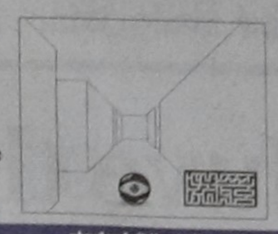
Star TECH

Dhaka Friday October 30, 2009

startech@thedailystar.net

Maze War

Maze War originated or disseminated a number of concepts used in thousands of games to follow, and is considered one of the earliest, if not earliest, examples of a first-person shooter. The game was released in 1974. Gameplay is simple by later standards. Players wander around a maze, being capable of moving backward or forwards, and turning right or left, and peeking through doorways. Other players are seen as eyeballs. When a player sees another player, they can shoot them. Players gain points for shooting other players, and lose them for being shot. Occasionally in some versions, a duck also appears in the passage.



TECHFOCUS

Boosting rural education through technology

NAHID AKHTER

IMAGINE a nation with a population booming with literacy. Where, irrespective of remoteness of village or limitation of seats, every student gets his fair share at educating himself. Sounds like a lot to ask for at this stage. But it's never too late to start trying.

Rural education is one field that has been lacking progress in Bangladesh and other third world countries, in general. There are very few schools set up in the rural areas, and as such, students living in remote villages have to walk miles to reach school. Moreover, the scope for higher education is almost negligible. Even within the few schools present in the rural areas, quality of education is usually not up to the mark, with poor infrastructure, absence of proper qualified teachers and other facilities like electricity, etc. This in turn drives more potential students away from school.

Attempts to get round this problem have been made by different third world countries in their own ways. Almost all solutions lie in the use of technology. In our neighboring country, India, the government has tried to promote rural education in various ways, like ensuring provision of at least one computer in every school in the villages, providing group classes by using video and audio conferencing, thereby promoting mass education.

Moreover, teachers are given tools like Laptops, printers, etc. to provide notes and other important notices to children. Private institutions like Real, NIIT are opening their centers in rural areas to provide computer education to students and teachers. Private companies like Wipro and others are providing basic infrastructures like computer parts, teachers and technicians for promoting rural education.

These initiatives are proving effective towards the promotion of rural education. Computers in the rural primary schools attract the children and in turn they attend classes. The computer education brings a feeling of confidence and equality among the village children. They feel like they are no less than those studying in the city schools and colleges. This feeling makes them work harder to achieve their goals. The companies and institutions that provide free computer education are also promoting the talent of the village children in a productive manner. A few schools are even using electricity produced by non conventional resources of energy. All in all, technology seems to be helping the promotion of rural education there.

In Kenya, according to a BBC report, a pilot project was initiated which was aimed at using technology to deliver education across the African continent. In this project, conceived by Eduvision, textbooks are out, and customised Pocket PCs, referred to as e-slates, are in. They are Wi-Fi enabled and run on licence-free open source software to keep costs down.

E-slates contain all sorts of information you'd find in a textbook and more. They contain textual information, visual information and questions. Within visual information they can have audio files, video clips and animations The handheld PCs were chosen in place of desktops because they are more portable, so the children can take them home at night, and also because they're cheaper, making them cost-effective alternatives to traditional methods of learning.

The justification Eduvision uses is that families pay upwards of $100 a year for textbooks. This system is something that they hope will be sustainable, and the money that they use towards textbooks could be used to buy e-slates instead, which can last more than a year, thereby reducing the cost of education.

Moreover, the potential offered by e-slates are enormous. The content stored on them can be dynamically updated wirelessly, hence the need for Wi-Fi.

This means that they could include anything from new textbooks which have just come on stream, to other content like local information or even pages from the web. The team have also devised a rather neat system for getting the information onto the devices. First off, content is created and formatted for use on the e-slate. A central operations centre distributes the material over a cheap satellite radio downlink to a satellite radio receiver in the school. The information passes through a base station which beams it out wirelessly to the students.

And so a new and enjoyable way of learning is born. The team is convinced that this system will play a part in Africa's digital future. Now that wi-fi is available in Bangladesh too, a similar system could be piloted by willing NGOs or the government to see how our rural children can benefit.

