

Mobile APP Interface Design Process Analysis

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Abstract. this paper mainly introduces the design direction and design principles of UI, and mainly introduces the interface design process of mobile APP. Through the introduction of this paper, readers can preliminarily understand the steps of interface design of mobile APP and have a clear design idea.

Keywords: UI; Design direction; Design principles; The design process.

1. Introduction of the UI

UI is short for User Interface. UI design refers to the overall design of human-computer interaction, operation logic and beautiful interface of software. Good UI design is not only to make the software personalized and tasteful, but also to make the operation of the software comfortable, simple, free and fully reflect the positioning and characteristics of the software.

2. UI Design Direction

One of the most important aspects of human-machine interaction is what we call the interface. User interface design is an important part of screen products. Generally, the interface can be divided into two levels: perception (vision, touch, hearing, etc.) and emotion. Interface design is a job that requires a lot of professional knowledge. Cognitive psychology, design, linguistics and so on play an important role here. Literally, it is two components of user and interface, but in fact, it also includes the interaction between user and interface, so it can be divided into three directions: user research, interaction design, and interface design.

2.1 User Research

User research includes two aspects: one is usability research, which studies how to improve the usability of products so that the design of website interface can be more easily accepted, used and remembered. The second is to explore the potential needs of users through usability research, and provide another idea and method for technological innovation. User research is to study products from the perspective of humanities, to study the needs of users, and to get involved in the development and design of products from the perspective of users. For designers, it's about figuring out how to make their web pages more popular with visitors

User research through the user's use of the environment, browsing habits and other research, so that in the early stage of website interface design, users' expectations of website functions, design and appearance requirements can be integrated into the website development and design process.

2.2 Interaction Design

This part refers to the interaction engineering between human and machine. In the past, interaction design was also done by programmers. In fact, programmers are good at coding rather than interacting with end users. One of the most impressive aspects of using a website is the visual aspect of the site, which is the interface we're talking about. Therefore, although many websites have complete functions, their interaction design is rough, tedious and difficult to use. How to make visitors in the use of the site can easily find their own resources, how to easily achieve the function of the site, to give visitors a happy mood, attract visitors to the next landing, these need to work hard on the site interaction design.

2.3 Interface Design

In the long development of software, interface design has not been taken seriously. People who do interface design are also pejoratively known as "artists". In fact, the website interface design is just like the industrial modeling design of industrial products. A friendly and beautiful interface will bring people comfortable visual enjoyment, close the distance between people and computers, and create selling points for the website. If the website is compared to a person, the website background programming is like human bone and muscle, and the interface is the personal appearance, everyone likes beauty, also has a good visual experience of the website interface is the key to the popularity of the website. Website interface is the external expression of the soul of the website, ignoring the interface design of the website will eventually make your website lose at the starting line. Interface design is not a pure art painting, it needs to locate users, use environment, use mode and design for the end user, is a pure scientific art design. The criterion for testing an interface is not the opinion of a project development team leader or the vote of project members, but the feeling of the end user.

3. UI Design Principles

3.1 Consistency Principle

3.1.1 Consistent Appearance of Elements

The appearance of an interaction element often affects the user's interaction. The same (class) software has a consistent look and feel that helps keep users focused and improves interaction.

3.1.2 Consistent Interaction Behavior

In the interaction model, the interaction behavior of users of different types of elements needs to be consistent after they trigger their corresponding behavior events.

For example: all dialogs that require a user to confirm an action contain at least two buttons to confirm and discard.

3.2 Usability Principles

3.2.1 Understandable

In order for software to be used by users, users must be able to understand the corresponding functions of each element of the software.

If not, you need to provide a non-destructive way for users to understand the functionality of the element by manipulating it.

3.2.2 Can Control

Users are the center of interaction, and interaction elements correspond to the functions required by users. Interaction elements must therefore be user-controlled.

Users can use interactive devices such as keyboards and mice to move and trigger existing interaction elements to reach other interaction elements that were not visible or interactive before.

4. Mobile APP Interface Design Process Analysis

4.1 Analysis of Mobile APP Interface Layout and Layout

4.1.1 Basic Content of Mobile APP Interface Composition

The composition of mobile phone software interface is often divided into several standard information areas within the scope of its interface: the title area, the main information operation area, and the public navigation area.

