

# Research On Optimization Method of Interface Layout Design For User Centric iPhone Management App

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**Abstract:** As the mobile Internet technology continuously develops, the smart phone represented by the U.S. Apple Corp. iPhone has gained high popularity rate, which also attracts millions of followers worldwide. In the meantime, many intelligent APP in iPhone also bring great convenience to people's learning, work and life. People can easily accomplish many behaviors, such as shopping, traveling, social networking and so on through the use of mobile APP. In order to be more user friendly and enhance the aesthetics of APP interface layout, this paper will conduct a brief analysis research on optimization method of interface layout design for user centric iPhone management app.

**Keywords:** user experience; iPhone; management APP; interface layout design

## 1. INTRODUCTION

User Centric iPhone Management App can not only endow the intelligent iPhone with basic functions, such as communication and conversation, but also collectively manage users' diet, health and information data. In this case, it can effectively enhance the user experience and provide convenience for users' work and learning life. Based on this, this paper tries to explore optimization methods of interface layout design for user centric iPhone management app, hoping to provide necessary guidance and help for realizing the rational layout and optimization of iPhone management APP.

*A. Factors affecting the user's experience caused by design of iPhone management APP interface layout*

### (1) Screen size

Users would make multi-touch interaction with the screen while using iPhone to query and browse text information, picture images. The actual size and resolution of iPhone screen will directly affect user

experience<sup>[1]</sup>. The screen size and resolution of mobile phone shall be fully considered when optimizing the layout of iPhone management APP interface. Based on this, the displayed content of the mobile phone shall be adjusted accordingly. Table 1 shows the size information of iPhone6 and iPhone6 Plus:

Table 1 Size and resolution of iPhone6 and iPhone6 Plus

iPhone Model	iPhone6	iPhone6 Plus
Pixel resolution	750×1334px	1242×2208px
Logical resolution	375×667pt	414×736pt
Physical size	5.44×2.64 inch	6.22×3.06 inch
Screen density	326ppi	401ppi

### (2) Situational operation

The use of iPhone in different contexts will also affect the user experience to a certain extent. Table 2 presents the iPhone parameters of the two latest models launched by Apple Corp this year. According to the contents of the table, the size of iPhone is becoming increasingly small in recent years. Moreover, the body and battery weight is gradually reduced, which is more convenient for people to carry and use. iPhone usually has a common version and Plus version. Two versions are quite obviously different in size. When compared with the larger iPhone Plus, more people get accustomed to one-handed thumb operation in the use of the ordinary version of the iPhone. Therefore, designers shall consider users' usage habits, gestures and other influencing factors when optimizing the interface layout design of the iPhone management APP, so as to bring more comfort and convenience to users.

Table 2 Parameter comparison of iPhone7 and iPhone7 Plus

Mobile phone model	iPhone7	iPhone7 Plus
Main screen size	4.7 inch	5.5 inch
Cell phone size	138g	188g
Cell phone weight	138.3×67.1×7.1mm	158.2×77.9×7.3mm
Modeling design	Straight / curved screen	Straight

(3) Task flow

In operating iPhone management APP, the entire iPhone series of mobile intelligent third party applications are unified in a single task and deep task process although the iPhone of different types can be quite different in terms of the size and usage situation. Adopting pull-down menu mode, the least and simplest operation can show the content of the application for the user as much as possible, thus the user can quickly and accurately complete the task operation.

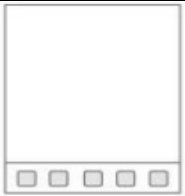
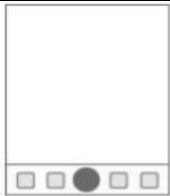



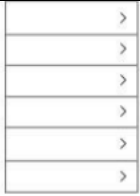
B. Optimization design of interface layout for user centric iPhone management APP

(1) Visual hierarchy

The interface of user centric iPhone management APP is distributed with a number of visual elements with certain complexity. Based on the user's specific reading habits and visual focus, iPhone management APP interface layout can be further effectively optimized through scientifically arranging and rationally combining visual elements according to

significance order of information after relevant analysis. Generally speaking, the more obvious the product's visual level, the more orderly the arrangement of reading information, the better the information transmission effect can be achieved, so as to reduce or avoid the issue of user misunderstanding or operation failure. Therefore, designers shall help users to clarify the hierarchical relationship between different information in navigation pages in a short time when optimizing the interface layout design of iPhone management APP [2]. For example, nine block box is designed in the current version of iPhone. The management APP is orderly arranged in the form of nine block box. According to the user clicks, the most commonly used functions are placed in the first row. Similarly, the user can quickly and accurately identify the relationship between the level of information after opening APP, which can provide convenience for the user's operation. Table 3 presents the page navigation design of several general-purpose types of the current iPhone management APP:

Table 3 Page navigation design type of iPhone management class APP

Type name	Tag Navigation	Rudder navigation	Drawer navigation	Palate navigation	integrated navigation	List navigation
Navigation design						
Advantages	All navigation content is clearly presented in front of the user like a label.	The most important navigation content is set as the circular touch key of the rudder, which is convenient for the user to operate directly.	This design is like a drawer; the user needs to click and open, which can keep certain privacy.	All the navigation information and APP management content are well distributed, which is quite neat.	APP functional icons and specific content are combined on display, which is convenient for users to understand and operate.	List forms are optimized in accordance with the primary and secondary properties of the information, which is simple and clear.

(2) Visual flow

In the layout design of iPhone management APP, visual flow refers to the guide of users' sight, so that users can find the content quickly in the page. In order to effectively attract the user's attention, designers shall adjust and change the size, height, position, color of the text and icons based on the specific functions of APP and the importance of information. Meanwhile, designers can build visual flow effectively by setting graphics, lines, and so on as instructions and guides. Most users usually read from left to right, from top to bottom. Therefore, a health management APP sets up my sports, health

records, my efforts summary, health assessment and other functional information from top to bottom according to the function weight. Moreover, it sets the corresponding icon at the left end of the information, and the text color of each management function is different. A large number of white designs make the relationship between the bottom of the map balanced. Under the visual guidance of the sequence of words and the color of the icons, this optimized form of information organization can effectively balance the user's cognitive ability and facilitate the operation of APP according to his own needs.

(3) Grouping and aligning

Various elements are grouped and aligned according to the specific relationships, which can also guide visual flow to a certain extent<sup>[3]</sup>. For example, in the time management APP iHour, iHour home page, my achievements, input statistics and so on are aligned, which can be neat and beautiful. After users click on the function key and enter the iHour, the interface displays the user records one by one in the form of

list navigation and shows the hours that the user has persisted in the form of a white orange on the right side. On the above, specific days of persistence will be displayed, so that users intuitively and clearly understand, record and manage the time of input on each item. Table 4 presents the part of the page layout design for iHour App:

Table 4 Interface layout design of iHour time management APP

Important items	Navigation Mode	Home display	page	Text reading form	Navigation position
Always display and located at the middle top of the interface	Tag navigation, at the bottom of the interface, a total of four menus	paging		Roll screen with no more than 4 full screens in length	Left panel

## CONCLUSION

User experience has become one of the most important considerations in the design of various APP applications as smart phones and mobile Internet technology are becoming increasingly mature. Centered on user experience, interface layout optimization design of iPhone management APP shall fully consider users' usage needs and their psychological needs, so as to design a structure of scientific and reasonable visual hierarchy. Through grouping and aligning methods, management APP can be both beautiful and practical in interface layout design, so as to effectively upgrade the user experience.

## REFERENCE

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