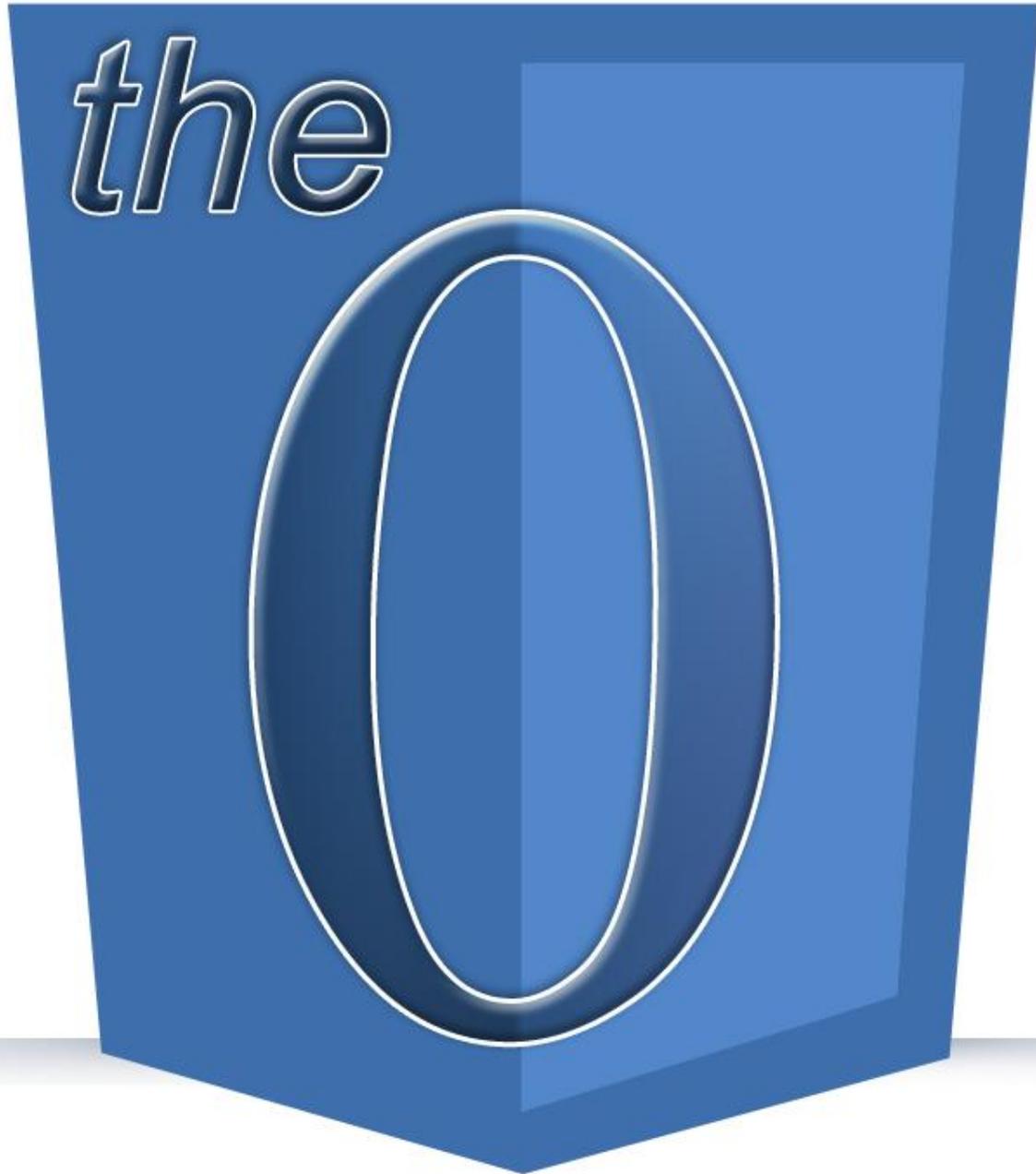। समुद्योगो हि विश्वजित् ।

the 0

ZERO - on its own its nothing but it is everything
Its too big to imagine, but anything less is compromise

Contents of this issue :

LETTER FROM THE DIRECTOR

Sanjeev Dahiwadkar, Director

HAPPY REPUBLIC DAY!

