

A laptop (also known as a notebook) is a personal computer designed for mobile use small enough to sit on one's lap. A laptop includes most of the typical components of a typical desktop computer, including a display, a keyboard, a pointing device (a touchpad) as well as a battery, into a single small and light unit. As the personal computer became feasible in the early 1970s, the idea of a portable personal computer followed. In particular, a "personal, portable information manipulator" was imagined by Alan Kay at Xerox PARC in 1968 and described in his 1972 paper as the "Dynamabook".



TECHSPOTLIGHT

Laptop vs desktop: an austerity look

FAROOQUE HOSSAIN KAMRUL

NAGGING power crisis has become a major concern for the government of any country, especially for the developing ones. Due to increasing use of electricity in all aspects of life, saving of energy has turned out to be an issue that needs to be dealt with.

For an instance, we can say about computer that is undoubtedly the most used electronic device and runs on electricity. It is true that the use of computer is not only a mere necessity any longer. Its use has rather become a demand of time.

As a result, various government, semi-government, autonomous, nongovernmental, multinational and international organisations are exploiting the use of computer hugely for their daily requirements.

Computer consumes a certain amount of power to keep running. But, how much amount of power or

Each computer consumes about 450x9 hoursx30 days or 121.5 kw-hr a month or simply 1478.25 kw-hr per year. So, a hundred PC will consume 121.5x100 kw-hr a month or 1478.25x100kw-hr a year.

In contrast, about 65x9 hoursx30 days or 17.55 kw-hr is consumed by a laptop monthly or 210.6 kw-hr yearly, only 14 percent of the power consumed by a desktop PC.

If the company pays Tk 7 for per kwh, it has to pay Tk 85,050 a month or Tk 1,020,600 in electricity bill a year for 100 PCs. Likewise, if the company shifts its focus on using the same number of laptop PC in place of desktop PC, it has to pay only Tk 11,900 a month or Tk142, 800 a year for electricity.

Now that we have got an idea of PC power consuming and its expenditures, let's consider the price of a laptop PC. Off late, the average price of a standard laptop PC is not more



doing work and save the file. While Desktop, if one do not has uninterrupted power supply (UPS) and electricity has problem, one may lose his/her work. Besides, Laptop has good design and looks modern, while desktop is conventional and looks old fashioned. For example Desktop has large dimensions and requires large area for operation.

From the above discussion we see that Laptop PC is superior to its counterpart Desktop one nearly in

