



## MICROSOFT IMAGINE CUP 2012

# Innovation battle begins

### IT & TELECOM REPORT

Microsoft Imagine Cup is the world's premier student technology competition which has been running for almost a decade. Since its inception in 2003, the Imagine Cup has grown to be a truly global competition focused on finding solutions to real world problems.

This year too, Microsoft is going to organise the Imagine Cup 2012 with the theme "Imagine a world where technology helps solve the toughest problems". The competitors have to develop their projects based on the theme.

In that line, Microsoft Bangladesh has organised national Imagine Cup 2012. Over 300 teams of students across the country applied for the contest, 14 got chances to participate and finally 10 teams have been selected for the final round. The winner of this competition will go to Sydney, Australia in July to compete in Imagine Cup 2012 Worldwide finals.

The teams showcased their project at an event held at DRIK ICT premises in the capital on April 28.

Let's take a look at the 10 teams and their projects.

#### Angry Coders from University of Dhaka

The Angry Coders have developed *Smart agro* application.

The team said because of climate change thousand acres of cultivable land are decaying every year in Bangladesh which has intensified poverty problem. Only floating cultivation with water-hyacinth bed in these water spaces can be substituted for meeting hunger and poverty for more than 5 million people. But different diseases & flooding deter this process of cultivation from implementation. To provide solution to these two major problems, they are developing this mobile adapted software which is able to detect diseases through image processing of the crops and vegetables and forecast flooding.



The participating teams pose for a group photo during the event.

Their app can be used on windows phone, tablet or laptop.

#### AUST 4BIT from Ahsanullah University of Science and Technology

The team has come up with their innovation *Helping System for Physically Disabled People Using Voice Processing* to help the disabled people.

Their software system will act only by the voice of a disabled person assigned to it. The software absolutely requires no physical interaction. It takes only voice input and acts based on the voice command. The software can turn on light, fan, doors without any physical interaction, it also helps call people through cell phone without the touching the keypad. It includes a voice guided robot which will help handicapped person fetch things.

#### Dexterous" from BRAC University

With *Save Energy, Save the Green* they are trying to solve the mass power loss in the renewable energy sector by using an intelligent switching system, which will reduce the use of fossil fuel and thus it will help the environment to keep it greener. Additionally, it will reduce the misuse of electricity. For example, they said, if a person forgets to turn off AC or fan at his office and remembers after coming back home, he will be able to switch off the AC or fan through his Windows mobile phone. Power of a source will be made always maximum.

Their app will use an internet based software system, which will automatically detect the present condition of every renewable energy based power source and will maximise the power harvesting from every source.

#### Engine from BUET, AIUB and North South University

With *Annapurna*, the team developed a solution which will provide a cultivation guideline to the farmers as well as cultivators. They will collect information related to farming provide an intelligent user-centric and personalised instruction to enhance better agricultural practice.

#### IIT Phoenix from Institute of IT, University of Dhaka

They have developed an online donation system- *Better Together* where someone economically solvent can help a person by providing financial aids. With their system anyone across the globe can post his or her requests, which after proper validation will be visible on the website. And interested individuals will be able to donate money by

means of e-transaction.

#### Leprechaun from North South University

With *Project Beetle* the team is trying to solve crop production disaster.

The team have developed a windows phone application to detect crop disease. The application will capture crop image and analyse them to get unusual patterns. The patterns will be matched with a huge cloud database which will be constantly updated by plant disease specialists from all around the world. After detecting the disease accurately, the application will provide detailed information about the crop disease and its cure. The application will also have offline database and localised support so that farmers on the remotest part of the world can get help.

#### Team MOR from BRAC University

The team has come up with the idea of *Eye controlled cursor* which will let you control the cursor movements by your pupil. They came up with this idea for those who (especially people with impairments) cannot work with other input devices-mouse, keyboard or touch panel.

The team found no efficient and cheap way to make such kind of software and system. With Eye controlled cursor, MOR is trying to make it work efficiently and cheaply using webcam and some computer vision algorithms where our pupil will act like a mouse.

#### Team Zero Hour from Patuakhali Science and Technology University

The team has come up with the idea of *Pocket Switch*. The idea is to develop a system that lets control devices from distant places.

#### Team "uiU\_DyNaMiC" from United International University

Their project is *Hahe Khori*, an education software. Their target is to design such an intelligent and responsive educational software application, in windows mobile, web and desktop platforms, that will help kids to learn recognising and writing alphabets of native language. With this application kids can learn alpha-

bets by listening, writing, and speaking. This application will provide a scribble pad to a kid and display one alphabet after another one. Kids will learn to write that alphabet on scribble pad. The application will determine whether kids' attempted writing is correct or wrong. This way the application will perform the role of a virtual tutor.

#### Team "UIU-Strugglers" from United International University

With the project *UIU Bangla OCR*, the team has developed a Bangla Optical Character Recogniser (OCR). They said although Bangla is a rich language and a lot of documents are there in this language, no OCR is available commercially. They developed a robust efficient Bangla OCR in windows platform for printed characters. The main goal is to transform the input data (pattern of data), such as text written document on manuscript, text typed on document or online writing into a digital format.

Five teams will present their projects before a panel of experts today and five teams will present tomorrow.