If you may recall, it took mother India three years to set up the foundation from its Independence. Let us take the inspiration from that example and let us set ITShastra to be long-term independent company with focus on independence from

- Our old dragging habits; if any!

- Negative energy; if any!

- Forces pulling down from excelling; if any!

- Inertia; if any!

- "You first" mentality; if any!

Best Luck!

Sanjeev

ON BUSINESS FRONT

➧ As a part of ITShastra 2012 Vision, many new changes and plans are being made and executed, with regular meetings to review of the processes. The EOM and EOQ have been standardized and is a regular process to be followed. The Mentorship, Food Policy, Setting up Foundation, Automation tool selection, etc are some of the changes that are being put forth and are in the process of being implemented.

Below are highlights of the work done by each of ITShastra teams :-

➧ Dot Net Team

Dotnet team has completed HLP v2.04 is already deployed and not team is busy with HLP SQL Server migration v2.05 that is going live on 06 Feb 11. The next two releases are also in queue for HLP.

The work of Premium counselor portal v2.00 is also started and targeted to complete by 15th Feb for client to test. The Premium portal is also upgraded to v2.02 with some enhancements and team is marching to add more features in next release.

➧ Testing Team

.NET testing team has tested HLP V.2.04 and rolled out on production. Testing of MS-SQL Migration testing of HLP, Insurer/ Outsourcer Portal are also in progress.

MS-SQL migration of RxOffice Java CMS for Prommis has been successfully done. Testing of Tracking Report enhancement in Java CMS is in WIP along with the development.

In Radian group, 2nd round testing of Guardian Pro 6.1 is in WIP.

➧ WebTeam

WebTeam has released two projects ProfilesPR, MissionHelpers for MissionMedia. The Nucleabio and Diesel driving school websites are launched. The Craddockstown project, conformlaw had new change requirements. The SQL Migration for hopenow and hopeloanportal websites was done on test server.

Maintenance work for Baby Vision, HopeNow, HLP, and CosmosBank websites. The official projects being enhanced are quick-n-ez, news and press release updates on indisoft.us website.

➧ Java Team

Java Team is busy with dynamic tracking report for Prommis

Guardian Pro Release 6.1 is in QA phase, it will be moved to UAT on Feb 11th 2011. IndiSoft team is busy with analysis & design phase of Guardian Pro Release 6.2, it covers core transition item.

ON PERSONAL FRONT

⇒ Dinesh Wagh (Dotnet Team) gets married to Ms Kavita on 12th Feb 2011

⇒ Shashi Kurtadkar (KPO Team) gets married to Ms Reshma on 16th Feb 2011

⇒ **Birthdays & Celebrations**

Sameer Desai : Feb 18th

TECHNICAL ARTICLE. 1

SQL Server blocking and deadlocks

The more blocking happens on SQL Server the less concurrency the system. A certain amount of short blocks are unavoidable but too many blocks for longer periods of time can degrade performance and increase the chances of SQL Server deadlocks.

A deadlock is created since two connections have blocked one another. SQL Server automatically resolves the deadlock by choosing one of the connections as a deadlock victim and killing it.

SQL Server blocking
SQL Server blocking occurs when one connection (user process or application process) places a lock on a table (or a number of rows) and a second connection attempts to read or modify the data under the lock.

Depending on the type of the lock, this can cause the second connection to wait until the first connection releases its lock. A blocked connection waits indefinitely for the blocking connection to release its lock.

The more blocking happens on the server the less concurrency the system achieves. A certain amount of blocking is unavoidable but too many blocks for longer periods of time can degrade the performance of SQL Server.

SQL Server deadlocks
The combination of two blocked connections where the first is blocking the second and the second is blocking the first is called a deadlock. Since deadlocks are not naturally resolved with time, SQL Server automatically kills one of the connection (Deadlock victim) once it detects a deadlock. This allows the other connection to continue with its transaction.

Although deadlocks can be caused by two short blocks (Fraction of a second), it is often the long blocks that increase the chances of a deadlock to happen.