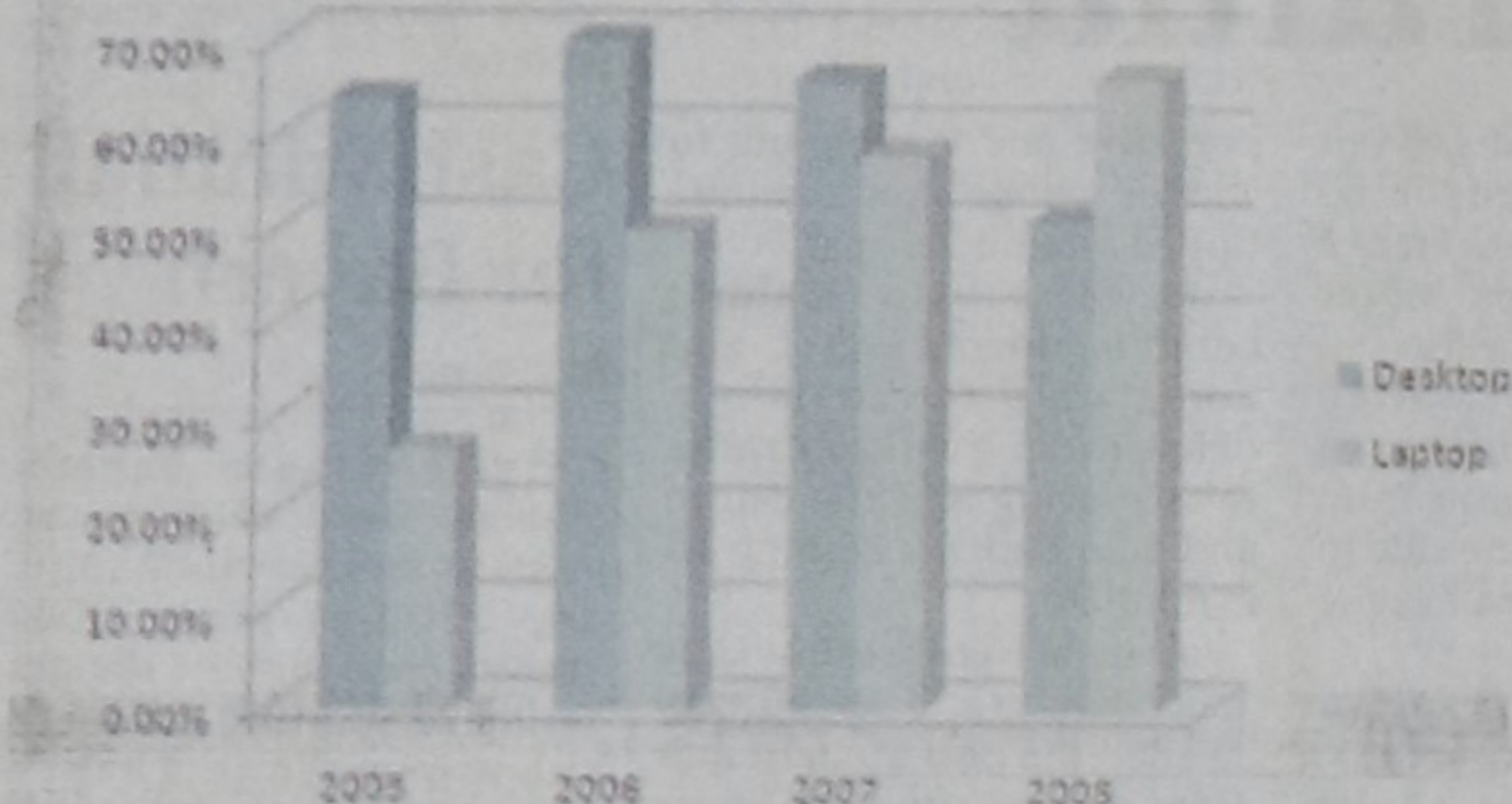
all aspects. Of course Desktop also has some advantages but that do not surpass the beneficial aspects of Laptop as far as power saving issue is concerned. Above all, Laptop is environment friendly too. Therefore, from my point of view it's high time especially for corporate organisations to replace the Desktop PCs with Laptop PCs.

The author is an executive of technical services at Thakral Information Systems Pvt Ltd.



"We've made significant improvements since you bought your last computer. We switched from beige plastic to dark gray."

Students owning personal desktops vs laptops



electricity a desktop or laptop PC consumes? How much a company or an organisation has to bear to run these devices?

Why and which one is economically viable in terms of power or cost saving, using Laptop or Desktop? Well, in this article I will explore these issues. I will also show why using Laptop PC is more cost-effective in terms of power saving issue and other beneficial aspects of it than its counterpart Desktop PC.

A typical desktop computer with its full-equipped stage uses about 450 watts. On the other hand, a laptop computer generally uses about 65 watts. That means a typical desktop PC consumes nearly seven times electricity that of a laptop PC does.

Say, how much money is needed to be paid in electricity bill for 100 desktop computers? Well, let's have a look at it. Assume that, a company runs these 100 PCs 9 hours a day,

than Tk 50,000 and that of for a desktop PC is Tk 35,000. That is, the company has to spend an extra Tk 15,000 for each PC if it intends to use Laptop instead of Desktop. From this, it is seen that the company requires spending about extra 30 percent money for each PC if it wants to shift to using Laptop PC from Desktop one. But at the same time it can save nearly 76 percent of electricity, which eventually make sense saving of 76 percent money from electricity bill if it uses Laptop PCs. Isn't it beneficial using Laptop PCs? Of course it is, as far as power saving is concerned.

In addition, Laptop is portable. It can be carried everywhere one wants. Moreover, Laptop can be used indoor or outdoor while Desktop can't do like this because Desktop is too heavy. What is more, Laptop has battery so when electricity has problem, one can continue

TECHNEWS

Living room of the future

REZAUL KARIM, back from Japan

The beauty of arithmetic and mathematics hidden in nature...The fun is natural science in daily life. This is the theme of world famous electronics manufacturer Panasonic. Panasonic generates ideas for life...today and tomorrow.

During a recent visit to the Panasonic Centre in Tokyo by 15 journalists from 11 countries under the Japan International Cooperation Agency (JICA) programme, it enabled them to experience the fascination of science and mathematics. It was a journey to discover the wonders of science and mathematics during the visit to RiSuPia, a hands-on museum of Panasonic digital network in Tokyo.

