In this Issue!

OLX—an application for easy money ........ 2
Oracle Database 12c: Plug into the cloud ............ 3
Enhance IT Security with Solar winds log & Event Manager ............ 4
Happening @ Dept. of I.T. in the month of August ........ 5
Our Shining Stars ...... 10
Quiz -Time.......11
OLX-an application for easy money

So many things we do every day are done through mobile apps. But who thought you could also buy and sell through a mobile app? People are increasingly using these apps now and making everyday transactions in the online classifieds space. The online industry in India has seen exponential growth. More people from smaller circles are using online classified space through mobile WAP sites and applications, as that is much easier for people who have no access to PCs and laptops.

At the basic level, free online classified services such as OLX connect individual buyers and sellers allow disintermediation and help individuals sell, buy, rent, etc.

Besides used cars and bikes, other second-hand goods in categories like mobiles, computers, electronics, furniture and different types of personal and household goods are now sold over the internet by individuals to other individuals, thus making everyone a seller. These sales happen within their own city, sometimes within their localities, with easy display of the product to be sold through a classified ad that is rich and descriptive, and where buyers can directly contact sellers to facilitate the transactions.

OLX has been in the mobile space for the last three years via wide array of apps for all smartphones and tablets- iPhone, iPad, Android, Blackberry, Windows Phone and Symbian. In fact they have been investing in mobile product experiences with a mobile-first orientation to developing online classifieds. They also have a mobile site that’s optimized for feature phones. The hyper-local nature of mobile phones helps users buy and sell easily in their vicinity, without much effort. For OLX, mobile traffic has grown exponentially through this year, and now over 55% of the total traffic is coming through mobile and tablet devices.
Database consolidation is a key step in the journey to the cloud. Oracle Database 12c makes the process far faster and simpler, enabling the high density of schema-based consolidation—without requiring changes to existing applications. With more than 500 new features, Oracle Database 12c is designed to give Oracle customers exactly what they need for cloud computing, big data, security, and availability.

Some new features in Oracle Database 12c

Online rename and relocation of an active data file
In 12c R1, a data file can be renamed or moved online simply using the ALTER DATABASE MOVE DATAFILE SQL statement. While the data file is being transferred, the end user can perform queries, DML and DDL tasks. Additionally, data files can be migrated between storages e.g. from non-ASM to ASM and vice versa.

Invisible columns
In 12c R1, you can now have an invisible column in a table. When a column is defined as invisible, the column won’t appear in generic queries, unless the column is explicitly referred to in the SQL statement or condition, or DESCRIBED in the table definition. It is pretty easy to add or modify a column to be invisible and vice versa:

```
SQL>CREATE TABLE emp (eno number(6), ename name varchar2(40), sal number(9) INVISIBLE);
```

Multiple indexes on the same column
Pre Oracle 12c, you can’t create multiple indexes either on the same column or set of columns in any form. For example, if you have an index on column {a} or columns {a,b}, you can’t create another index on the same column or set of columns in the same order. In 12c, you can have multiple indexes on the same column or set of columns as long as the index type is different. However, only one type of index is usable /visible at a given time. In order to test the invisible indexes, you need to set the optimizer_use_use_invisible_indexes=true.

Backup specific user privilege
In 11g R2, SYSASM privilege was introduced to perform ASM specific operations. Similarly, backup and recovery tasks specific privilege SYSBACKUP has been introduced in 12c to execute backup and recovery commands in Recovery Manager (RMAN). Therefore, you can create a local user in the database and grant the SYSBACKUP privilege to perform any backup and recovery related tasks in RMAN without being granting the SYSDBA privilege.
Restricting PGA size
Pre Oracle 12c R1, there was no option to limit and control the PGA size. Although, you set a certain size to PGA_AGGREGATE_TARGET initialization parameter, Oracle could increase/reduce the size of the PGA dynamically based on the workload and requirements. In 12c, you can set a hard limit on PGA by enabling the automatic PGA management, which requires PGA_AGGREGATE_LIMIT parameter settings. Therefore, you can now set the hard limit on PGA by setting the new parameter to avoid excessive PGA usage.