Blocks escalating to deadlocks

The following diagram shows the sequence of events leading to a deadlock. Consider two applications (A1, A2) accessing two different tables (T1, T2):

Event 1:
A1 places a lock on T1 inside its transaction and continues to execute other statements

Event 2:
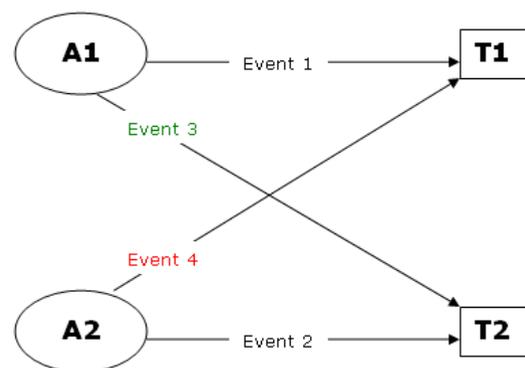A2 places a lock on T2 inside its transaction and continues to execute other statements

Event 3:
A1 attempts to place a lock on T2 (Needs to access T2 before it can finish the transaction) but has to wait for A2 to release its lock

At this point, a block is created since A2 is blocking A1

Event 4: While A1 is waiting, A2 attempts to place a lock on T1 (Needs to access T1 before it can finish its own transaction)

TECHNICAL ARTICLE. 2

Understanding SQL Server Memory Internals

Like all database servers, Microsoft SQL Server thrives on memory. Each instance of Microsoft SQL Server has its own memory address space. The SQL Server address space (Virtual memory allocation by Windows) consists of two main components: executable code and memory pool. Let's examine each of these components in more details.

SQL Server executable code

Executable code is basically SQL Server's own EXEs and DDLs that are loaded into the address space. The following is breakdown of the various components:

- SQL Server Engine
- Open Data Services
- Server Net-Libraries
- Distributed Queries
- Extended Stored Procedures (DLLs)
- OLE Automation Stored Procedures

SQL Server memory Pool

The memory pool is the unit of memory that an instance of SQL Server uses to create and manage data structures relating to client requests. The following data structures are allocated in the memory pool of an instance of SQL Server:

- **Buffer Cache:** This is the pool of memory pages into which data pages are read. An important indicator of the performance of the buffer cache is the Buffer Cache Hit Ratio performance counter. It indicates the percentage of data pages found in the buffer cache as opposed to disk. A value of 95% indicates that pages were found in memory 95% of the time. The other 5% required physical disk access. A consistent value below 90% indicates that more physical memory is needed on the server.
- **Procedure Cache:** This is the pool of memory pages containing the execution plans for all Transact-SQL statements currently executing in the instance. An important indicator of the performance of the procedure cache is the Procedure Cache Hit Ratio performance counter. It indicates the percentage of execution plan pages found in memory as opposed to disk.
- **Log Caches:** This is the pool of memory used to read and write log pages. Each log has a set of cache pages. The log caches are managed separately from the buffer cache to reduce the synchronization between log and data buffers.
- **Connection Context:** Each connection has a set of data structures that record the current state of the connection. These data structures hold items such as parameter values for stored procedures, cursor positioning information, and tables currently being referenced.
- **System-level Data Structures:** These are data structures that hold data global to the instance, such as database descriptors and the lock table.

The buffer cache, procedure cache, and log caches are the only memory elements whose size is controlled by SQL Server.

A very important aspect to watch for is whether SQL Server is using the maximum memory available on the system (assuming the system is dedicated to SQL Server). A system with a fully utilized memory may be prone to performance bottlenecks when competition for resources increases. Prepared Transact-SQL statements, for example, may suffer when the procedure cache is unable to expand due to fully utilized buffer caches.

TECHNICAL NEWS

Google Android is the world's leading smart phone platform

It has not taken Google long to turn Android from an acquired property to the world's most popular smartphone platform.

The latest market reports claim that Android has finally overtaken Symbian to the top spot.

It was anticipated for a long time but no one had thought that it would happen so soon. Most market analysts had predicted that Android would overtake Symbian sometime later this year…

New computer program studies handwriting to detect liars

Washington, Aug 29 : While experts have long been trying to use handwriting as a tool in forensic labs or their personality traits, researchers have now developed a computerized tool that can measure handwriting characteristics more effectively, making it greatly useful in lie detection…

Readability wants to make web a better place to consume content

Readability is a new project which is aimed to make it easy for you to consume content on the web.