In Bangladesh rural education has been encouraged through Distance Learning. A small number of educational institutions (public and private) in Bangladesh offer distance and open learning programs. Among these, Bangladesh Open University (BOU) is the only public institution which plays a major role. BOU mainly aims at mass education and training, especially of rural groups like women, agricultural workers, etc.

It basically uses media, like lectures on TV and radio, face-to-face tutorials and audio cassettes, tapes, email, teleconference and printed modules for independent study. The government also provides programs like 'Mati O' Manush' an agricultural information TV program.

However, there are a number of limitations to the system. There is no interactivity involved with the students, no feedback of learning outcome, no way of gauging student progress and no evaluation of teaching quality. Given the limitation of resources, a computer-based system would be unfeasible for our rural setup.

However, mobile phone use has been growing sporadically into rural areas of Bangladesh. The use of Short Message Service (SMS) is also growing accordingly. SMS, which costs less than calling, offers a mode of communication that is within reach of almost everyone. As such, SMS may be effective in providing two-way feedback during a distance education session.

In a paper prepared by Yousuf M Islam, Zillur Rahman, Shafiq Shamsur Razzaq, Md. Abu Sayed and Shakib Zaman of BRAC University and Soft-Ed Limited respectively, it has been proposed how the SMS system can be incorporated into a distance education session over national television. A participant may SMS his queries regarding the course, using particular key words. After few seconds the system will automatically send the information about the courses. So, people in remote areas can also easily find out course's information using SMS without the need for Internet access.

If a participant fulfils the course requirements, he/she can register his/her information using SMS. If the registration is successful then the proposed system will send a confirmation via SMS. If the lectures are telecast live, the students can confirm his/her attendance. The logged attendance will help the teacher ask random individual questions by phoning up attending students. The lesson session needs to be question-based to provoke thought and establish the mechanism of two-way feedback. The presenter would pose questions at suitable intervals. If some participants do not participate in the question answer session then the system can send a message to the participants to give the feeling that he/she is being personally monitored by the presenter. This would motivate participants to attend the question-answer session. In the last 10 minutes of a live show, participants can send in their queries and questions by SMS. The presenter can browse the questions and give answers on air. The system can also keep record of each participant's performance throughout the course. At end of the each class, participants can get a performance notification via SMS. This may motivate participants to attend the next class.

The system of taking lectures over television with feedback established through SMS was lab tested in a few universities using a multimedia projector fed from a video camera - the presenter being in a separate room. During the lecture, the students responding via SMS were independently videotaped. Most participants were reported to have enjoyed the lecture thoroughly and came out with a clear concept about the lecture. Moreover, the system helped the weak participants, who were shy to answer the questions. They also said that the proposed system helped them to concentrate on delivered lecture.

Thus Immediate student feedback on learning positively motivates students and can be used to enhance distance learning. The SMS system of distance education can prospectively help bridge the rural education gap in an effective and non-expensive way, and encourage a larger crowd in Bangladesh to reap the benefits of education.

BCS shows road through Digital Education Project

MUSA IBRAHIM

THE 'Digital Bangladesh' slogan is getting momentum day by day through the involvement of the stakeholders from the society. As such, Bangladesh Computer Samity (BCS) took an initiative to disseminate the technology in education and build up awareness among the teachers and students about its use with a slogan 'BCS Digital Education Project'. BCS distributed a complete computer with internet connection, various digital education materials and equipments in 50 schools in an initial stage of the progra-mme. These schools will also be used as mass communication centres locally.

Guests at the event hand over a computer to poet Nirmolendu Gun, who runs a school at Netrokona district.

Yeafesh Osman, state minister for science, information and communication technology, while addressing the computer distribution programme at IDB Bhaban auditorium as chief guest said the government took short, mid and long term work plans and is keen to implement these plans. And this initiative is a great milestone to accomplish the dream of digital Bangladesh. If this initiative can be implemented successfully in future, it is possible to give the country a new shape. He also sought support from the non-government sectors for the huge work.