Gathering statistics concurrently on multiple tables
In previous Oracle database editions, whenever you execute a DBMS_STATS procedure to gather table, index, schema or database level statistics, Oracle used to collect stats one table at a time. If the table is big enough, then increasing the parallelism was recommended. With 12c R1, you can now collect stats on multiple tables, partitions and sub partitions concurrently.

Real-time ADDM analysis
Analyzing past and current database health statuses through a set of automatic diagnostic tools such as AWR, ASH and ADDM is part of every DBAs life. Though each individual tool can be used at various levels to measure the database’s overall health and performance, no tool can be used when the database is unresponsive or totally hung.

When you encounter an unresponsive database or hung state, and if you have configured Oracle Enterprise Manager 12c Cloud Control, you can diagnose serious performance issues. This would give you a good picture about what’s currently going on in the database, and might also provide a remedy to resolve the issue.

The following step-by-step procedure demonstrates how to analyze the situation on the Oracle EM 12c Cloud Control:

- Select the Emergency Monitoring option from the Performance menu on the Access the Database Home page. This will show the top blocking sessions in the Hang Analysis table.
- Select the Real-Time ADDM option from the Performance to perform Real-time ADDM analysis.
- After collecting the performance data, click on the Findings tab to get the interactive summary of all the findings.
Enhance IT Security with Solar Winds Log & Event Manager

What will you do when the security systems implemented to secure your IT environment are not secure anymore? Do you know what’s lurking in your network to exploit vulnerabilities and compromise IT security?

SolarWinds Log & Event Manager (LEM) provides real-time insight and awareness into all your security, operational and policy-driven activities on your IT frontier. SolarWinds LEM can detect, alert, and react to zero-day threats and help protect your network and systems from security risks.

SolarWinds LEM offers comprehensive log management functionality to collect logs from various network and security devices, and correlate events in real time for advanced incident alerting. LEM enhances IT security and allows you to:

- Analyze log data with intuitive search tools and identify anomalies and suspicious behavior patterns
- Leverage powerful automated response to remediate and counter real-time security threats
- Defend against unauthorized USB access and confidential data loss
- Use out-of-the-box audit-proven regulatory reports to support organizational and federal compliance

SolarWinds LEM is a full-function security event and information management (SIEM) solution that integrates with network devices, security appliances, workstations, servers, OS, databases and more for far-reaching IT security.
Happenings @ Dept. of I.T. in the month of September, 2013

A Workshop on "Advanced C programming" for MCA 2nd year Students

Prof. Rakesh Roshan of department of I.T, I.T.S, Mohan Nagar, Ghaziabad conducted a half day workshop covering advanced concepts in C programming for MCA 2nd year students on 7th Sep, 2013. The advanced topics such as interrupts, mouse/keyboard event handling, graphics and pointers were discussed and practically demonstrated in the workshop.

Mr. Balaji Venkateshwar, Vice President-Information Security, Bank of America, once again at I.T.S, Mohan Nagar

A guest talk on “Information Security- Nation’s Safety” was given by Mr. Balaji Venkateshwar for MCA and BCA students at I.T.S, Mohan Nagar on 19th Sep, 2013. Mr. Balaji talked about the current and future opportunities in the field of cyber security. He emphasized that how a computer science student can utilize his time to face the challenging world of technology. He also explained that how just by including 39 buzzwords in one’s resume one can increase probability of getting hired. Mr. Balaji also pointed out the need of being cautious about the profile on social networking sites because many employers do a background investigation for a candidate on these sites too and Hadoop is the tool generally used for this purpose. He also motivated the students to be self reliant and entrepreneurs who create jobs for other rather being a job seeker.
In this Issue!

OLX-an application for easy money .......... 2

Oracle Database 12c: Plug into the cloud ............ 3

Enhance IT Security with Solar winds log & Event Manager ............ 4

Happening @ Dept. of I.T. in the month of August .. 5

Our Shining Stars ...... 10

Quiz -Time.......11

Devanshu Sharma and Priyanka Tyagi were declared Mr. and Ms. Fresher, while Basant Kumar and Priya Chaturvedi were announced Mr. and Ms. Evening
Happenings @ Dept. of I.T. in the month of September, 2013

**Guest Talk by Mr. S.K. Kathiresan on Information Security for MCA students**

Department of I.T organized a guest lecture on “**Advanced Persistent Threats : Postmortem on Cyber Threats Beyond Borders**” for MCA III & MCA V semester students on 20th September 2013 at I.T.S, Mohan Nagar. Dr. Sivakumar Kathiresan, Associate Director – Head -Security Assessment Team - Offshore. Digital Security Practice, Cognizant Technology Solutions-Chennai, was the resource person of the event.