The service is designed to format web pages in readable format by removing ads and other clutter.

They are aiming to help the publishers by giving them bulk of the revenues generated by the service…

Egypt gets its Internet back

Egyptian authorities have restored Internet service to the country after anti Government protests last week led to a five-day Net blackout.

"Egyptian Internet providers returned to the Internet at 09:29:31 UTC (11:29 a.m. Cairo time)," said a blog post by Net monitoring firm Renesys today…

5 tips IT should take to prepare for the big Android rush

IT has struggled with iPhones and now iPads coming into the enterprise, but the fragmented world of Android could blindside them

For years, CIOs struggled with iPhones and now iPads coming into the enterprise but Android devices will blindside them. Even worse, the fragmented world of Android is coming quickly.

Android's global tablet marketshare grew nearly tenfold in the fourth quarter of 2010, to 22 percent of shipments, up from 2.3 percent in the preceding quarter, according to new research released earlier this week from Strategy Analytics…

WORK ETHICS

What are Work Ethics Anyway?

We hear a lot of complaints about the lack of work ethics today. The lack of work ethics is a much more pervasive problem. There are employees who lack a work ethic in every business and every job.

In a way you can think of work ethics as living up to employer expectations. Work ethics can seem like the invisible employee behavior. We only notice it when it is not there.

We think of work ethics as having these components.

PUNCTUALITY and ATTENDANCE
The employee arrives at work on time, returns from lunch and breaks on time. Employee works every day with rare absences and only for acceptable reasons.

PRODUCTIVITY
The employee uses work time as work time, not personal time. The employee is able to follow directions and complete tasks on time. The employee makes good decisions.

ATTITUDE
The employee comes to work prepared to do a good job. The employee is polite and pleasant. The employee is able to take on difficult tasks with a smile.

PROFESSIONAL IMAGE
The employee wears appropriate, neat, well cared for clothes. The employee practices good hygiene. If there is a company uniform or a dress code the employee respects it.

PROFESSIONAL RELATIONSHIPS
The employee is able to work well with others, even difficult people. The employee is able to listen to boss, co-workers and customers. The employee is a team player.

SELF MANAGEMENT
The employee is able to leave personal problems at home. The employee is able to manage his emotions. The employee does not engage in unproductive activities such as gossiping, spreading rumors, negative talk about the company or bullying others.

For those of you who have a strong work ethic these components seem obvious and need no explanation.

You probably learned your work ethic from your parents and can't imagine being any other way.
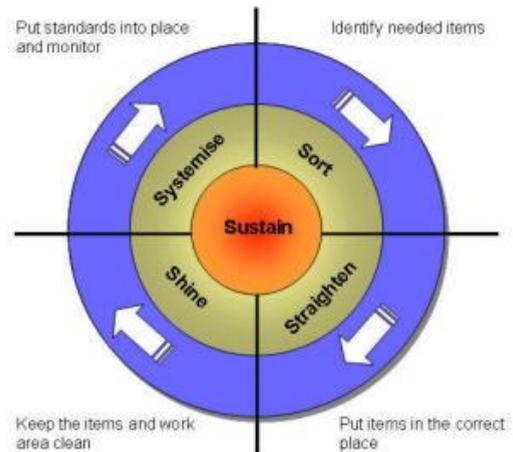
WORK ETIQUETTE

5S - Workplace Organization Methodology

5S is the name of a workplace organization methodology that uses a list of five Japanese words which are seiri, seiton, seiso, seiketsu and shitsuke. Transliterated or translated into English, they all start with the letter "S". 5S provides a methodology for organizing a productive work environment. This is a lean manufacturing tool enabling operators to improve their efficiency through organizing their work place. The list describes how items are stored and how the new order is maintained. The decision-making process usually comes from a dialogue about standardization which builds a clear understanding among employees of how work should be done. It also instills ownership of the process in each employee.

Phases of 5S

There are 5 primary phases of 5S: sorting, straightening, systematic cleaning, standardizing, and sustaining. Additionally, there are two other phases sometimes included, safety & security. Five S is driven by 5 Pillars of improvement.

The Five S pillars: 1) Sort (Seiri) 2) Set in Order 3) (Seiton) 4) Shine (Seiso)
5) Standardize (Seiketsu)

1. Sorting (Seiri)

The first stage is removing the rubbish and clutter, it also involves cleaning and generally making the area tidy. By getting rid of unused items space can be made and items that are used on a regular basis can be found quicker. Eliminate all unnecessary tools, parts, and instructions. Go through all tools, materials, and so forth in the plant and work area. Keep only essential items and eliminate what is not required, prioritizing things as per requirements and keeping them in easily-accessible places. Everything else is stored or discarded.

Straightening or setting in order / stabilize (Seiton)
Once you have cleaned the area out you need to ensure that the items left are kept in the right place. Tools should be located where they are needed and the utilization of shadow boards to store them in set locations.

There should be a place for everything and everything should be in its place. The place for each item should be clearly labeled or demarcated. Items should be arranged in a manner that promotes efficient work flow, with equipment used most often being the most easily accessible. Workers should not have to bend repetitively to access materials. Each tool, part, supply, or piece of equipment should be kept close to where it will be used – in other words, straightening the flow path. Seiton is one of the features that distinguish 5S from "standardized cleanup". This phase can also be referred to as Simplifying.

2. Sweeping or shining or cleanliness / systematic cleaning (Seiso)

Now you have got rid of the rubbish and organised your tools, you need to maintain your new found order. The area is their work environment and they should keep it clean and tidy. This is an educational program. To provide the education a detailed and comprehensive 5S training program is needed

Keep the workplace tidy and organized. At the end of each shift, clean the work area and be sure everything is restored to its place. This makes it easy to know what goes where and ensures that everything is where it belongs. A key point is that maintaining cleanliness should be part of the daily work – not an occasional activity initiated when things get too messy.

WORK ETIQUETTE

3. Standardizing (Seiketsu)

Once you have made the effort to tidy, organise and clean the work area you need to ensure your efforts and new found disciplines are not let to slip. Implementing random and strict 5S audits should be used to maintain the standards.

Work practices should be consistent and standardized. All work stations should be identical. All employees should be able to work in any station doing the same job with the same tools that are in the same location in every station. Everyone should know exactly what his or her responsibilities are for adhering to the first 3 S's.

4.Sustaining the discipline or self-discipline (Shitsuke)

Maintain and review standards. Once the previous 4 S's have been established, they become the new way to operate. Maintain focus on this new way and do not allow a gradual decline back to the old ways. While thinking about the new way, also be thinking about yet better ways. When an issue arises such as a suggested improvement, a new way of working, a new tool or a new output requirement, review the first 4 S's and make changes as appropriate.

You have put into place the culture and systems to sustain 5S but you also need to look at continual improvements. You must introduce the whole culture change, standards must be accepted through training and education and every one work to continued improvements as part of Lean Manufacturing.

An important part of any Five S program is to provide the complete operational staff with the required 5S training. This should cover the benefits to all members of the staff and how it improves their day to day work environment.

5. Safety

A sixth phase, "Safety", is sometimes added. There is debate over whether including this sixth "S" promotes safety by stating this value explicitly, or if a comprehensive safety program is undermined when it is relegated to a single item in an efficiency-focused business methodology.

EGO WILL PULL YOU DOWN

There was once a learned scientist, who after a lot of practice and efforts developed a formula and learned the art of reproducing himself. He did it so perfectly that it was impossible to tell the reproduction from the original. One day while doing his research he realized that the Angel of Death was searching for him. In order to remain immortal, he reproduced a dozen copies of himself. The reproduction was so meticulous that all of them looked exactly like him.

Now, when this Angel of Death came down, he was at a loss to know which one of the thirteen before him was the original scientist. Confused, he left them all alone and returned back to heaven.

But, not for long; for, being an expert in human nature, the Angel came up with a clever idea. He said to the scientist addressing all thirteen of them, "Sir, you must be a genius to have succeeded in making such a perfect reproductive formula of yourself. However, I have discovered a flaw in your work, just one tiny little flaw."