Mostafa Jabbar, president of BCS, presided the ceremony and said it was a historical moment for the country's technology education and its dissemination. BCS started the journey through distributing the computers among the schools and it would be continued, he added describing his organisation's digital education project's aims, objectives and plans.

Among others, poet Nirmolendu Gun, Md Zahid Hossain, acting secretary of Communication Ministry, Ishtiaq Hossain Chowdhury of GrameenPhone Limited and Aziz Rahman, managing director of Index IT Limited, spoke in the function.

The speakers said all the students, teachers and employees of the school will be able to develop skill of the technological literacy among themselves through this project. Besides, this initiative will also support them for practical education and will meet the demand for information. The local people will be able to use these schools as mass communication centres for their necessary information and will get necessary instructions.

Index IT Ltd provided 50 computers, GrameenPhone Ltd assisted with internet connection with modem and Smart Technologies (BD) Ltd while Orient Computer, Excel Technologies, Epsilon Systems and Solutions Ltd, Bdjobs dot com, Beta Bangladesh Ltd, Unique Business Systems, Bijoy Digital, Bangladesh Open Source Network, The Computers Limited, Colours of Bangladesh and Techno BD stepped forward with different support.

TECHNEWS

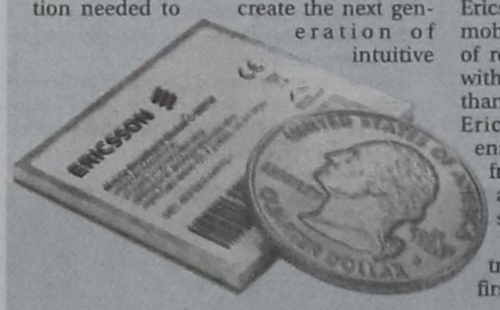
Ericsson's new module connects consumer electronics

STARTECH DESK

ERICSSON recently unveiled its new mobile broadband module specifically designed to bring high-speed wireless connections to a new generation of consumer electronic devices. As demand increases for the freedom and mobility which embedded broadband enables, Ericsson's new consumer electronics (CE) module signifies a great leap towards an all-communicating world, says a press release.

Intended for immediate implementation in e-book readers, GPS navigators, and other popular portable consumer electronics, the CE module has the potential to be integrated into media players, durable goods and more, as embedded mobile broadband becomes part of everyday life. Already with commercial wins in the consumer electronics space, Ericsson's modules are enabling manufacturers to embrace and capitalize on the connected lifestyle.

The new Ericsson CE module, named C3607w, gives device manufacturers the flexible, self-contained connectivity solution needed to create the next generation of intuitive and innovative consumer electronics by decoupling the processor and connectivity design. At only a third of the size of previous Ericsson modules, the C3607w is packaged with an extensive operator approval program and outstanding IPR protection which eases integration and shortens time to market.



"This is an exciting time for Ericsson and the industry as we announce our new CE module," said Mats Norin, vice president, Ericsson Mobile Broadband Modules. "Our vision is clear: all devices that can be connected will be connected as the technology required for an all-communicating world is now here. This module opens a new realm of possibilities and innovation for the consumer electronics industry as they can now easily and cost-effectively integrate the power and speed of mobile broadband in today's and tomorrow's devices."

Unveiled at the Intel Developer Forum (IDF), the C3607w module highlights progress in Ericsson's collaboration with Intel announced last year to bring HSPA mobile data solutions to Intel's 'Moorestown' platform-based MIDs. The C3607w is Ericsson's smallest, lightest and fastest mobile broadband module to date, capable of reaching uplink speeds of 5.76 Mbps with up to 40% less power consumption than previous modules. Equipped with Ericsson's wake-on-wireless feature, enabling remote wake-up commands from sleep mode, the CE module will also enable a new set of applications for security and messaging.

Ericsson's C3607w consumer electronics module will be available in the first quarter of 2010.

