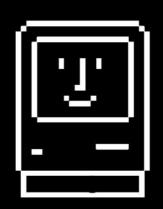
# DIGITIMES

1WOD







"To err is **human**, but to really foul things up you need a computer. "







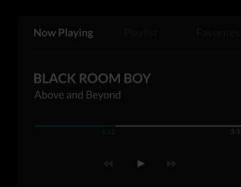
## From The Editorial Team

Once it was a dream sitting before a computer and making things. That drove us to this instance of studying Computer Science Engineering. Lets now dream for a new world, controlled only by computers. Hope Believe Dream, These words are by Barack Obama, the former President of United States of America. Lets follow those words and make them, our life.

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## **DIGIFLASH**

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Google Doodle is a special. temporary alteration of the logo on Google's homepage that is intended to celebrate holidays, events, achievements and people. The first Google Doodle was in honor of the Burning Man Festival of 1998, and was designed by Larry Page and Sergey Brin to notify users of their absence in case the servers crashed. A team of employees to logo termed themselves as design "Doodlers". Initially, Doodles were neither animated nor hyperlinked. The interactive Doodle appeared shortly thereafter celebrating Pac-Man and hyperlinks also began to be added to Doodles, usually linking to a search page for the subject of the Doodle. By 2014, Google had published over 2,000 regional and international Doodles throughout its homepages, often featuring guest artists, musicians and personalities.

In May 2010, on the 30th anniversary of the arcade game Pac-Man, Google unveiled worldwide their first interactive logo, created in association with Namco. Ms. Pac-Man, enabling two players to play at once, controlled using the W, A, S, D keys, instead of the arrows as used by Player. It was then removed on May 23, 2010. Later on that day, Google released a permanent Google Pac-Man site, due to the popular user demand for the playable logo.

The first Google Doodle was an out-of-office message. The day was August 30, 1998 -- nearly two years after Larry Page and Sergey Brin had built a search engine in a Stanford dorm room. Google was so young then, indeed, that it still had a Yahoo!-style exclamation mark as part of its logo. The pair decided on a little icon -- the Burning Man logo -- and placed the spare stick figure behind Google's second "o." They published the new image to their site on the World Wide

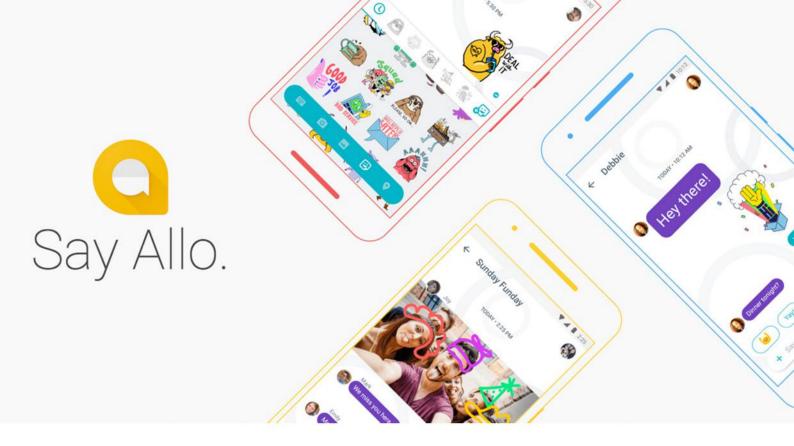
## Part of Google Doodle in Olympics

On August 5, 2016, for the 2016
Summer Olympics the Google app
received an update for Android and IOS
devices to include 7 mini games called
"Doodle Fruit Games" featuring
Strawberry, Blueberry, Coconut,
Pineapple and more. It will last until
August 21, with a new mini game every
day. The game is accessible on the
Google app by clicking on a play button.

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Web.

Reference: en.wikipedia.org/wiki/googledoodle



In recent years, the most rapidly developing technology is the smartphone. The main advantage of smartphones is the availability of 'mobile apps'.

### So, what are mobile apps?

A mobile app is a software application that runs on mobile devices like smartphones tablet and computers. Mobile apps help users by making it easier to use the internet on their portable devices. A mobile app maybe a mobile website, bookmarking utility, a mobile-based instant messaging client and many other applications.

Among the various mobile apps, communication apps play a key role in our day-to-day life.

Between all the apps we use to talk with people, we also use apps to search web, order stuff online and book reservations, etc. This could sometimes get a bit stressful.