The scientist immediately jumped out and shouted, "Impossible! Where is the flaw?" "Right here!"
said the Angel, as he picked up the scientist from among the reproductions and carried him off.

The whole purpose of the scientist and his formula of reproduction failed as he could not control his ego and lost his life.

Remember: While knowledge and skills take one to the top of the ladder and make one successful; the three letter word 'EGO' will pull one down immediately. So, let go - the ego.

INTERESTING TO READ

There is always the difficulty of recognizing American English spellings and British English spellings. Whether we like it or not, much of our language is now heavily influenced by British English spellings. Certain sets of words follow group rules of English grammar. Many rules of grammar are quite mathematical, with groups of words falling into building-blocks which all act the same way. For example, the spelling rules are the same for 'practice', 'licence' and 'advice': the noun has a 'c', while the verb has an 's'.

One way of remembering this is that the word 'noun' comes before the word 'verb' in the dictionary; likewise 'c' comes before 's', so the nouns are 'practice /licence/advice' and the verbs are 'practise/license/advise'.

In fact, the confusion arises with 'practice' and 'licence' mainly because they sound the same with the 'c' or the 's'. However, with 'advice' and 'advise', there is a shift in sound, so there is no confusion at all. We can use this to our advantage: another way of knowing which to use is to replace the 'practice' or 'licence' word you want with 'advice' or 'advise' – this will tell you whether you need the 'c' or the 's' spelling.

So, in the following phrase, let's say you are unsure which to write :

- I do not like this 'practise/practice'.

Replace the word you want with 'advice' or 'advise'.

- I do not like this 'advice'.

So – you will need:

- I do not like this 'practice'.

Is it enquiry or inquiry?
British English uses both 'enquiry' and 'inquiry', but not in the same way as American English, which favours the 'i' spelling.

Enquiry - 'To enquire' means to request information/look into.
Ex: They enquired about the football match. , She enquired about his health.

Inquiry - This is favoured in English only when talking of investigations.
Ex: There will be an inquiry into this riot.

Is it license or licence?
We use both forms in British English – one is a verb (doing word) and the other a noun (thing).

License
This is the verb 'to license'.

　Examples:
- I license this pub., You are licensed to run this pub., The officer licenses the taxis here.

Licence
This is the noun 'a licence'.

　Examples:
- I have a driving licence.
- She wants to buy a licence for her car.

HEALTH CORNER

Importance of Fruits in Diet Natural Benefits of Fruits

Fruits are one of the oldest forms of food known to man. In fact, Adam, the first man ate an apple, the 'forbidden fruit' of heaven. There are many references to fruits in ancient literature. Vedas state that the fruits form the base of the Food of Gods. According to Quran, the fruits like grape, date, fig, olive and pomegranate are the gifts and heavenly fruits of God.

The people in ancient times regarded fruits to be endowed with magic. or divine properties. They gave them due reverence and dedicated them to their gods and goddesses. They also used their designs in decorating temples, vestments or ceremonial garments and sacred vessels.

Fresh and dry fruits are the natural staple food of man. They contain substantial quantities of essential nutrients in a rational proportion. They are excellent sources of minerals, vitamins and enzymes. They are easily digested and exercise a cleansing effect on the blood and the digestive tract. Persons subsisting on this natural diet will always enjoy good health. Moreover, the ailments caused by the intake of unnatural foods can be successfully treated by fruits. Fresh and dry fruits are thus not only a good food but also a good medicine.

Natural Benefits of Fruits

Fruits have highly beneficial effect on the human system. The main physiological actions of fruits are as follows:

Hydrating Effect

Taking of fruits or fruit juice is the most pleasant way of hydrating the organism. The water absorbed by sick persons in this manner has an added advantage of supplying sugar and minerals at the same time.

Diuretic Effect

Clinical observations have shown that potassium, magnesium and sodium contents of the fruit act as a diuretic and dieresis -frequency of urination is considerably increased when fruits and fruit juices are taken. They lower the urine density and thereby accelerate the elimination of nitrogenous waste and chlorides. As, however, fruits contain a very low level of sodium, they make a valuable contribution to a salt-free diet.