Dr. Sivakumar discussed theoretical as well as application aspects of cross border cyber wars and intrusion in the government sites and portals. He extended his discussion with various technologies available in the field of cyber security. He added that the application of cyber security technologies is on high demand in all over the world. He gave many practical examples of intrusion and hacking in the various Govt. sites and their detection. Students interacted with speaker regarding their carrier opportunities in the field of cyber security.
Happenings @ Dept. of I.T. in the month of September, 2013

Guest Talk on Software Engineering

An invited talk on "Software Engineering" was organized by Dept. of I.T for MCA students on 26th Sep, 2013. Dr. Vijay Rao was invited to share his thoughts on the relevance of the subject in the industry.

Dr. Rao discusses about the software crisis and how standard process models like waterfall, prototyping & spiral approaches were applied to control these crisis. Dr. Rao discussed extensively "Agile Software Development" approach and exposed students with Agile methodologies, characteristics and latest trends of Software development approaches.

Dr. Rao also discussed software architectures, framework and importance of software engineering practices in industry, more importantly, in commercial applications.
Our Shining Stars

Aspiring Team Systems Pvt. Ltd

AMAN BHUSHAN
ANKIT KUMAR
BHAWNA ARYA
VIVEK Kr. YADAV

i-MAX Technologies Pvt. Ltd.

ANKUR KAPIL
ASHISH KUMAR
KAVITA YADAV
KOMAL GUPTA
MUGDHA BHARADWAJ
PARUL
SHIVAM DANGRA
SHUBHI TAYAL
ANKIT KUMAR
Congratulations to all the placed students of MCA @ITS, Mohan Nagar
Quiz-Time...some riddles

1. Two fathers took their sons to a fruit stall. Each man and son bought an apple, but when they returned home, they had only 3 apples. They did not eat, lost, or thrown. How could this be possible?

2. John, Jenita, Maria and Julie went to a shop. Each picked a colorful ball of a different favorite color. The colors are Yellow, Violet, Green and Red. John and Maria both do not like violet. The person who likes red is a girl. Jenita likes green, but it is not her favorite color. Jenita's favorite color is either green or yellow, although she can have only one favorite color. John likes red, but it is not his favorite color.

3. Michael has ten pairs of black socks, eight pairs of white socks and seven pairs of green socks. Everything is mixed in a draw. As there is no light he was not able to identify the color of the socks. How many of the socks did he want to take to match one pair?
Bill Moggridge (the man behind the first laptop computer)

Moggridge, a British-born designer, author and educator, created the Grid Compass clamshell computer in 1979. The computer, which sold for $8,150 when it was released in 1982, was encased in magnesium and used by the U.S. military and NASA. There were a number of portable computers being developed at the same time as the Grid Compass, however Moggridge pushed for the foldable design because the screen, keyboard and circuitry could all fit into a comfortable and truly portable design. Portable computers at that time resembled sewing machines and weighed more than 20 pounds; Moggridge’s design cut average device weight in half and actually made computers portable. Since then, the clamshell laptop has continued to evolve into the portable ultrabooks that are available today.

Announcement and Contact Details

VIBRANCE is an E-magazine of Department of I.T, I.T.S, Ghaziabad. We look forward to the contribution from our students, alumni, faculty members and industry experts.

Contributors are advised to send their contribution to our editorial team at:
sakshiguptaag@its.edu.in (Sakshi Gupta-MCA-3rd yr.)
pankuribansal@its.edu.in (Pankuri Bansal- MCA- 2nd yr.)
shilpisharma@its.edu.in (Shilpi Sharma MCA-3rd yr.)
pujadhar@its.edu.in (Prof. Puja Dhar)

Disclaimer:

VIBRANCE, an e-magazine is just a compilation of news, articles from various sources like websites, journals, newspapers and magazines and hence no personal analysis is being done by the members. Editors would not be responsible for any undertakings.