

# BYTE QUEST

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Bytequest is the article published by the CSE dept of Vasavi college of engineering regarding the latest innovative technologies and software's that have been emerged in the competitive world. The motto of this article is to update the people regarding the improvement in technology. The article is designed by the active participation of students under the guidance of faculty coordinators.

- Good ,bad or indifferent if you are not investing in new technology , you are going to be left behind.

-Philip Green

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## ' BITCOIN ' THE FUTURE OF MONEY

Bitcoin is digital money used directly between people anywhere in the world to buy online goods and services. To get started, download the Bitcoin wallet. Like a real wallet, it stores your bitcoins and is used to send and receive payments using unique addresses. The receiver creates a new bitcoin address. This bitcoin address is used by the sender to transfer a specific amount to the receiver. Anytime a transaction is made between bitcoin users, it's recorded on a publicly shared log called the blockchain. These transactions are checked and confirmed by miners. Miners are essentially people with powerful computers who, in exchange for newly created bitcoins, use Bitcoin software to verify that transactions are correct. With thousands of miners contributing, transactions run smoothly and the network is



constantly secured. Cryptography is used to make it impossible for anyone to spend funds from another users wallet and can encrypt a wallet so that it cannot be accessed without a password. Hacking the Bitcoin network would require processing power 15x greater than the world's fastest supercomputer.

**Farha Kauser (CSE-B 3/4)**

## THE GOOGLE DRIVELESS CAR



We know them as the most popular search engine in the World Wide Web. They are much more than that. They pioneer in inspiring innovation in the field of technology which is beyond their time. The google driverless car is a project by google which involves the development of technology to make a car self-dependent. The software that google use to automate cars is known as the "Google Chauffeur". They do not produce a separate car but install the required equipment onto a regular car. The project is currently being led by google engineer Sebastian Thurin

under the aegis of Google X. The tests were conducted with expert drivers in the driver seat and Google's engineers in the passenger seat. They have driven a great deal of distance in varied topographical locations and traffic densities in the United States of America. The speed limits are stored in the brain of the control systems and the car comes with a manual override which passes on the control to a driver in case of any malfunction. By August 2012, google announced that it had completed 500,000 km of road testing. As of December 2013, four states in the USA have established laws permitting the use of autonomous cars, California, Florida, Nevada and Michigan

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## ANDROID 'M', THE NEXT ANDROID PLATFORM.



### **App permissions:**

App permissions have been overhauled in Android M, with users now being able to choose to accept or deny individual permissions as they see fit .(i.e. you don't have to agree to permissions that don't make sense to you).

### **Fingerprint Scanning:**

With Google standardizing fingerprint support, device manufacturers can now build fingerprint scanners into the device.

### **Android Pay:**

This mobile payment system can avail of fingerprint scanning introduced by android. Android Pay is secure, and ready for prime time mobile payment system which ensures ease of use to end users.

### **App Links:**

Android 'M' offers varied choices to selecting how you would like to open apps. Now when you tap a specific link, instead of asking if you wish open link with chrome or Playstore, it will open easy peasy. This is a small improvement but in the end it will result in a cleaner and user-friendly experience.

### **Improved Standby Time and Charging:**

Android 'M' will come with a new feature called DOZE. This feature will utilize motion sensors to generate a special stand-by to improve battery life. It also offers support USB type-c connectors which ensure faster charging times for devices. With this feature you can even charge other devices using your mobile phone.

### **Adaptable Storage:**

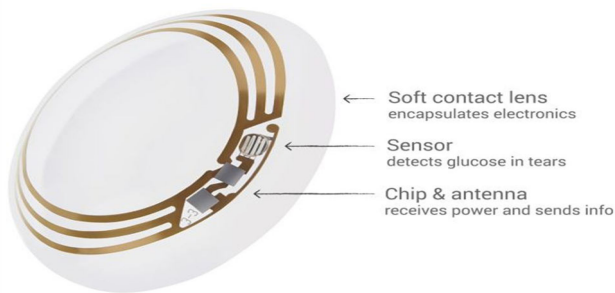
Android M will make use of external storage, but it will be formatted as internal storage. This enables you to transfer data back and forth between external and internal storage with ease. Adoptable storage makes use of encryption and so users can be assured about security.

### **Google now on Tap:**

This is one major changes introduced with Android 'M'. Google Now is also rolling out a pilot program called "Now on Tap" with 100 popular apps. Now on Tap provides Google Now-like content right where you are, without having to leave the app you're in.

