

AWESOME SMARTPHONE CONCEPTS THAT MAY NEVER EXIST

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We can already do a lot of things with the smart phones in our pockets, but who knows what phones will be able to do in the future. Contact lens phones, gold tooth phones, earring phones – the possibilities are endless.

Nokia 2030. This phone was designed by Jim Chan and it's pretty cool looking. It would be made of titanium and glass, and you could attach colored film to the glass to customize it. The Nokia 2030 would be scratch-resistant and small, at only 2 x 4.75 x 0.25 inches and have a touchscreen. Oddly, it still has a physical phone number pad. Even with a super thin glass screen, it can't hide its age.

Modai. This has to be our personal favorite among the concepts. It's almost obnoxiously playful, but we like the functions they've created and the creativity. This isn't the old smiley face on the Android text message icon, it's a phone designed to express a more personal relationship with the cold, hard piece of technology that you so frequently communicate with. This phone would have facial-based icons based on what you're doing, day/night themes, and a really cool alarm clock that lifts the phone to face you when it goes off. To turn the alarm off you simply press the phone back down to a horizontal position. The "peeling" function can also act as a notification, in lieu of a vibration. This phone is said to have the capability of responding to your emotions. This phone was designed by Julius Tarnq.

EmoPulse. This phone is actually coming out. Whoa! This wristwatch phone is much sleeker than many other concepts that have floated through the market. There are plenty of smartwatches out there, but this watch has a bigger screen and seemingly more versatility. Not only will it have cool features, it will be using one of the fastest processors on the market. Using the OMAP 5, this phone will let you simultaneously display three HD videos or display one on a 3D screen. This phone will have 4G, of course, and USB 3.0. It will also have 128 – 256GB of internal flash storage for storing your files, most likely music. The battery will last you about two days. It's also waterproof! So far, it looks like you'll be spending about \$550.00 on this little guy when it comes out at the end of the year.

iPhone PRO concept. The iPhone PRO concept by Jinyoung Choi is a phone for photographers. This phone concept might not be the most practical, but it is a really interesting concept. With camera phones going the way they are, it seems almost criminal that they don't have better lenses. It looks as if you'd even be able to create a small projection from the lens, somehow, judging from the photos above. It's an interesting concept, but most iPhone users probably don't want to carry the lens around very often.

Philips Fluid. This phone would be an OLED that can bend into something that fits on your wrist. It's like the EmoPulse in that way, but it is not meant to be used while on the wrist and can be laid out flat. This is certainly one of the more high-fashion designs on this list, created by Brazilian designer Dinard da Mata. We're pretty sure you could cuff someone in the face with it, if you had to, as well.

Kambala. This is a phone that is designed to fit straight into your ear, like some kind of phone-bluetooth-headset-Frankenstein-monster. The really cool thing about this concept is the idea of the phone camouflaging with your ear once it's on there. It seems as if the entire phone would have to be equipped with some kind of image sensor layer that could identify the colors of your skin/hair. It doesn't look like it would be very comfortable, but since it's not a real phone, it's hard to tell. Designed by Ilshat Garipov.

iPhone Next G. "Ermahgerd, it's like Star Wars or something!!!" Yes, this is a hologram phone. Actually, no, it's a projector phone, but it looks kind of like a hologram. This phone is much like the projecting keyboards that currently exist, except it's a wristwatch phone that projects onto your palm. This is a cool idea aesthetically and in working concept. We're not exactly sure how this phone would account for hand size, but we're pretty sure any would-be developers could make some way for it to calibrate that. Designed by Samuel Lee Kwon.

Two-Sided, Transparent Touch Screen. This phone doesn't look like much, but it could be a breakthrough in touch screen technology. This phone has a see-through touchscreen that can be operated from both sides. This concept was presented by Fujitsu and NTT DoCoMo last year and is pretty unique. Say what you will about the interface, which looks a little shoddy, but it is a kind of technology that we have not often come across as a possibility for the future. We are under the impression that this kind of technology could make a serious impact in the future.

ZTE Eco-Mobius. This phone could change the world as we know it. The iPhone 5s is out, do you have it? Do you stand in line to get every new iPhone right when it comes out? That's fine; however, it's not great for the environment if you're just throwing away the old one. Not to mention, it's really inconvenient to find places where you can properly dispose of phones. This concept was designed to combat this problem. In order to keep up with the quickly changing world of phones, ZTE has developed a phone that you could easily upgrade piece-by-piece. The phone would be divided up into: LCD, core, camera, and battery sections. Is your phone not fast enough anymore? Well, you can just switch out the RAM. Certainly you can only take part-upgrading so far before you need a new device, but this piece of equipment could conceivably last you a few more years than how long you are currently keeping your phones.

The technological revolution is matching ahead and it can't be stopped in our speedy world. But it's necessary to pay attention to the development of safe and ecologically friendly gadgets. In addition it's worth to emphasize that

scientists recommend such concepts not to emit harmful radiation in order to protect our health.

Список использованных источников:

1. <http://www.digitaltrends.com/mobile/10-awesome-future-phone-concepts/>

“SHIFRATOR” PROGRAMME – AN INFORMATION CODER BASED ON A “CHAR-CIPHER”

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Nowadays information is penetrating all spheres of our life. Part of information is available to the public; and there is another part of information not intended for everyone. That is why there exist various cryptographic codes for its protection. Bellow we discuss a code “a char-cipher” – a new word in the world of cryptography.

For our char-cipher (later on just “cipher”) we used characteristics of type “char” variables in a programming language Java. These variables are both symbols and numbers (i.e. each figure is a serial number of a symbol). Thus, we can work with information or encipher it without its converting.

When encoding information we replace each symbol by two. For these purpose a cipher algorithm can be divided into two parts. First we divide the number of a current symbol into two without a residue (any residue left - 1 or 0 - will be taken into account later). The resulting value is the first symbol. To get the second symbol there are some conditions:

1. If a residue is a unit, the second symbol is selected randomly;
2. if a residue is a zero, the second symbol is selected randomly from a given array of values.

Thus, every new letter (symbol) will have its own encoding, making the char-cipher very difficult to break. For example, if you encode a string of identical symbols, e.g. `tttttttttt`, then the result is
:H:9:0:A:z:*:,:z:/,:H,:)

We see that encrypting only one letter we can have different combinations of symbols.

As for the program itself, “Shifrator”, which uses the char-cipher we can say that it has a very simple interface, shown in Figure 1:

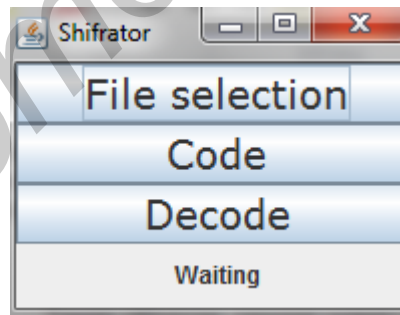


Figure 1 – Shifrator's interface

First it is necessary to select a file which has to be coded or decoded. To do this, click on "File selection" button. Window for file selection is shown in Figure 2: