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In this Issue!

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Some tips for spotting a phishing email

Every day countless phishing emails are sent to unsuspecting victims all over the world. While some of these messages are so outlandish that they are obvious frauds, others can be a bit more convincing. So how do you tell the difference between a phishing message and a legitimate message? Unfortunately, there is no one single technique that works in every situation, but there are a number of different things that you can look for. This article lists ten.

1. The message contains a mismatched URL

One of the first things that are recommend is to check in a suspicious email message is the integrity of any embedded URLs. Often times the URL in a phishing message will appear to be perfectly valid. However, if you hover your mouse over top of the URL, you will see the actual hyperlinked address (at least that's how it works in Outlook). If the hyperlinked address is different from the address that is displayed, then the message is probably fraudulent or malicious.

2. URLs contain a misleading domain name

Often times people that launch phishing scams depend on their victims not knowing how the DNS naming structure for domains works. It is the last part of a domain name that is the most telling. For example, the domain name info.brienposey.com would be a child domain of brienposey.com because brienposey.com appears at the end of the full domain name (on the right hand side). Conversely, brienposey.com.maliciousdomai.com would clearly not have originated from brienposey.com because the reference to brienposey.com is on the left side of the domain name, not the right.

3. The message contains poor spelling and grammar

Whenever a large company sends out a message on behalf of the company as a whole, the message is usually reviewed for spelling, grammar, legality, and a number of other things. As such, if a message is filled with poor grammar or spelling mistakes it probably didn't come from a major corporation's legal department.

4. The message asks for personal information

No matter how official an email message might look, it is always a bad sign if the message asks for personal information. Your bank doesn't need you to send them your account number. They already know what it is. Similarly, a reputable company should never send an email asking for your password, credit card number, or the answer to a security question.

Charles W. Bachman: Database Software Pioneer

Charles W. Bachman was born in December 11, 1924 at Manhattan, Kan. He was the proposer of a network approach to storing data as in the Integrated Data Store (IDS) and developer of the OSI Reference Model. Bachman began his service to the computer industry in 1958 by chairing the SHARE Data processing Committee that developed the IBM 709 Data Processing Package (9PAC), and which preceded the development of the programming language COBOL.

He continued this development work through the American National Standards Institute SPARC Study Group on Data Base Management Systems (ANSI/ SPARC/DBMS) that created the layer architecture and conceptual schema for database systems. This work led to the development of the international "Reference Model for Open Systems Integration," which included the basic idea of seven-layer architecture, the basis of the OSI networking standard.

Bachman received the 1973 ACM Turing Award for his development of the Integrated Data Store, which lifted database work from the status of a specialty to first-class citizenship in computing. IDS provided an elegant logical framework for organizing large on-line collections of variously interrelated data. The system had pragmatic significance also in taking into account advice on expected usage patterns, to improve physical data layouts. The facilities of IDS were fully integrated into the COBOL language and so became available for full-scale practical use. Bachman was cited for the completeness of this conception -- from the underlying modeling to installation in the field -- and for its proven impact on data processing.

Bachman holds more than a dozen U.S. patents in database software and

Purify air while you ride

Researchers have designed an eco-friendly bicycle that cleans polluted air while cruising down the street. The air-purifier bike designed by Bangkok's Lightfog Creative & Design Company currently exists only in concept. In theory, its aluminum frame would run on a "photosynthesis system" that generates oxygen through a reaction between water and electric power from a lithium-ion battery.

Riding a bicycle can reduce traffic jams in a city. Moreover, the inventors wanted to add more value to a bicycle by adding its ability to reduce the pollution.

The idea, which is not yet a prototype yet, is that a filter between the handles bars would filter polluted air, scrubbing it of particulates. The frame itself would work something like a leaf, converting sunlight into energy that would, presumably run a fuel cell battery, the by-product of which would be good, clean oxygen for everyone

2013-The Year for Tablets

The year 2013 was a big one for tablets, because they finally usurped laptops as the go-to mobile tool for business users. During that time, Apple, Android, and Microsoft jockeyed to get their products into the enterprise. Each platform experienced successes and failures -- some big and some small -- and there are definitely lessons here that can be learned.

iPad

The iPad is the king of business tablets. That doesn't mean it has perfected the mobile experience. In fact, the iPad can learn a couple of very important lessons from its competitors.

Android: If anything, the iPad could take a page or two from the book of flexibility that is Android. With the iPad, you know what you're getting into -- you work Apple's way or no way. If you don't like working the Apple way, your only hope is to find another platform. Apple might want to re-think this plan of attack and allow users more configuration options to better serve specific needs.

Surface 2: The Surface 2 has one major lesson it can teach the iPad -- expandability. The Surface offers both a MicroSD and USB 3.0 port to help expand the tablet. With the iPad, you get nothing of the sort. Apple needs to seriously learn that business users need to be able to connect via USB. For the life of me, I can't understand why Apple refuses to add USB to the iPad.