#### What if one such app does it all?

Google has created the new communications app called "Google Allo" which solves the above issue. Google describes this app as "a messaging app for Android and iPhone users". It is a "smart messaging app" that has the power of Google built-in and can apparently learn over time. The next question that pops into our mind is "How does it work?" Allo uses our phone number, similar to WhatsApp and other related messaging apps. So we can send text messages to anyone in the phonebook, even the ones who do not use Google Allo.

#### **EXPRESSION**

Like any other messaging app, Allo has the similar features. We could send stickers, emojis and scroll up & down to see the entire threaded conversation. The one feature which the other apps do not have is something called "Whisper or Shout".

Another feature called "Ink" lets us to doodle the photos, etc. Allo also has the "Smart Reply" feature which helps us to quickly respond to messages by popping up responses. Allo uses machine-learning and natural language processing in order to suggest what we want to say next and how we might say it.

#### **GOOGLE ASSISTANT**

Google Assistant is Google's latest iteration of a virtual assistant. It is said to be an upgrade of Google Now. Google Assistant can remember things including our name, address, etc. It uses artificial intelligence machine and learning determine stuff. to like information to our questions. For example, if we ask "What's playing tonight?", Google Assistant shows the list of movies playing in our neighbourhood. If we then follow up with "Is Kung Fu Panda any good?", the assistant will display reviews, ratings, etc. Remember that Google Assistant strings our questions together determine context and displays the proper information.



This therefore makes the app useful for chatting with friends, or to get things done, all at the same time.

#### **SECURITY**

All messages in Allo are encrypted. Allo offers Incognito Mode, which means we can get access to not only end-to-end encrypted messages but also to features like expiring chats and private notifications. This therefore helps us to keep our messages safe from prying eyes, control how long they stick around, and permanently delete them from our device.

These three aspects of "Google Allo" make it an app that does not only help us to communicate with people but also to get our things done. This app is currently in the testing phase and is expected to be made available for Android and iPhone users after summer'16.

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Reference: allo.google.com



# SAP SYSTEMS, APPLICATIONS & PRODUCTS.

SAP ERP is Enterprise Resource Planning software developed by the German company SAP SE (Societas Europaea). SAP ERP incorporates the key business functions of an organization. The latest version (SAP ERP 6.0) was made available in 2006. The most recent Enhancement Package (EHP8) for SAP ERP 6.0 was released in 2016.

Business Processes included in SAP ERP include Operations (Sales & Distribution, Materials Management, Production Planning, Logistics Execution, and Quality Management), Financials (Financial Accounting, Management Accounting, and Financial Supply Chain Management) and Human Capital Management (Payroll, e-Recruiting).

#### DEVELOPMENT

SAP ERP was built based on the former SAP R/3 software. SAP R/3 through version 4.6c consisted of various applications on top of SAP middleware Basis. SAP's set of programs and tools. When SAP R/3 Enterprise was launched in 2002, all applications were built on top of the Web Application Extension sets were used to deliver new features and keep the core as stable as possible. The Web Application Server contained all the capabilities of SAP Basis.

A complete architecture change took place with the introduction of mySAP ERP edition in 2004. R/3 Enterprise was replaced with of introduction **ERP** the Central Component (SAP ECC). The SAP Business Warehouse, SAP Strategic Enterprise Management and Internet Transaction Server were also merged into SAP ECC, allowing users to run them under one instance. Architectural changes were also made to support Enterprise architecture to transition customers to a services-oriented architecture.

#### **IMPLEMENTATION**

SAP ERP consists of several modules. including utilities for Marketing and Sales, Field Service. Product Design and Development, Production and Inventory Control, Human Resources, Finance and Accounting. SAP ERP collects and combines data from the separate modules to provide the company or organization with enterprise resource planning.

#### DEPLOYMENT

Effectively implemented SAP ERP systems can have cost benefits. Integration is the key in this process. "Generally, a company's level of data integration is highest when the company uses one vendor to supply all of its modules." An out-of-box software package has some level of integration but it depends on the expertise of the company to install the system and how the package allows the users to integrate the different modules.



#### ADVANTAGES OF ERP

- 1. Complete visibility into all the important processes, across various departments of an organization (especially for senior management personnel).
- 2. Automatic and coherent workflow from one department/function to another, to ensure a smooth transition and quicker completion of processes.
- 3. A unified and single reporting system to analyze the statistics/status etc. in real-time, across all functions/departments.

#### DISADVANTAGES OF ERP

- 1. The cost of ERP Software, planning, customization, configuration, testing, implementation, etc. is too high.
- 2. ERP deployments are highly time-consuming projects may take 1-3 years (or more) to get completed and fully functional.
- 3. Too little customization may not integrate the ERP system with the business process & too much customization may slow down the project and make it difficult to upgrade.

