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St. Joseph's Institute of Technology

Department of Information Technology



The NewzIT



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Success means doing the best we can with what we have. Success is the doing, not the getting; in the trying, not the triumph. Success is a personal standard, reaching for the highest that is in us, becoming all that we can be.



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COMPUTER SOCIETY OF INDIA

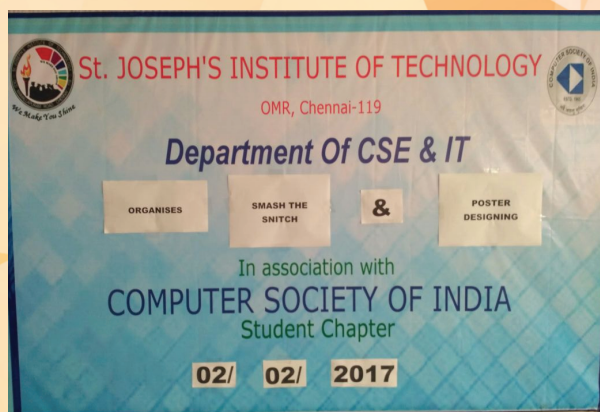


The Department of CSE and IT has been conducting events in collaboration with The Computer Society of India every year within the college premises. This year, two competitive events namely Smash the Snitch and Poster designing were organised. The competitions were conducted on 2 February 2017, in IT Laboratory-II within the college premises and hours.

Smash the Snitch involved testing the students' program understanding and debugging skills. The students were sorted into groups of two each. The number of such groups that attended the competition was 48 out of which top three teams were selected.

Poster Designing topics were given a few minutes before the commencement of the contest. The students were organised into teams of two each. The competition aimed at testing the students' creativity as well as eloquence in using Adobe Photoshop. The poster topics were Digital India, Bugatti Cars and Movie poster (of any choice).

The winners were selected on the basis of speed and accuracy (understanding or cognitive abilities) and creativity. A total of 23 teams participated out of which the first three teams were recognised and rewarded.



Smartdust is a system of many tiny microelectromechanical systems (MEMS) such as sensors, robots, or other devices, that can detect light, temperature, vibration, magnetism, or chemicals.

They are usually operated on a computer network wirelessly and are distributed over some area to perform tasks, usually sensing through radio-frequency identification.

Without an antenna of much greater size, the range of tiny smart dust communication devices is measured in a few millimeters and they maybe



vulnerable to electromagnetic disablement and destruction by microwave exposure.

The first public presentation of the concept by that name was at the American Vacuum Society meeting in Anaheim in 1996.

The proposal, to build wireless sensor nodes with a volume of one cubic millimetre, was selected for funding in 1998.

The project led to a working mote smaller than a grain of rice, "COTS Dust" & devices kicked off the TinyOS effort at Berkeley.

SMART DUST

Watch it all...!!

A recent review discusses various techniques to take smart dust in sensor networks beyond millimetre dimensions to the micrometre level. Smart Dust entered the Gartner Hype Cycle on Emerging Technologies in 2003, and returned in 2013 as the most speculative entrant.

Under observation, we act less free, which means we effectively are less free.

SIGNING THE DOCUMENT WITHOUT PRINTING OR SAVING

Quitting the laughably archaic means

To sign a document using Adobe Reader,

- Open the PDF document in the Adobe Acrobat Reader DC application. Click the "Fill Sign" button in the right pane

- Click the "Sign" button on the toolbar and select "Add Signature" to add your signature to Adobe Acrobat Reader DC.

You can create a signature in one of three ways

- Select "Type" so you can type your name and have it converted to a signature.
- Select "Draw" and then draw your signature using your mouse or a touch screen.

- Select "Image" if you'd like to sign a piece of paper, scan it with a scanner, and then add your written signature to Adobe Reader.



- Click "Apply" to apply it to the document. Leave "Save Signature" checked and you can quickly add this signature in the future.

Position your signature where you want it with your mouse and click to apply it. If you save your signature, you'll find it easily accessible in the "Sign" menu in the future.

To save your signed PDF document, click File > Save and select a location for the file.

More on this in the next article

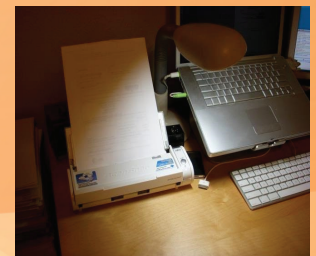
SEND AND RECEIVE FAXES ONLINE WITHOUT PHONE AND COMPUTERS

Net'o fax!

First, you'll need to scan the document you want to fax. There are so many online fax services out there that it's hard to make an informed decision about which one to choose.

Power User: RingCentral Fax

If you are going to be sending sensitive faxes all the time, or you work for a company and you're trying to choose a service, RingCentral Fax, which is partially owned by Cisco and AT&T, is probably the best choice for your needs, especially since they have a lot of great security features. It has all the features you can imagine, including integrations with Outlook, Google Drive.



Dropbox, Box, and you can even get a toll-free number. It also has a lot of security features that would be useful for businesses or people that are transmitting secure information.

Of course, if you just want to send a few faxes, you can sign up for one of their cheap plans that start under \$7 per month... and then just cancel after a month or two.

NGO VISIT

Mudichur: The second and third year students were taken on a NGO visit to Amma Appa Oldage home on 04 Feb 2017 and 28 Jan 2017 respectively.

