

start:

Now I am running Windows 11 natively on a Mobile phone! What amazing!

You can freely edit word documents, use Adobe family bucket, and even play large-scale games!

And this is my EPQ project: How to install Windows system on your smart phone?

Introduction:

-Before I came into contact with EPQ, I already saw some people discuss the WOA project on a geek forum, which is the abbreviation of Windows On Arm. Since then, I have been very interested in WOA. After I started my EPQ project, my first thing that came to my mind was WOA. However, I found that the pioneers of WOA project did not think about what kind of help WOA could give people. After I think about it, helping students or office workers to solve the mild mobile office needs has become the goal of my EPQ project.

-The first step is the questionnaire. The best way to

prove whether a mobile office market has any demand and to understand what users need for mobile office is to design a questionnaire. Everything comes to him who waits, so after collecting more than 500 results, I got this, which I call it the future generation 1.

characteristic:

-As you can see, The VR you just saw is a display mode of future generation 1. It is characterized by a strong sense of immersion and can quickly enter the state when you are working. At the same time, its movie viewing experience is also excellent! However, there are also some problems with this display method, such as the lack of versatility. It is somewhat strange for some public places such as coffee shops to typing with a VR, so you can also use the mobile phone's own screen... No, but connect a portable screen. When using this battery built-in screen, you can choose to turn off the phone's own screen to extend the endurance.

Well, some attentive friends maybe already found that I designed different schemes for one function, and this is modular design. The most intuitive benefit is that various users can choose the most suitable solution for their own use in various occasions.

On the other hand, heat dissipation may not be particularly important for a mobile phone, but for the mobile phone that is actually a computer, excellent heat dissipation can greatly improve its endurance performance.

In the long run, whether it is too hot or too cold, it will affect the internal chemical balance of the mobile phone lithium battery, resulting in the reduction of the battery life or the utilization rate of electric energy. In the short term, the chip will generate heat when it is working. If the heat is higher than the external heat dissipation, it will accumulate and cause the temperature rise of the mobile phone, and the temperature rise will cause the increase of the operating environment temperature and reduce the chip computing performance. Therefore, it needs to increase the energy consumption to maintain. In terms of performance, it is

a dead cycle. The higher the temperature, the faster the power down, the faster the power down, and the higher the temperature. Therefore, heat dissipation is a very important part, and in this part,

I also made a modular design for heat dissipation.

Scheme 1 Active fan for heat dissipation. The advantage of this scheme is high heat dissipation efficiency. The heat dissipation fan can be easily

installed through a magnetic sheet. However, the disadvantages are also obvious, that is, there is noise, so I also optimized this point and made scheme 2.

Scheme II Passive fin heat dissipation: a metal fin is used to passively transfer the heat of the mobile phone to the air through heat conduction and heat radiation. In this way, the noise problem will be solved! However, after a long time of use, the fins themselves will become hot, and the ability to help the mobile phone heat dissipation will become limited. Therefore, it is more recommended to use scheme 1 when using software that requires high hardware resources such as PS or pr.

-Keyboard

There is a question in my questionnaire: "do you prefer to use a membrane keyboard or a mechanical keyboard?", More than one-third of

the respondents said they preferred to use a mechanical keyboard. The data also show that the mechanical keyboard can significantly improve the typing accuracy and thus provide higher office efficiency. And some product similar to my future generation 1 like laptop, the thinner membrane keyboard has become the standard. Although you can also choose to connect the mechanical keyboard on the laptop, but my product is not bound by the standard, and the concept of modular design is implemented. You can freely choose whether you need a membrane keyboard, a mechanical keyboard or... A projection keyboard! The Bluetooth function of mobile phone can be used normally, so you can also connect the projection keyboard used by the hacker Kiko in the movie Detective Chinatown, which is more portable and cool in appearance, and may meet some social needs of some users.

-Performance test

Due to time limitation, I will not describe each test item in detail here. I conducted five tests on the four dimensions of CPU, GPU, SSD (hard disk) and battery performance of mobile phones, namely, cinebench R21, crystal diskmark, CPU-Z, 3dmark and endurance test. I have put the detailed test results in the following table. Those interested can contact me to obtain this table. Here, I would like to thank my classmate Zack for providing me with the first-hand endurance test from his Rog game laptop.

In terms of performance, the performance of my future generation 1 is quite satisfactory. It can definitely meet the mild office needs. After all, the sapnapdragon 845 processor in this machine has been officially recognized by Microsoft as the processor of a generation of surface Pro laptop.

-Price

In terms of price, my products finally beat a lot of competitors of the same kind. In order to arrange various modular designs, I cited the most normal series of accessories: I bought the second-hand mobile phone for 600 yuan. If you have a suitable mobile phone, this money will be saved. A portable screen with a battery has a 4K resolution and only costs 800 yuan. If you don't need a 4K resolution screen, you can buy a 1080p resolution screen on Taobao for 600 yuan, which is enough for daily use. If you buy it in the second-hand market, the price can be lowered. Besides the first time, there is also an expansion dock of 100 yuan, a mouse of 100 yuan, a DIY

keyboard of 200 yuan, a cooling fan of several tens of yuan, and a display expansion dock with DisplayLink technology. It is also about 200 yuan.

In a word, less than 2000 yuan or 250 pounds, which is absolutely enough to meet your own needs. Then let's take a look at the similar competitive products in the market? The most basic Huawei laptop also needs a price of four to five thousand yuan (620 pounds), and the new iPad also needs an average of about 3000 yuan. Compared with my future generation 1, these price is indeed much higher.

Summary:

After several months, my future generation 1 has also met the initial design requirements, that is, to meet people's mild mobile office needs. At the same time, my project also makes it possible for old mobile phones that are not used at home to be reborn.

In a word, my project uses a low budget to provide users with a solution that they can actually operate, not necessarily a product, at the same time, the second-hand mobile phones and portable screens that are redundant in the market or idle at home have new uses and meet the needs of the students and office workers for the windows software ecology.

So that's all the content of the video! Thanks for watching.