

Introduction

Wearable devices might just be the hottest tech since the iPhone. One in 6 consumers currently own and use wearable tech, and more than 70% of 16-to-24 year olds want to purchase a wearable device. There are millions of wearable devices in the market today (including watches, wristbands, glasses, earphones, and rings) and even more are coming. If you haven't designed for these devices, chances are you'll have to soon. But wearables present a unique set of challenges when it comes to design. The devices have limitations (smaller screen space, less information density, limited battery life) and present different use cases (people using wearables are regularly in motion) which mean they require a different design approach..

Source:<https://theblog.adobe.com/designing-for-wearables-11-things-to-keep-in-mind/>

1. Design For Glanceability

No word has been thrown around in wearable design quite as much as "glanceable." Glanceability refers to information being designed for short moments of interaction. We were first introduced to the concept through screenless fitness trackers, which rely on lights to explain to the user what's going on.

The term is used differently in the context of the smartwatch – glanceability is less about reducing the interface down to its most basic visual feedback, and more about figuring out what exactly the user needs to see at any given moment of time.

For wearables' limited screen real estate, it's crucial that designers focus on displaying only the most critical information. A user should be able to consume content made for a smartwatch in less than 5 seconds.

2. Design For Context

Context is the backbone of your design and you should use it to provide specific information at a glance. Try to utilize build-in device sensors to determine user context.

Example, be aware when the user is using Geolocation services, and help enhance the user's experience

3. Design Lightweight Interactions

While desktop and mobile apps might consider a longer user session, wearable experiences should be as short as possible. If a user interaction takes more than 10 seconds, it's time to go back to the drawing board and redesign your interface. Minimize interactions and keep interfaces simple by only showing what's essential for a user to complete a task. For example, when users have to reply to a message using smartwatch, it's better to avoid typing. Offer quick responses and provide a voice input option if a longer response is required..

4. Keep It Simple

The well known KISS Principle is perhaps even more relevant in the domain of wearables than in desktop or mobile user interfaces. You should avoid the temptation to put as many features and information in the wearable as possible. Follow simple rules:

- Don't put more actions or information than the user needs, otherwise it will disrupt the experience. Instead, focus on single use case and cover it by creating an efficient flow that helps users complete tasks quickly.

- Make interactions as easy as possible. Design singular, focused tasks: users should be able to do and see just one thing at a time.

A few simple rules to follow when designing notifications for wearables:

The information pushed to a user via a wearable should be filtered.

The frequency of notifications should be minimal so the device doesn't constantly nag and irritate the person who wearing it.

When you do need to notify a user, you should make sure the notification is high-quality. You can do amazing things with a positive interruption, but this requires an understanding of what a user actually needs. Pushing relevant information at the right point of time is key to a great wearable app.

Allow the user to configure the timing and types of notifications they receive, and allow them to easily disable them when needed. Also make it possible for users to select how they would like to be notified (some will prefer a vibration and a screen glow, while others will select just a screen glow).

5. Design A Clear Minimalistic Interface

Users must be able to read whatever you put on the screen, and easily interact with it while moving. Minimalist design is ideal for smartwatches and wearables. Everything from color to typography should be simple and straightforward:

Sharp contrast. Contrast is very important on small screens, as it makes elements easy to see and read at a glance. Designs should clearly define individual elements and have plenty of separation between them.

Simple typography. When it comes to typeface on wearable devices, a simple Sans Serif with a uniform stroke width is one of the most readable options.

Enough space between elements. Space can make or break a design on a small screen: if you put too much space between elements there won't be a room for any other content, but if you put too little space between them, it will be hard to see or read. Thus, you have to find a proper balance that will help you to provide function and usability.

6. Minimize Interruption

Even on large-screen smartphones, incoming notifications and alerts are often disruptive. But when wearable devices require a lot of attention, this can make people abandon them. It is one thing to have a mobile device buzz in your pocket, but it's a completely different thing to have something buzzing that is right up against your skin.

7. Opt For More Privacy

Wearables bring the great advantage of being way more connected to a user's physical body than any smartphone or mobile device could ever hope for. But at the same time these devices are very personal and can display extremely personal information: private conversations or health data. Unlike smartphones, which are usually concealed in a pocket, wearables are in plain sight. Given the choice, designers should always opt for more privacy. A few practical recommendations:

Be aware of which way the device is facing and display content accordingly. Inward allows for more personal content to be displayed, outward should default to a blank screen.

The same applies to notifications: vibrate first, display second.

8. Leverage Non-Visual User Interface

The saying that "the best interface is no interface" especially holds true when wearables are involved. By focusing too much on the visual, we're limiting ourselves in our designs. Try to utilize sound and vibrational communication. Consider voice input to compose text messages or to schedule activities; notify users with vibrations and sounds.

9. Interaction With Other Devices Is Important

Don't think of wearable design in isolation. It's important to integrate a wearable with the existing devices in a user's digital ecosystem. Use the strengths of a wearable to benefit from it..

Example: a blood pressure monitor and heart health companion app for a smartwatch might be used to collect the data, but the review and analysis of the data collected can be done using a smartphone

10. Design for Offline Usage

Like any other digital devices, wearables will experience connectivity problems. Always try to provide core functionality in offline mode. If it's impossible to do, then you should at least explain to the user what's happening.

11. Check What's Viable

It's important to consider both the capabilities and limitations of the platform when designing apps for wearables. Research what is possible with the software development kit (SDK) and what physical capabilities are available on the device. Without researching first, you can end up with unfeasible design ideas.

Example, animations in the to-do app for Apple Watch concept below look amazing, but some of them are impossible to implement using SDK for Apple Watch.