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Technology, the most fast growing giant in the universe .Technology exceeds the speed of even time. This technology has reduced our burden of using cards for our banking's and credits. You may soon be able to shop and make payments using just a scan of your finger veins, thanks to a new breakthrough technology that has emerged to soften our works.

**FINGOPAY** 

The technology called FingoPay uses a biometric reader to scan the veins of a shopper's finger, building a unique "map" for each individual. This biometric is used for sensing our body parts with unique sensing strategy. As there are no symmetric finger prints or vein structures for humans in this world, this can be a most promising idea.

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This pattern is connected with a credit card or bank account to allow shoppers to pay simply by placing their finger in a pocket-sized scanner, doing away with cash and credit cards.

We might have come across many biometric techniques, but this is simply unique which makes people to be safe and do not worry about robbery and other malfunctions.

The company which developed FingoPay will test the technology at London, the 'Telegraph' reported.

The technology will be used to speed up waiting times at places both by cutting down on cards and by being able to suggest things based on what a patron has previously ordered.

So soon we will be able to shop on our own without looking for cards and swippers. All we need is a database with our credit and debit details and a mapper of our vein pattern.

## Augmented REALITY

## HEAD MOUNTED

A head-mounted display (HMD) is a display device paired to the forehead such as a harness or helmet. HMDs place images of both the physical world and virtual objects over the user's field of view. HMDs can provide users immersive, mobile and collaborative AR experiences. In January 2015, Meta launched a \$1 project led by Horizons Ventures, BOE Optoelectronics and Garry Tan. On February 17, 2016, Meta announced their second-generation product at TED, Meta 2. The Meta 2 head-mounted display headset uses a sensory array for hand interactions and positional tracking, visual field view of 90 degrees (diagonal), and resolution display of 2560 x 1440 (20 pixels per degree), which is considered the largest field view (FOV) currently available

#### Eyeglasses

AR displays can be rendered on devices resembling eyeglasses. Versions include eyewear that employ cameras to intercept the real world view and re-display its augmented view through the eye pieces and devices in which the AR imagery is projected through or reflected off the surfaces of the eyewear lens pieces.

Augmented reality is a live direct or indirect view of a physical, real-world environment whose elements are augmented (or supplemented) by computer-generated sensory input such as sound, video, graphics or GPS data. It is related to a more general concept called mediated reality, in which a view of reality is modified (possibly even diminished rather than augmented) by a computer. As a result, the technology functions by enhancing one's current perception of reality. Augmentation is conventionally real-time and in semantic context in with environmental elements, such as sports scores on TV during a match. With the help of advanced AR technology (e.g. adding computer vision and object recognition) the information about the surrounding real world of the user becomes interactive and digitally manipulable.

## HARDWARE

Hardware components for augmented reality are: processor, display, sensors and input devices. Modern mobile computing devices like smartphones and tablet computers contain these elements which often include a camera and MEMS sensors such as accelerometer, GPS, and solid state compass, making them suitable AR platforms.

## DISPLAY

Various technologies are used in Augmented Reality rendering including optical projection systems, monitors, hand held devices, and display systems worn on the human body.

#### HUD(MICROSOFT HOLO LENS)

In January 2015, Microsoft introduced HoloLens, which is an independent smartglasses unit. Brian Blau, Research Director of Consumer Technology and Markets at Gartner, said that "Out of all the head-mounted displays that I've tried in the past couple of decades, the HoloLens was the best in its class.". First impressions and opinions have been generally that HoloLens is a superior device to the Google Glass, and manages to do several things "right" in which Glass failed.

#### Virtual retinal display

A virtual retinal display (VRD) is a personal display device under development at the University of Washington's Human Interface Technology Laboratory. With this technology, a display is scanned directly onto the retina of a viewer's eye. The viewer sees what appears to be a conventional display floating in space in front of them.

#### **APPLICATIONS**

#### Literature

In 2011, there were works using AR poetry made by ni\_ka from the Sekai Camera in Japan, Tokyo. The rose of these works come from Paul Celan, "Die Niemandsrose", and express the mourning of 3.11, 2011 Tōhoku earthquake and tsunami. In these works, there is a rose on the top of the Tokyo Tower, and touching Kitty float poetry words, and we can write the reply of this insteration. Pokémon Go make people know Augmented Reality, however ni\_ka is a pioneer of AR literature.

#### Archaeology

AR can be used to aid archaeological research, by augmenting archaeological features onto the modern landscape, enabling archaeologists to formulate conclusions about site placement and configuration Another application given to AR in this field is the possibility for users to rebuild ruins, buildings, landscapes or even ancient characters as they formerly existed.