Mr.V.Govindharaj Mrs. G. Abinaya accompanied the third year students to the oldage home. Mr.Karthi and Mrs.S,Niroshini accompanied the second year students to the oldage home. Fund for the collaborated contribution was raised by Amalesh Fernando.J.T ,Kumaraguru.G, Abirami.S and Shreeja.S. The management prepared the mid-day meals and sent it along with the students helping them serve better. The visiting party left the college premises by 10 a.m. The Fund was spent on buying towels, biscuits



The location of the home itself, turned out to be a really serene one, away from the monotonous buzz of life. The visiting party was cordially welcomed by the in charge of the home. The students felt at home interacting with the elderly people there. The elderly were also kind enough to provide the students with the motivation to keep the stones rolling. The party came back to college around 4 p.m.

LIFE IN OUR CAMPUS...

A building with four walls and tomorrow inside



Four years in St. Josephs is like a novel filled with pages of smiles, experience, happiness and sorrows. Entering the college as teenage kids, no one was so sure about what their future would bring. Slowly the time mended us, through our professors into professionals, who are ready to work up in mnc's.

Like a railway track, both fun and academics travelled parallelly in our college life. Ngo's taught us to be thankful for what we are today. Industrial visit is mainly to know about the industrious work around us but more than that they taught us the value of human life. Cultural and department symposium encouraged us to bring up our hidden talent. Everything motivated us to shape up and we are here as a complete sculpture. Thanks to the management and our beloved staffs.

E-BOX TRAINING

The world goes mad over code!

E-Box is a Technology Enabled Active Learning and Assessment platform for technology and engineering domains. The pre final year and second year students were trained by professional mentors from Amphisoft. The E-Box database is known to be referenced by top IT companies. The point worth making note of is that, the company has just initiated training in Chennai. Consequently, the diligent candidate gets to enter into one of the many reputed giants, which are known to have tie ups with e-box database. The training took place for 3 working days from 9a.m to 5p.m in the college premises. Important concepts such as recursions, dynamic arrays, pointers and structures were discussed in the guided sessions. Virtual sessions were opened on 09/01/17. Currently VTS 4 is opened. The virtual sessions will be followed by an analysis. This analysis makes the top few candidates eligible for training in algorithm and data structures. Some students were provided training in communication and other soft skills. Various presentation and activities were held to tear off the veil of stage fear. Many techniques for suppressing the native accent were discussed. The best part about the techniques was that they were feasible. The feedbacks given by both the students and faculty members were satisfactory.



Programming is fun. So is cryptography. However they should not be combined.



GLUG

After all, it is your information

The GLUG meet was held on 31 January, 2017 at CSE Lab-2. We had many students who volunteered from the IT and CSE department. The students were gathered with a common motive of exploring the world of free softwares and to learn the art of programming. The session was organized by the seniors. It was a pleasure to see them return to college in spite of their last working days being completed. The session was about "Cryptography" which was handled by K.Syed Jafer from the IT department. IT is one of the most trending and futuristic topics which comprises of many things that are yet to be discovered. The session included Encryption and Decryption and the ways in which they can be executed. We also got to watch videos and snippets regarding the topic.

*Once GNU is written,
everyone will be able
to obtain good
system software free,
just like air.*

*-Richard M. Stallman
Software freedom
activist and programmer*

One of the most interesting topics was "Caesar's Cipher" which is one of the easiest forms of Encryption and was invented and followed centuries ago. The session was concluded by a motivational speech given by seniors Syed and Jeremy. Being an emotional speech, yet a motivational one, it was one of the best meet till date.

DEBUG

```
#include<stdio.h>
void main(){
int n,*a,i;
scanf("%d",&n);
a=(int *)malloc(n*sizeof(int));
for(i=0;i<n;i++)
{
scanf("%s",&a[i]);
}
printf("\n");
for(i=0;i<n;i++)
printf("%d",&a[i]);
free(a);
}
```

Answers in the next issue

SEMINAR

Moving to mastery

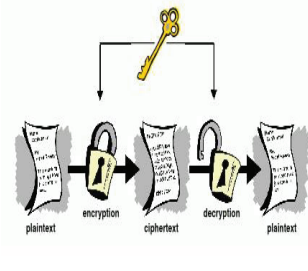
A seminar by Syed Jafer

A seminar was taken by Syed Jafer.K on synchronization of process. The following is the brief summary of the seminar he presented.

Process Synchronization means sharing of system resources by processes in such a way that, Concurrent access to shared data is handled thereby minimizing the chance of inconsistent data. Maintaining data consistency demands mechanisms to ensure synchronized execution of cooperating processes.

A Critical Section is a code segment that accesses shared variables and has to be executed in an atomic action. It means that in a group of cooperating processes, at a given point of time, only one process must be executing its critical section. If any other process also wants to execute its critical section, it must wait until the first one finishes.

A solution to the critical section problem must satisfy the following three conditions :



Mutual Exclusion

Out of a group of cooperating processes, only one process can be in its critical section at a given point of time..

Progress

If no process is in its critical section, and if one or more threads want to execute their critical section then any one of these threads must be allowed to get into its critical section.

Bounded Waiting

After a process makes a request for getting into its critical section, there is a limit for how many other processes can get into their critical section, before this process's request is granted. So after the limit is reached, system must grant the process permission to get into its critical section.

MAGAZINE EDITORS

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- 3.SYED JAFFER
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