Android tablet

Android is doing a great job of stealing market share from the iPad. It offers everything the iPad doesn't. However, Android shouldn't rest on its growing reputation. Instead, the flexible platform needs to keep its eyes trained on both Apple and Microsoft and learn from what both platforms offered in 2013.

iPad: When the iPad Air was released, it completely surprised consumers with its size, amazing display, and power. The iPad's A7 chip is a 64-bit mobile powerhouse that has placed Android in a serious state of catch up. If Android is going to keep up in this race, it's going to have to have a piece of hardware that can stand up to the iPad Air. At the moment, it has nothing of the sort.

Surface 2: If there's one major lesson to be learned from the Surface 2, it's the inclusion of a powerful, functionable, office suite. All Android tablets should be sold with a complete set of tools that enable mobile business users to do everything they need -- without having to install a single piece of software. This could mean the inclusion of something like Kingsoft Office.

Each of the major mobile platforms have their strengths and weaknesses. With so many improvements happening in 2013, it was a great year for those platforms to learn from one another.

Happenings @ Dept. of I.T. in the month of November, 2013

SANSMARAN 2013
Alumni Meet on 7th Dec, 2013 @ I.T.S, Mohan Nagar

SANSMARAN 2013
Alumni Meet on 7th Dec, 2013 @ I.T.S, Mohan Nagar

Faculty Participation

Date of event	Participant	Theme	Venue
30th Nov., 2013	Prof. Rakesh Roshan	Delivered Guest Talk on "ERP Technologies"	IMS, Noida

Our Shining Stars

Congratulations!

Kept Bug Technologies Pvt. Ltd.

MOHIT JAISWAL

Congratulations to all the placed students of MCA @ITS,
Mohan Nagar

Placement Quiz Series

1. Which notation has the lower as well as upper limit of a function?
A. O-notation
B. o-notation
C. θ-notation
D. Ω-notation

2. What is the worst case running time of Insertion sort, if number of elements is n?
A. $\theta (n)$
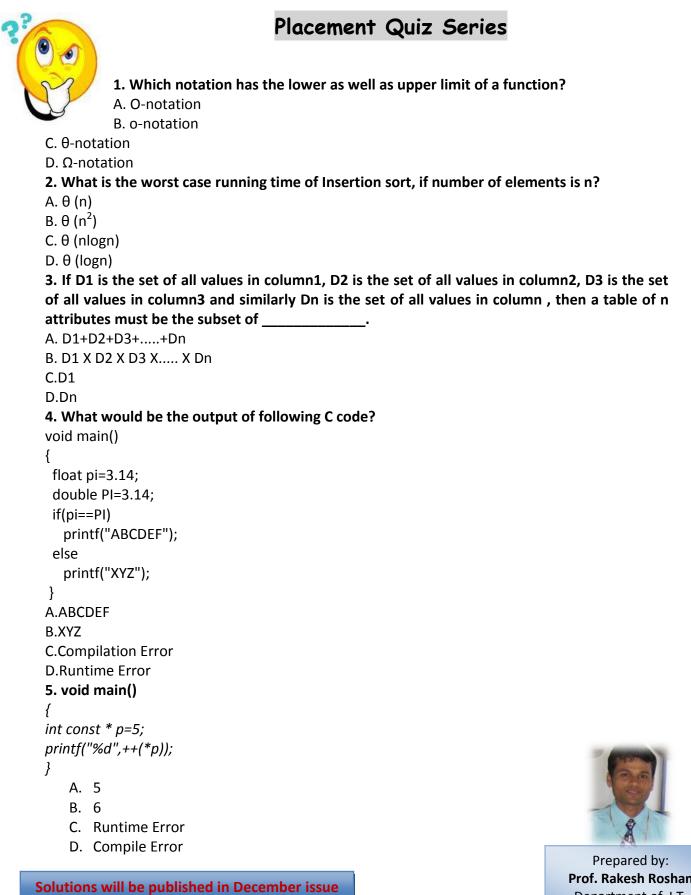B. $\theta (n^2)$
C. $\theta (nlogn)$
D. $\theta (logn)$

3. If D1 is the set of all values in column1, D2 is the set of all values in column2, D3 is the set of all values in column3 and similarly Dn is the set of all values in column , then a table of n attributes must be the subset of _____.
A. D1+D2+D3+.....+Dn
B. D1 X D2 X D3 X..... X Dn
C.D1
D.Dn

4. What would be the output of following C code?
```
void main()
{
  float pi=3.14;
  double PI=3.14;
  if(pi==PI)
    printf("ABCDEF");
  else
    printf("XYZ");
}
```
A.ABCDEF
B.XYZ
C.Compilation Error
D.Runtime Error

5. void main()
```
{
int const * p=5;
printf("%d",++(*p));
}
```
A. 5
B. 6
C. Runtime Error
D. Compile Error

Solutions will be published in December issue

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Answer to last Placement Quiz Series

1 -B

2-A

3-C

4-B

5-B

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.

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Wishing You All a Very Happy & Prosperous New Year 2014