Through innovative appliances, Panasonic is enriching people's lives around the world. Watch TV. Use a DVD recorder, a digital camera or a movie camera. Each of these devices is designed for a specific function. What would it be like if all of these functions were incorporated into a new form of entertainment? Panasonic offers a new concept: the linkable TV.

One of the latest and greatest innovations of Panasonic Future Life Wall...its Ideas for the 'Living Room of the Future'.

The giant display, in which the television represents an entire wall, has evolved still further. It now enables users to enjoy a broad array of contents and life-sized communication through instinctive

movement of the person watching it. It automatically adjusts to the viewer's optimal viewing position, letting you fully enjoy your favorite images.

Easy-Gesture-TV
You can intuitively control the Easy-Gesture-TV from a table, in front of a wall, or anywhere in the living room, all at the same time. It's a great way to communicate with others by operating the TV with gestures.

True-to-life Communication
When the entire wall becomes a screen, it will enable new and unique forms of communication that will be filled with realistic ambience. For example, you can have a natural conversation with a life-size image of someone who is in a completely different location. You can also share exciting scenes that show your children's growth development with other people in real time.

Close communications connect distant locations together

With Life Wall, it is possible to enjoy natural conversations with family members in different locations, with life-sized images. Life Wall provides close communications, the like of which has never been seen before.

Talking with the visiting journalists, Manager of Panasonic Centre Tokyo Mr. Takashi Kitamura said the Panasonic is committed to creating a sustainable society and thus producing energy-efficient products and an eco life within home



operations that require gestures only, by accessing a high-speed and large-capacity network. Life Wall connects your living room to the world, proposing a new lifestyle.

You-Know-Me-TV

This TV automatically displays personally customized information by recognizing each family member. Several people can quickly and simultaneously retrieve the information they want.

Stay-with-Me-TV

The screen becomes bigger or smaller, and moves left or right, depending on the

appliances.

Citing example, he said the volume of energy consumed in a day and the extent to which energy-efficient products can reduce CO2 emissions. To improve environmental performance in the home, the Panasonic is creating a sustainable society.

He said Panasonic plans to reduce CO2 emissions in its global production activities by 300,000 tons in three years from 2006 to 2009. The Group has also set a goal to reduce CO2 emissions to the 2000 level by 2010.

TECHNEWS

Apple's small new 4-gigabyte iPod shuffle can talk

AP, Seattle

APPL INC. unveiled a minuscule new iPod Shuffle on Wednesday that takes it's "smaller is better" mantra to a whole new level.

The third-generation Shuffle, a slim aluminum rectangle less than 2 inches long, takes up about half as much space as the previous version even as it doubles music storage space to 4 gigabytes. To achieve such a tiny form, Apple had to remove most of the buttons from the body of the \$79 device and build them into the headphone cord instead.

"Smaller has tended to work very well for us," said Greg Joswiak, a marketing vice president at Apple.

The trade-off for a sub-\$100 Shuffle always has been the lack of a screen to visually navigate the music stored on the device. The first-generation Shuffle, which launched in 2005, could hold about 240 songs, arguably not enough to warrant a screen.

Now that the device can carry 1,000 songs, Apple has come up with

a way for people to identify the music they're listening to or find songs they want. A new feature called VoiceOver can, at the push of a button, speak the song and artist name or rattle off the list of custom mixes called playlists that the owner has loaded onto the device.

Here's how it works: As you synchronize a new Shuffle using an updated version of iTunes, your PC or Mac looks at each track and playlist and creates a small file of a computerized voice speaking the title, artist or playlist name.

When you tap a button on the headphones, the voice speaks the title and artist as the music plays. (If a song is in Spanish, Chinese or any one of 12 other languages, the software figures this out and speaks in the appropriate language.) When you hold down the headphone button, the device reads a list of your playlists, and you can pick one by tapping again.

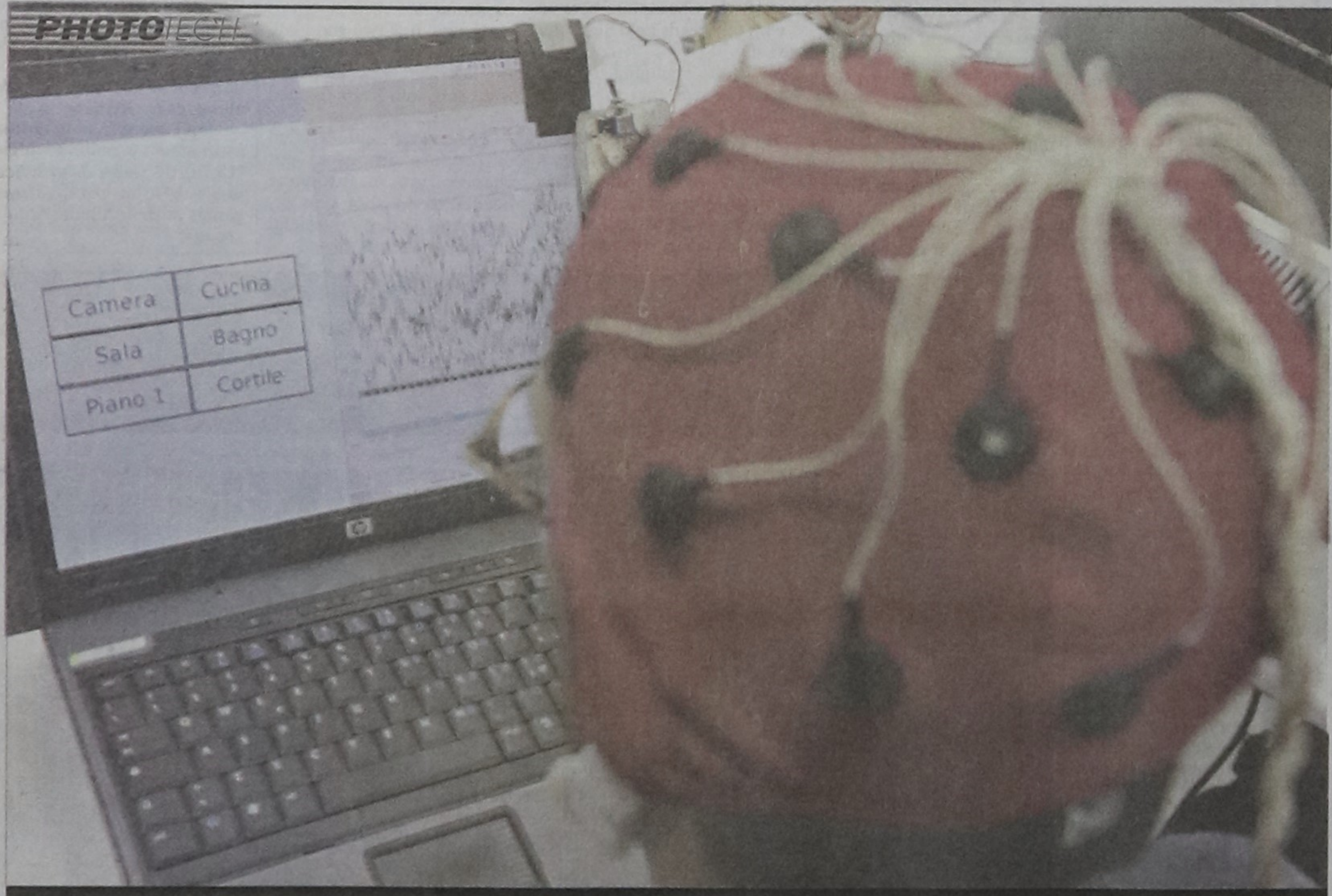
It's not possible to scroll through all of the songs on the device to jump right to one favorite, unless you know it's at the start of a certain playlist.

The new Shuffle, which comes in silver or black aluminum with a shiny stainless steel clip, is set to go on sale Thursday. Joswiak said Apple's own earphones will be the only option for early buyers, but that other companies plan to make compatible headphones as well as adapters for regular headphones.

Ross Rubin, an analyst for market researcher NPD Group, said there's no such thing as "too small" for gadget-happy consumers as long as Apple stays focused on ergonomics and provides a way to secure the device and keep it from getting lost.

But people who do buy a new Shuffle will be paying a premium for Apple's design, he added, noting less-expensive mini-models like SanDisk Corp.'s Sansa Clip (\$60 for a 4-gigabyte model) and Creative Technology Ltd.'s Zen Stone (less than \$50 for a 2-gigabyte version on Amazon.com).

Shares of Cupertino, Calif.-based Apple jumped \$4.05, or 4.6 percent, to \$92.68.



'OBEY ME ...'

Ph.D student Bernardo Dal Seno wears a skullcap mounted with electrodes and wired to a computer as he sits on a special wheel chair on March 6 at the Politecnico di Milan department in Milan. Italian researchers have developed a wheelchair that obeys mental signals sent to a computer, they said. The user is connected to a computer with electrodes on his or her scalp, and sends a signal by concentrating for a few seconds on the name of the desired destination - kitchen, bedroom, bathroom - displayed on a screen.

PHOTO: AFP