

Altair 8800

The MITS Altair 8800 was a microcomputer design from 1975, based on the Intel 8080A CPU. Sold as a kit through Popular Electronics magazine, the designers intended to sell only a few hundred to hobbyists, and were surprised when they sold over ten times that many in the first month. Today the Altair is widely recognized as the spark that led to the personal computer revolution of the next few years. The computer bus designed for the Altair was to become a de facto standard in form of the S-100 bus, and the first programming language for the machine was Microsoft's founding product, Altair BASIC.



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TECHFOCUS

Helping the mentors of mentally challenged

RIDWAN A KABIR

As a milestone in the history of social welfare in the country, Therap (BD) Ltd, a subsidiary of the USA based Therap Services, LLC, has stepped forward in improving the quality of life for people mentally challenged and people with developmental disabilities (MC/DD). They intend to do this by providing cost-effective information, communications, and technology services tailored to the specific needs of service providers, service managers, health professionals, and regulators.

Therap Ltd is not only working within the national border, but also working globally to institute a web-based service solution which will predominantly provide the non-governmental organisations (NGO) through a positively driven contribution towards the MC/DD community by providing the 'Therap Services Applications' (TSA) and endowing an adaptation of their web-based solution modules on such schemes.

"Our principal product is an integrated suite of web-based application modules, developed on the UNIX/Linux, Sun Microsystems environment with Java, and J2EE platforms," Syeed Ul Huq Khandker, assistant director of marketing, Therap (BD) Ltd. "It extends from report processing, communication and notification services to activity tracking and health record keeping systems, including incident reports, witness reports, behaviour tracking, health tracking, medication error reports, individual and emergency data forms, etc," he elaborated.

"Based on the authentication and access privileges, which can then be shared and reported on according to needs," he said adding how the modules are utterly accessible through the net at their website, www.therapservices.net, which is developed, maintained, updated on their secured servers.

"Previously data on mentally challenged individuals had been paper documented within the local NGO officials, in contrast to the TSA, which is expected to be far more efficient and cost effective, while giving an edge to human resource," Khandker continued.

Founded in 2004, Therap (BD) Ltd, in addition to development



and maintenance of this application, also provides extensive support to customer agencies, mostly in the US through emails, user guides, animated tutorials and web conferencing. "We are proud to say all related training and marketing materials are designed and developed here in Bangladesh," Khandker stated. "We currently have over 50 people working in our Dhaka office. The main areas of work include programming, testing, developing training material, graphic design and also marketing support for Therap Services, LLC," he said.

"Many citizens do not know that with a view to protect the rights of people with challenges, and to promote the equal rights and opportunities for their participation in all spheres of life, the

Ministry of Social Welfare, in association with the National Forum of Organisations Working for the Disabled (NFOWD), had initiated the development of a draft legislation on disability-concerned issues recently," he said. Extending his full enthusiasm he added, their current involvement with the ministry and NFOWD along with the National Foundation for Development of the Disabled Persons (NFDDP), in conjunction with NGOs such as Society for the Welfare of the Intellectually Disabled, Bangladesh (SWID) are working towards attaining a nationwide connection with the existing NGOs working to build a better social infrastructure for the MC/DD community of the country.

"We are looking to introduce

our application to the US based and the local DD community. Collaborating with various NGOs and related organisations, we hope to improve awareness and practices by offering our services," the assistant director cited. Therap is maintaining a full-fledged website for the members having valid login and password, and the price varies with the modules to be used and the constituting number of clients the particular agency comprises employing the services from Therap (BD) Ltd. A demo account is being offered on their web page without any associated charges.

Therap's web based documentation system is designed to record day-to-day documentations in a secure and The Health Insurance Portability

and Accountability Act of 1996 (HIPAA) compliant way. HIPAA requires physicians to ensure they are protecting the privacy and security of patients' medical information and using a standard format when submitting electronic transactions. Therap application ensures no such disclosure of information regarding the DD individuals to unauthorised people which makes it a secure communication system. "Therap's reliable and secure online reporting tools make it faster, easier, and more accurate to manage and follow-up individual and staff information. Essentially, it improves the care by facilitating communications among providers, programs, staff, regulators, state personnel, family members, and guardians," Khandker stated.

TECHNEWS

Paralysed man moves cursor through thought

REUTERS, London

A Paralyzed man using a new brain sensor has been able to move a computer cursor, open e-mail and control a robotic device simply by thinking about doing it, a team of scientists said on Wednesday.

They believe the BrainGate sensor, which involves implanting electrodes in the brain, could offer new hope to people Paralyzed by injuries or illnesses.

"This is the first step in an ongoing clinical trial of a device that is encouraging for its potential to help people with paralysis," Dr Leigh Hochberg, of Massachusetts General Hospital, said in an interview.

The 25-year-old man who suffered paralysis of all four limbs three years earlier completed tasks such as moving a cursor on a screen and controlling a robotic arm.

He is the first of four patients with spinal cord injuries, muscular dystrophy, stroke or motor neurone disease testing the brain-to-movement system developed by Cyberkinetics Neurotechnology Systems Inc in Massachusetts.