The judges will be looking for video presentations that provide background and context to the projects, explanation on why the problem is an interesting one, highlight on how the system works including an insightful demonstration. Teams will also be evaluated on their ability to take questions from the panel.

Name of the winning team along with 1st and 2nd runner-up teams will be announced on May 9.

GPIT is sponsoring the tickets for worldwide finals in Sydney and TSS is sponsoring Doel laptops for the winning team members.

Each member of the 1st and 2nd runner-up teams will get Doel laptops.

Team Rapture, Last year's National champion team, won the "People's Choice Award" at the Imagine Cup worldwide finals in USA.

## Election Commission uses Oracle's database service

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Election Commission (EC) has upgraded its biometric identification and voter registration system by consolidating over hundreds of different databases into a single database running on Oracle Exadata Database Machine X2-2 and realised a 3x boost in system performance, said a press release.

The new system stores voter information such as fingerprints, photos, signatures and contact details for approximately 86 million Bangladeshi voters across 602 remote locations and is capable of scaling further to accommodate the three to five percent year-on-year growth in registrations as more citizens reach legal voting age.

Apart from Exadata, the EC has implemented Oracle SOA Suite, Oracle Business Intelligence Enterprise Edition, and Oracle WebLogic Server to enhance data integration, security and overall system management capabilities.

TigerIT, a Gold level member of Oracle PartnerNetwork (OPN) provided consultation and support services for the implementation.

"Oracle Exadata Database Machine has provided us with advanced data security, processing, and administration functions," said Brig General Akhtaruzzaman Siddique, psc, te, National Project Director, PERP and FINIDC Project, Bangladesh Election Commission. "By including the scalable database machine in our identification and voter registration system, I believe we now have the best data capturing and management solution available," he also added.

## Nokia promises new products to exasperated investors

REUTERS, Helsinki/London

Nokia's outgoing Chairman Jorma Ollila promised a range of new products ahead of a meeting on Thursday with shareholders who are increasingly losing patience with the company's recovery efforts.

In an interview published on Thursday, Ollila told the Financial Times the Finnish company would launch a range of tablets and "hybrid" smart mobile devices, but did not say when.

Ollila, who will step down at the meeting after 27 years with the company, told the Financial Times that Nokia had been too slow at the start of the smartphone revolution, but said the combination of new products and Nokia services would help.

Nokia is widely expected to unveil its first tablet computer later this year when Microsoft's new Windows 8 operating system becomes available.

"Nokia's fate in tablets is directly linked to Microsoft, which also has to succeed in this space," said Pohjola analyst Hannu Rauhalu.

Nokia has lost out to Apple Inc and Google Inc in the smartphone business and is now pinning hopes of a turnaround on Lumia, a new range of smartphones which use Microsoft software.

Once hailed as a national hero in Finland for transforming Nokia from a toilet paper-to-rubber boots conglomerate to the world's No 1 cellphone maker in 1998, Ollila has since come under criticism for neglecting the

emergence of smartphones.

"Tablets are an important one, so that is being looked into, and there will be different hybrids, different form factors in the future," he said.

Sales of Nokia's new smartphone range have so far been slow and are yet to compensate for diving sales of previous products. Nokia also lost its position as the largest volume cellphone maker to Samsung Electronics last quarter.

Nokia executives are likely to face a grilling on these issues at Thursday's meeting. Investors have seen the value of their Nokia holding fall 90 percent in less than five years - two-thirds of that since its new chief executive Stephen Elop unveiled the company's strategy shift to Microsoft in February 2011.

Most attendees are likely to be individual shareholders as institutional investors usually do not come to such meetings.

The meeting follows moves by ratings agencies Fitch and Standard & Poor's to cut Nokia's credit rating to "junk" status given its bleak outlook [ID:nL6E8FR75]

Ollila will hand over his role to Risto Siilasmaa after the shareholders meeting. In a poll published by national broadcaster YLE last week, around 40 percent of analysts following the company rated his 13 years' work as chairman as 'poor' or 'unacceptable'.

Shares in Nokia were 0.8 percent higher at 2.722 euros by 0822 GMT, on the last day investors in the stock have the right to a 0.20 euros per share dividend.

## Samsung and GP to bring Galaxy Pocket

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Samsung mobile is going to launch its new smartphone Samsung Galaxy Pocket exclusively with Grameenphone this month.

This mobile phone delivers a rich and smart mobile experience especially for youths and young professionals, who are highly conscious about brand and style.

This full touch mobile phone has a slim and compact form. It comes with a wide range of useful services that enrich the user's mobile experience. Its powerful 832 Mhz processor handles multi-tasking with ease and it has 3GB of memory for applications and content storage. It also has Micro SD slot that supports up to 32GB of memory.

The phone runs on Android 2.3 (Gingerbread) and has TouchWiz interface. Users can access Google Mobile Services and even download free apps from Samsung Apps.

Galaxy Pocket also features socialising tools including push email, social networking sites and ChatOn. It also comes with 2MP camera, high speed Wi-Fi, Bluetooth 3.0, USB 2.0.



The phone has a price tag of Tk 12,990.

Samsung mobile and Grameenphone, as part of their continuous efforts to enrich customers' lives, are going to put extra efforts in delighting smartphone customers through this upcoming market offering.

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