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CURRENT RESEARCH ON MOBILE OPERATING SYSTEM ANDROID

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In recent years, due to the further development and improvement of mobile technology active research on operating systems continues. The present report aims to analyse information about the latest development of Android operating system.

Android is a Linux-based operating system designed primarily for touchscreen mobile devices such as smartphones and tablet computers. Initially developed by Android, Inc., which Google backed financially and later bought in 2005, Android was unveiled in 2007 along with the founding of the Open Handset Alliance: a consortium of hardware, software, and telecommunication companies devoted to advancing open standards for mobile devices. Android is open source and Google releases the code under the Apache License. This open source code and permissive licensing allows the software to be freely modified and distributed by device manufacturers, wireless carriers and enthusiast developers. Additionally, Android has a large community of developers writing applications ("apps") that extend the functionality of devices, written primarily in a customized version of the Java programming language. In October 2012, there were approximately 700,000 apps available for Android, and the estimated number of applications downloaded from Google Play, Android's primary app store, was 25 billion.

The open and customizable nature of Android allows it to be used on other electronics, including laptops and netbooks, smartbooks, smart TVs (Google TV) and cameras (Nikon Coolpix S800c and Galaxy Camera). In addition, the Android operating system has seen applications on smart glasses (Project Glass), wristwatches, headphones, car CD and DVD players, mirrors, portable media players and landlines and Voice over IP phones. Ouya, an upcoming videogames console running Android, became one of the most successful Kickstarter campaigns, crowd funding US$8.5 million for its development, and was later followed by other Android-based video games consoles such as Project Shield from NVIDIA.

In 2011, Google demonstrated "Android@Home", a new home automaton technology which uses Android to control a range of household devices including light switches, power sockets and thermostats. Prototype light bulbs were announced that could be controlled from an Android phone or tablet, but Android head Andy Rubin was cautious to note that "turning a light bulb on and off is nothing new," pointing to numerous failed home automation services. Google, he said, was thinking more ambitiously and the intention was to use their position as a cloud services provider to bring Google products into customers' homes.

As a conclusion, we should note that scientific and technological progress in coming years will require upgrading of existing and creating new operating systems, so you can predict many interesting and important innovations in IT-technology.

У доповіді використано матеріали web-сайтів:
http://en.wikipedia.org/wiki/Android_(operating_system)