"This is the dawn of major neurotechnology where the ability to take signals out of the brain has taken a big step forward. We have the ability to put signals into the brain but getting signals out is a real challenge. I think this represents a landmark event," said Professor John Donoghue of Brown University in Rhode Island and the chief scientific officer of Cyberkinetics.

The scientists implanted a tiny silicon chip with 100 electrodes into an area of the brain responsible for movement. The activity of the cells was recorded



An illustration depicting the uses of the BrainGate technology. A paralyzed man using a new brain sensor has been able to move a computer cursor, open e-mail and control a robotic device simply by thinking about doing it, a team of scientists said on Wednesday.

and sent to a computer which translated the commands and enabled the patient to move and control the external device.

"This part of the brain, the motor cortex, which usually sends its signals down the spinal cord and out to the limbs to control movement, can still be used by this participant to control an external device, even after years had gone by since his spinal cord injury," added Hochberg, a co-author of the study published in the journal Nature.

Although it is not the first time brain activity has been used to control a cursor, Stephen Scott of Queen's University in Ontario, Canada said it advances the technology.

"This research suggests that implanted prosthetics are a

viable approach for assisting severely impaired individuals to communicate and interact with the environment," he said in a commentary in the journal.

In a separate study, researchers from Stanford University Schools of Medicine and Engineering described a faster way to process signals from the brain to control a computer or prosthetic device.

"Our research is starting to show that, from a performance perspective, this type of prosthetic system is clinically viable," Stephen Ryu, an assistant professor of neurosurgery at Stanford, said in a statement.

TECHNEWS

Samsung's NV3 lets users point, click, rock out

REUTERS, New York

THEY say the only successful converged device is the clock radio. Samsung is hoping to prove that false with a combination digital camera and music player.

The NV3 is much like any other cameraphone, with 7.2 megapixels, 3x optical zoom and a 2.5-inch high-resolution LCD display. But it also can store and play back MP3 and



WAV music files, as well as videoclips. It features 16 MB of internal memory, with a memory card expansion slot for additional storage. It includes a stereo headphone jack and

integrated stereo speakers. Digital camera rival Olympus last year tried and failed to market a similar device called the m:robe, which was even backed by a Super Bowl commercial. The product was discontinued after less than eight months.

Samsung's NV3 is expected to be available in fourth-quarter 2006 for \$350.

TECHNEWS

Microsoft, Yahoo link their online IM systems

AFP, San Francisco

YAHOO and Microsoft released software that built a bridge between their previously exclusive online instant messaging (IM) systems.

The move fulfilled a promise the US Internet titans made late last year and marked the first time rival global messaging service providers arranged to co-mingle members.

It also signaled a continued erosion of the walls dividing users of IM and mobile telephone text messaging services, according to lead analyst Matt Rosoff of Directions on Microsoft.

"I think that within the next five years you will see interoperability between IMs, and the text messaging you get with phones," Rosoff told AFP.

"That is the best possible world for consumers where I send you a message and it just finds you where ever you are."

Windows Live Messenger and Yahoo Messenger with Voice users in more than 15 international markets could get "beta" test versions of the interoperability software at

http://messenger.yahoo.com or http://ideas.live.com, according to the companies.

The union promised to create the world's largest IM community by merging nearly 350 million IM accounts, Microsoft and Yahoo said in a combined release.

"A new era for staying connected with friends and family is here, and the bridge between Yahoo's and Microsoft's IM communities is bringing people around the world closer together," said Brad Garlinghouse, senior vice president of Communications, Community and Front Doors, Yahoo.

The beta program would be available in Argentina, Australia, Brazil, Canada, China, France, Germany, Hong Kong, India, Italy, Korea, Mexico, Netherlands, Singapore, Spain, Taiwan, Turkey, the United Kingdom and the United States.

"We're proud to deliver this latest advancement in IM services that empower people to communicate with virtually whomever they want, wherever they want and whenever they want," Blake Irving, corporate

vice president, Windows Live Platform at Microsoft, said in a release.

The alliance of Yahoo and Microsoft was a "logical tie-up" between the IM providers ranked second and third behind America Online (AOL) in the United States, Rosoff said.

Yahoo and Microsoft announced last year that they would link their IM services by the second financial quarter of 2006.

"They are just a little late," Rosoff said. "It is not anything surprising."

AOL has resisted opening its IM system in the past but could change tack after its recent decision to provide all of its services except internet access to broadband users for free, according to analysts.

"They might break down the IM barrier too," Rosoff said of AOL, which is owned by Time Warner. "AOL was resistant to opening the IM system because it had a big lead, at least in the United States."

Internet juggernaut Goggle invited rival IM providers to link with its latest messaging system, which hasn't caught on with users.

PHOTOTECH

SOYUZ-2

The Soyuz-2 rocket installed at the launch pad of the Baikonur cosmodrome in Kazakhstan on July 17, 2006. The launch of the rocket set to carry into space a huge new satellite designed to improve monitoring of weather systems and the climate was postponed for two to three months due to technical reasons, a spokesman for the Federal Space Agency said.

PHOTO: AFP