PHOTOTECH

ON A SURFACE

A Microsoft store employee demonstrates a touch friendly computer screen at the first store at Scottsdale Fashion Square on October 22 in Scottsdale, Arizona.

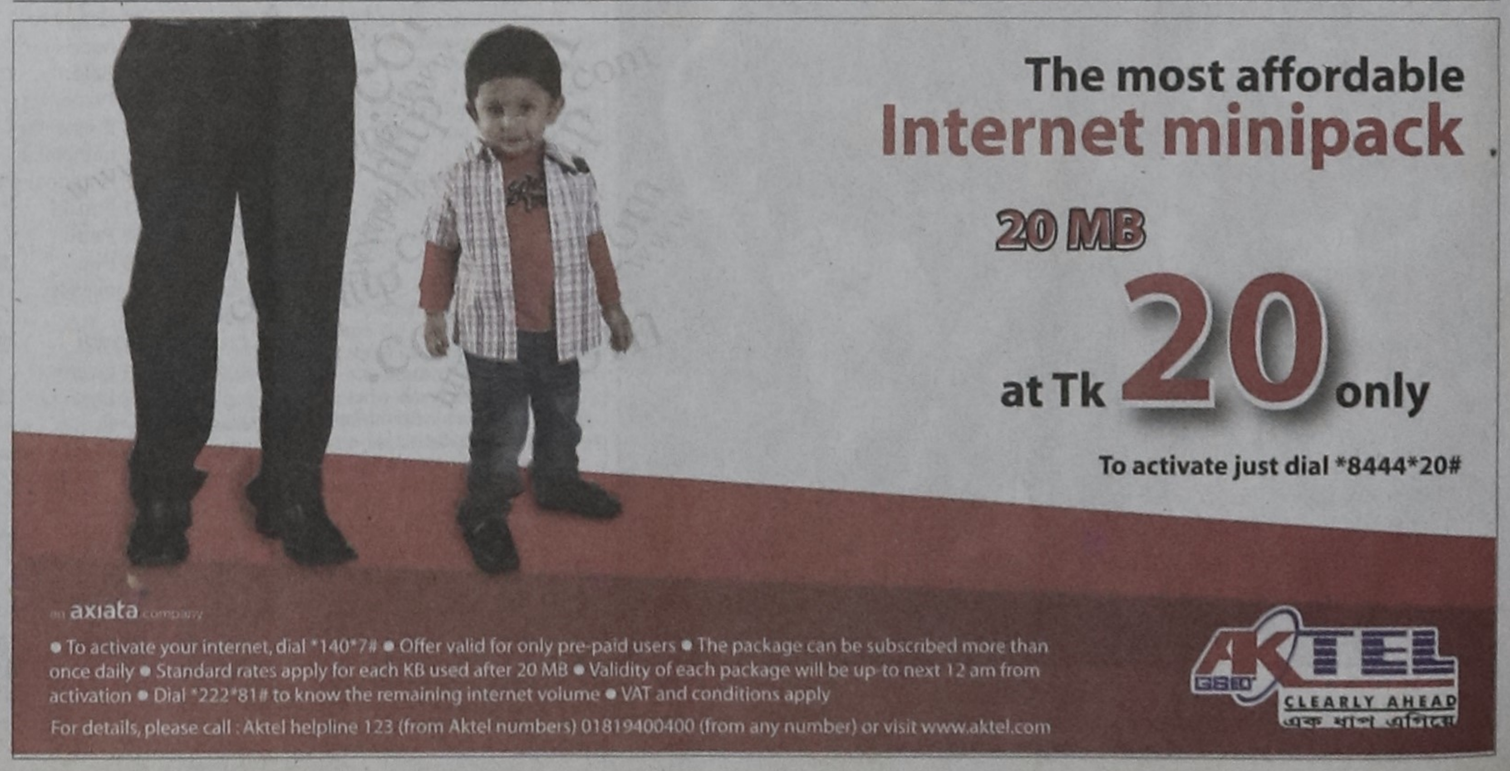



PHOTO: AFP