Title area: mainly is the software LOGO, software version, and related graphic information.

Functional operation area: it is the core part of the software and the broadest part of the layout.

Public navigation area: it is the area for macro control of software operation, which can be seen at any time.

Here it can save the results of the current operation, switch the current operation module, exit the software system, and achieve flexible control of the software.

The design of mobile phone interface, to a large extent, needs to learn from the design of mobile phone system interface to create, only on this basis, to ensure the unity of the whole mobile phone interface.

4.2.2 Decomposition and Combination of Interface Elements

The layout composition of the interface depends on the composition of points and lines of the interface. Due to the small operating environment of mobile phone software, it is necessary to control its own size. Therefore, our interface graphics must be divided according to the needs of the program to achieve the effect of the program as far as possible to achieve, such as monochrome line and surface. Complex ICONS are kept in graphic presentation, so after the design of interface layout is completed, we must communicate closely with the programmer, decompose and optimize the graphic elements that need to be decomposed, and then deliver the second combination of layout to the programmer.

4.2 Visual Effect Analysis and Product Planning

The visual effect of mobile phone interface should follow the principle of providing users with comfort, vitality and vitality. Through the stimulation of visual senses, users' affinity should be increased to adapt to different psychological characteristics of different users. There are several visual effects.

4.2.1 Simplicity and Lightness

The development trend of modern design is simple and bright, the composition method of color line combination of large surface is fashionable, high precision, the design and arrangement of basic elements of layout design such as dot, line and surface, which can well highlight the sense of The Times and bring relaxed feelings to users' operation.

4.2.2 Interest and Originality

Mobile phone interface design in the fun, mainly refers to the form of interest. This is a lively layout visual language. If there is not much wonderful content in the layout, it is necessary to create interest to win, which is also the role of artistic means in the design. In the design of mobile phone interface, we can consider the use of personalized ICONS or interesting layout modeling techniques to express the interface of interest. The principle of originality is essentially the principle of highlighting individual characteristics. Distinct personality is the creative soul of typesetting design.

In the design process, based on the ideas of the above style design, the following methods should be referred to in the design of visual effects:

A. The texture of each button in the interface is the result of careful debugging by the designer. The interface design of IOS system seems to be the object that everyone imitates.

B. ICONS should be made as round and full as possible to avoid sharp edges and give users a stiff feeling.

C. The integral colour of the interface wants again in a big color department mediate, must not get be like a palette dish, what kind of colour goes up gather together.

4.3 Design of Final Visual Elements

Graphic element design principles: unified style, concise, intuitive, metaphor.

Graphic element design process: divided into four steps. Determine the style, determine the function of icon, determine the shape of icon, and make.

4.3.1 Determine the Style

According to the overall style of the interface to determine the icon style, style unity is the most important thing to pay attention to. Not only icon style is unified, the style of colour should also be unified, had better have a mass-tone tone.

4.3.2 Determine Icon Function

It is very prudent to determine the icon function, to ensure that the metaphor of the icon, there should be no ambiguity, to allow users to see the icon after the same association, the meaning represented by the icon must be familiar with. The functionality of ICONS is something we have to think about a lot in the design process.

4.3.3 Determine the Shape of Icon

There are many ways to determine a shape, as long as it doesn't violate the theme the icon represents. We advocate the original design of icon modeling. First, draw in illustrator, and then do the post-processing of icon design in photoshop. All the same level of interface, the same kind of icon we also want to ensure the unity of the form of presentation, to avoid user visual disorder.

4.4 Interface Design and Production

In photoshop, path tools are often used to draw graphic elements of the interface (to facilitate customization of later versions), and the interface is made according to the style of the interface. This step takes a long time. In this stage, unreasonable phenomena in the previous design may be found, which requires the production staff to continuously debug in the implementation process until the most reasonable effect is achieved.

5. Conclusion

Through the above introduction, readers should have a general understanding of the interface design process of mobile APP. The other is to conduct more practical operations, so that they can be familiar with the interface design process and methods of mobile APP.

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