Vasavi .Y (CSE-B 3/4)

## INSIDE GOOGLE X'S SMART CONTACT LENS



Google's smart contact prototypes squeeze a glucose sensor, antenna, capacitor and chip between two contact lens layers, making a kind of electronics sandwich. A tiny hole on the eye side allows tear film, which contains glucose, to reach the sensor. The integrated circuit is no larger than a piece of glitter, and its weight is undetectable on the tip of a finger. The sensor, which takes glucose readings twice a second, isn't much bigger. And the antenna is thinner than a human hair.

The components sit on top of a thin plastic-like film that is made of a biocompatible material that holds everything together like a fiberglass circuit board traditionally would. Google's smart lens broadcasts its readings through radio frequencies to an external monitoring device that a test subject carries with him or her. In turn, the device powers the mechanics of the lenses through those same radio frequencies. Project lead Brian Otis mentioned that a later design might include a light source in the lens, which could indicate to the wearer whether glucose levels are high, medium or low perhaps even when they close their eyes.

Krishna Chaithanya (CSE-B 3/4)

## TOUCHPICO

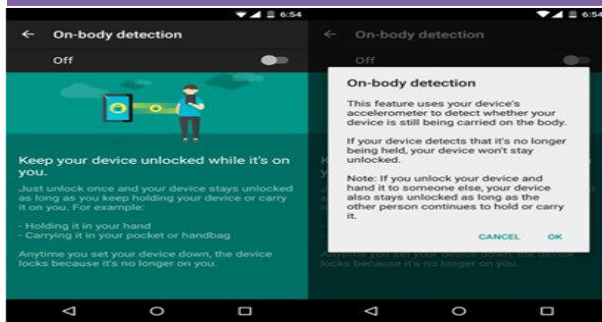
There will be little need for carrying laptops and smartphones now, because there is a device that can convert any surface into a touchscreen. TouchPico, a new crowdfunding Indigogo project, is a compact Android PC with a built-in projector. Imagine playing Temple Run, but not within the confines of your phone's screen, but on an 80-inch space. That, precisely, is what TouchPico does. You can use the stylus that comes with TouchPico to touch and operate the apps on the projected surface. The projector runs Android 4.0 and has access to all Google Play apps. Therefore, you can open your favourite apps to read a book, watch a movie, surf the web - all on an 80-inch screen. And not just for entertainment, this projector can also be used for professional work like giving



presentations or drawing interactive tables; it can also prove to be instrumental for students and teachers alike in the classroom. On the hardware side, TouchPico has a 1.6 GHz dual-core processor, 1GB of RAM and features a wireless mouse and audio output. Users can expand the storage of the device via a memory card. However, it is noteworthy, that it only works with Wi-Fi.

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## Android 5.0 Lollipop Gets New 'On – Body Detection ' Smart Lock



Apart from 'Trusted devices' and 'Trusted places' for smart locking/ unlocking your Android phone, Google has rolled out a new 'On-body detection' mode to the Smart Lock menu. With the option, users can keep their devices unlocked depending upon the proximity to their body.

The feature was first spotted by Android Police on Friday, and is also working for us on a Google Nexus 4 smartphone running Android 5.0.1 Lollipop alongside Google Play Services v7.0.97.

The 'On-body detection' feature essentially keeps the device unlocked (once unlocked) till the time user is holding it or is near the body (pocket or handbag). This is helpful when you leave the device somewhere and as soon as it goes out of your body's proximity it gets locked, even before the sleep and lock time.

Unfortunately the new On-body detection smart lock feature cannot differentiate between different bodies, so when you hand an unlocked smartphone with the feature enabled to someone it will stay unlocked. Also, if users have Trusted devices or Trusted places features enabled alongside, the device may stay unlocked even after it is out of proximity.

"This feature uses your device's accelerometer to detect whether your device is still being carried on the body. If your device detects that it's no longer being held, your device won't stay unlocked [...] If you unlock your device and hand it to someone else, your device also stays unlocked as long as the other person continues to hold or carry it," reads the On-body detection feature's brief note.

The feature is also reported to be working for non-Nexus devices running versions higher than Android 5.0 apart from the latest Google Play services version 7.0.97.

To remind you, Google during the MWC 2015 trade show introduced the Google Play Services 7.0 with new APIs for developers. Notably, the search giant launched its Google Play Services 6.5 last year in November.

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