboard is the best example of good button design. Not only is it easily readable, it also uses an algorithm to predict the next letter and changes the size of the key hitbox.

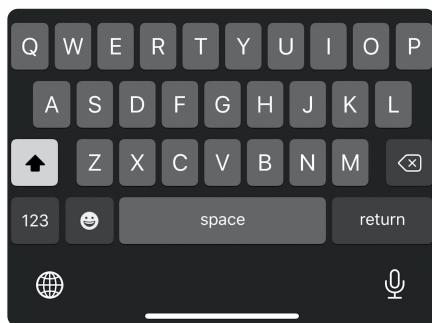


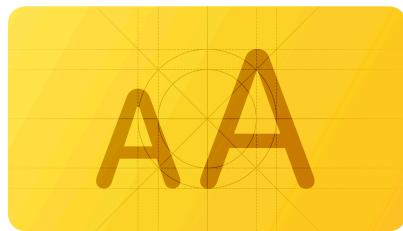
Image Sources [4](#) [5](#)

Goal Nr. 5: Visual Layout.

By default, the system shows the user the most important apps. You can use the iPhone just like this, theoretically. Each of the default iPhone apps has a distinctive colour, and if two have the same colour, there is a reason for it.

For example, Music is red, Weather is blue, Settings are grey and FaceTime and Telephone are both green.

Goal Nr. 6: Consistent Look.



All of the apps have a consistent font size and use the same SF (San Francisco) typeface, which was developed in-house for optimal readability. Developers are advised which typeface to use for optimal readability at different sizes.

Image Source ⁶

Goal Nr. 7: Fitted to the Hardware.

- Screen size makes a difference to how everything is sorted out. For example, iPhones with smaller screens have one fewer row of apps.
- It was the first system to introduce multi-touch.
- UI elements are always sized according to the average size of a fingertip for the phone.

Main Goal: UI is a Game of Rules

Put simply, iPhones do what they are supposed to do. The system is predictable. They do what you expect them to do.

Does Windows Phone 10 achieve those goals?

Goal Nr. 1: Being Simple, not confusing.

Windows Phone started out as a system with an extremely minimalist and simple design philosophy. However, Windows Phone 10 was the last of the Windows Phone era. Released in 2015 alongside Windows 10 for PC, it was intended as a middle ground between mobile and PC operating systems. It even offered the option of using a stripped-down version of Windows 10, called Continuum.

However, it ended up being just a Frankenstein-esque copy of the desktop user interface.

Goal Nr. 2: Good Navigation. Clean System, the User always knows, where they are.



Image Source [7](#)

Everything was clean. The design was minimalist. But how can you actually find your way around here?

Goal Nr. 3: Labels & Terminology: Using common known terms for things, so everybody can use it.

If you heard the word "Action Center" what would you think of? A gym? A casino? A place where superagents are training?

No, it is the Windows Phone 10 Notification Center.

Goal Nr. 4: Buttons: Should do what they say, reasonably usable.



Image Source [8](#)

The buttons in the apps were all different sizes, which made them a huge mess.

Goal Nr. 5: Visual Layout.

- There is far too much whitespace.
- There is no consistent symmetry of important elements.
- Too many different colours!

The Live Tiles tried to be both widgets and app shortcuts, but were honestly just a place to look at notifications from last week because the system didn't work.

Goal Nr. 6: Consistent Look.

The Windows Phone 10 UI is composed of elements from three different design periods, resulting in a lack of general consistency.

Metro Design (Windows 8/8.1): single-coloured tiles/pictograms.

Fluent Design (Windows 10): an evolution of Metro Design with more transparency, lighting and shadows.

There were no global font settings for the system, so it was always a mix of various font sizes.

Goal Nr. 7: Fitted to the Hardware.



Image Source [9](#)

As can be seen in the picture, Windows Phone 10 barely makes use of the huge display of its flagship model, the Lumia 950 XL. The Lumia 950 XL. This is WhatsApp, in case you couldn't tell.

Main Goal: UI is a Game of Rules

The main components of the system were functional. However, some important aspects were implemented incorrectly:

- Inconsistent reactions:
- Hidden menus: how is a user supposed to know if settings are hidden behind three dots or swiping gestures?
- Inconsistent waiting times: Most of the system was programmed so badly that everything took a second to process.

Where would be room for Improvement?

I'd say that the biggest problem of Windows Phone, not just Windows 10, was that it was fundamentally uninteresting for developers to build apps for. A smartphone ecosystem lives and dies by its apps, and if developers aren't motivated to create for your platform, the entire device becomes much less attractive to users. Windows Phone suffered from a severe chicken-and-egg problem: no apps meant few users, and few users meant no reason for developers to invest time and money.

This problem actually began as early as Windows Phone 7. Microsoft charged smartphone manufacturers for using their OS on produced devices, while competitors like Google with Android were giving their system away practically for free, gaining massive adoption everywhere. Apple, on the other hand, had the App Store and the iPhone ecosystem already locked in, making Windows Phone look even less compelling.

By the time Windows Phone 10 arrived, the platform was already on the back foot. The OS had some genuinely good ideas and a clean, modern interface, but it never had the critical mass of apps or developer interest necessary to make it competitive. Users were left with beautifully designed phones that simply couldn't meet their everyday app needs, and Microsoft itself increasingly lost interest in heavily investing in the platform.

Ultimately, Windows Phone 10 never really had a chance. Its failure was built into the ecosystem from the start: a combination of late market entry, restrictive manufacturer licensing in the early days, and a lack of developer engagement meant it was fighting a battle it could never win. And they would have needed a company that actually has taste.

Sources

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