Alkalinizing Effect

The organic acids of the salts in fruits produce alkaline carbonates, when transformed within the organism, which alkali se the fluids. All fruits promote intestinal elimination. This keeps the body free from toxic wastes, which creep into the blood from an overloaded, sluggish intestinal tract. The carbohydrates of fruits .are chiefly in the form of sugar, dextrin and acids which are easily digestible and are completely absorbed. Hence, they are very useful for sick and invalids for quick energy and heat.

Mineralizing Effect

Fruits furnish minerals to the body. Dried fruits such as apricots, raisins and dates are rich in calcium and iron. These minerals are essential for strong bones and good blood respectively. Some fruits, like custard apple, furnish calcium to the extent of 800 mg. per fruit, which is sufficient to meet our daily requirement of this mineral.

Laxative Effect

The fibrous matter in fruits, cellulose, aids in the smooth passage of the food in the digestive tract and easy bowel action. The sugars and organic acids contained in fruits also increase their laxative effect. Hence, regular use of fruits prevents and cures constipation.

Tonic Action

Fruits, as dependable sources of vitamins, exert a tonic effect in the body. Guavas, custard apples and citrus fruits, like lemons and oranges, are particularly valuable sources of vitamin C. These fruits are usually eaten fresh and raw, thus making the vitamins fully available to us. Several fruits contain good amounts of carotene which gets converted to vitamin A in the body. A medium-sized mango can provide as much as 15,000 international units of vitamin A which is sufficient for full one week and this vitamin can be stored in the body. The common papaya is an excellent source of vitamin C and carotene.

Fruits are at their best when eaten in the raw and ripe state. In cooking, they lose portions of the nutrient salts and' carbohydrates. They are most beneficial when taken as a separate meal by themselves, preferably for breakfast in the morning. A combination of fruits with vegetables is not considered good. If it becomes necessary to take fruits with regular food, they should form a larger proportion of the meals. Fruits, however, make better combination with milk than with meals. It is also desirable to take one kind of fruit at a time.

In case of sickness, it will be advisable to take fruits in the form of juice. However, juice should be taken immediately after extraction as it begins to decompose quickly and loses its properties.

FUN CORNER

Windows XP Error Messages

A few of the new error messages that were taken under consideration during the development of the Windows XP operating system...

- Smash forehead on keyboard to continue.
- Press any key to continue or any other key to quit.
- BREAKFAST.SYS halted... Cereal port not responding.
- Close your eyes and press escape three times.
- File not found. Should I fake it? (Y/N)
- Runtime Error 6D at 417A:32CF: Incompetent User.
- Enter any 11-digit prime number to continue.
- Bad command or file name! Go stand in the corner.
- Windows message: "Error saving file! Format drive now? (Y/Y)"
- Windows VirusScan 1.0 - "Windows found: Remove it? (Y/N)"

The Computer Programmer

A man was crossing a road one day when a frog called out to him and said, "If you kiss me, I'll turn into a beautiful princess." He bent over, picked up the frog, and put it in his pocket.

The frog spoke up again and said, "If you kiss me and turn me back into a beautiful princess, I will tell everyone how smart and brave you are and how you are my hero." The man took the frog out of his pocket, smiled at it, and returned it to his pocket.

The frog spoke up again and said, "If you kiss me and turn me back into a beautiful princess, I will be your loving companion for an entire week." The man took the frog out of his pocket, smiled at it, and returned it to his pocket.

The frog then cried out, "If you kiss me and turn me back into a princess, I'll stay with you for a year and do ANYTHING you want." Again the man took the frog out, smiled at it, and put it back into his pocket.

Finally, the frog asked, "What is the matter? I've told you I'm a beautiful princess, that I'll stay with you for a year and do anything you want. Why won't you kiss me?"

The man said, "Look, I'm a computer programmer. I don't have time for a girlfriend, but a talking frog is cool."

DO MORE

Do more than believe
- **PRACTICE**

Do more than be fair
- **BE KIND**

Do more than cares
- **HELP**

Do more than forgive
- **FORGET**

Do more than belong
- **PARTICIPATE**

Do more than dream
- **WORK**

DO
MORE

Editor : Sandhya Ashokan	Sub Editor : Lata Dass	**Designer:** Narendra Chougule