#### Reference :

en.wikipedia.org/wiki/AugmentedReality

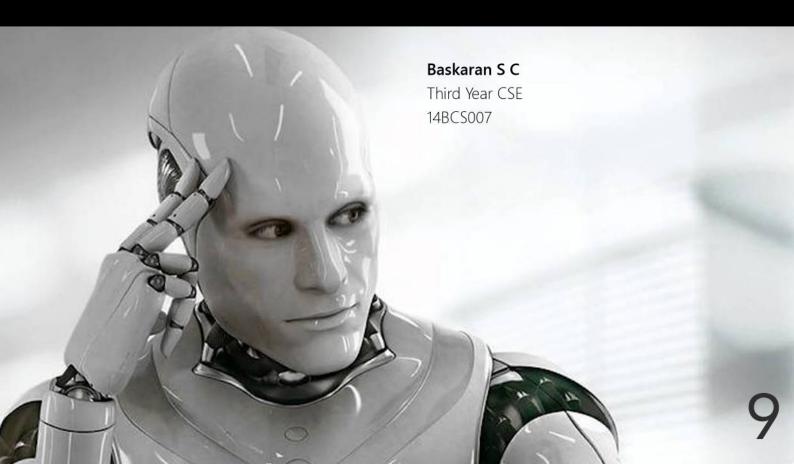


#### Architecture

AR can aid in visualizing building projects. Computer-generated images of a structure can be superimposed into a real life local view of a property before the physical building is constructed there; this was demonstrated publicly Trimble by Navigation in 2004. AR can also be employed within an architect's work space, rendering into their view animated 3D visualizations of their 2D drawings. Architecture sight-seeing can be enhanced with AR applications allowing users viewing a building's exterior to virtually see through its walls, viewing its interior objects and layout.

#### Commerce

AR can enhance product previews such as allowing a customer to view what's inside a product's packaging without opening it. AR can also be used as an aid in selecting products from a catalog or through a kiosk. Scanned images of products can activate views of additional content such as customization options and additional images of the product in its use. AR is used to integrate print and video marketing. Printed marketing material can be designed with certain "trigger" images that, when scanned by an AR enabled device using image recognition, activate a video version of the promotional material.



## Hot gadgets debuting at

## **Rio Olympics 2016**



With all eyes on the Rio Olympics, it's no surprise that many companies are unveiling their newest technology and gadgetry at this event. Here's some of the coolest hi-tech wizardry that's making a debut at the biggest sporting event of this year.

## Cooling Hood

Cooling Hood covers the face, head and neck, while its inner layers store cool water. The frame around the eyes ensures a secure fit and keeps cold portions close to the face for effective cooling and faster recovery in between events.



## NFC enabled rings

Electronic payments company Visa is an official service provider at the Olympics, and it has also picked this event to introduce its Visa Payment Ring, the first ever NFC-enabled wearable. This will allow them to make purchases by simply tapping it at any of the 4,000 NFC-capable payment terminals that Visa has set up at all venues. The Visa ring uses a secure microchip with an embedded NFC antenna that enables contactless payment capabilities.

## Hykos

Hykso counts how many punches are thrown, along with details like type (jab, cross, leftright power), time, speed and strike intensity. It uses a 3-axis accelerometer and gyroscope to record these metrics, while the app helps the coach reassess a boxer's technique and attacking strategy.





## Halo Sport

The Olympics are all about athletes performing at their optimum, and US' Halo Neuroscience is helping them achieve that top form. Their technology takes the shape of a pair of headphones called Halo Sport that sends pulses of energy to the wearer's brain to improve its response to training. This form of "neuropriming" enables the motor cortex to send stronger signals to muscles to help athletes see better results, faster.

## Whoop 2.0:

During these games, athletes will be using all kinds of sensor technology, including a wearable called the Whoop 2.0 wristband that monitors and records its wearer's heart rate, ambient temperature, motion (via a 3-axis accelerometer), sleep patterns and more. its companion app converts this raw data into analytical advice about when the athlete should rest, warn him or her about strain and bring about a change in diet to reduce injury and improve recovery times.







## Vert Jump Monitor

There are sensors for specific sports like the Vert Jump Monitor for the US women's volleyball team and the Hykso Tracker for the Canadian boxing team. The Vert relays the number of jumps and the height achieved by a player to its companion app in real time. This helps the coach to observe which player is over exerting, make quick decisions to switch positions on the court and prevent injuries.

#### Reference:

www.timesofindia/tech/7-hot-gadgets-debuting-at-Rio-Olympics-2016 -2016/itslideshow/53571457.cms

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