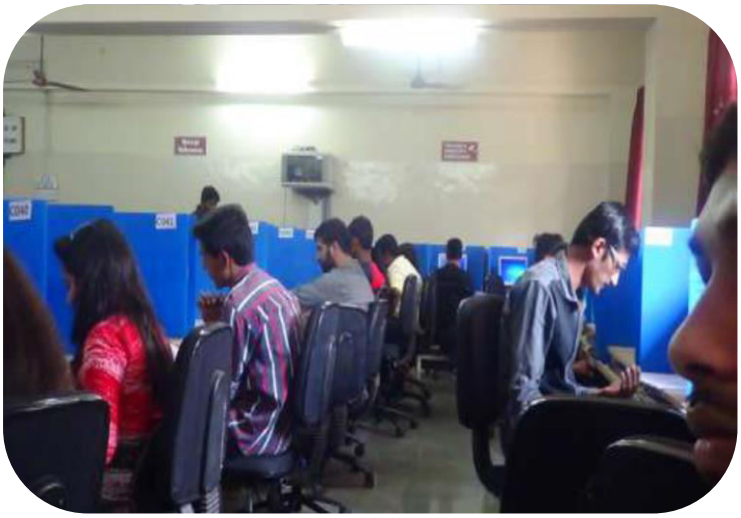
Sinhgad Karandak : Techtonic

Logica 2017:

The contest was designed for students to promote their analytical, logical & programming skills by solving a series of industry specific programming problems. Entire event is consist of THREE rounds

1. Qualifying Rounds (Q.R.)
2. Programming Round -I (PR-I)
3. Programming Round -II (PR-II)



The overall event is evaluated and judge by the experts from academia and Industry persons. The winners of the contest are felicitated by handsome cash prizes.

Type of Program:
C/C++ Programming Contest
Duration : 1 day
Date: 10th February 2017
No. of Participants : 42

Winners:

1st Prize : **Mr. Sumit Solonki**
2nd Prize: **Mr. Dhaval Vaghani**

Judge:
Mr. Amit Patil (CEO – Whitecode PVT. LTD.)

Kurukshetra 2017: Chill Zone Competition

This computation organized for student game playing activities in that **Need for Speed (NFS) and Counter Strike (CS)** two different games included and student take a participation in any one game. As per rule both games two different winners are selected.

Duration : 1 day
Date: 13th February 2017
No. of Participants : 16

Winners:

NFS: Mr. Rahul Yerme

CS: Mr. Swapnil Londhe, Mr. Kishan Tnymmar, Mr. Pratik Nighjkar

Smart India Hackathon 2017 Grand Finale at Ahmadabad

Sinhgad Institute of Management and Computer Application (SIMCA-MCA), Narhe, Pune had selected for **Smart India Hackathon 2017** in association with **Ministry of HRD and All India Council of Technical Education (AICTE).** The grand finale was on **1st and 2nd April 2017** project in Ahmadabad.

Ministry of HRD along with different union ministries hosted Smart India Hackathon 2017 involving technology students from across the nation. Total 26 cities have been identified where students will participate in Hackathon to solve problem statement given by 29 union ministries concurrently during this 36-hour program. Almost each state is hosting the Hackathon based on challenges provided by particular department**. Ministry of HRD/AICTE** has selected Ahmadabad's one of the host centre which will have to host about 55 teams comprising 440 students coming from across the nation who will work on challenges provided by **Indian Space Research Organization (ISRO)**. As a part of this **Gujarat Technical University and Gujarat University** are posting the Hackathon based on challenges provided by ISRO in Ahmadabad on **1st and 2nd April 2017**. This program will be hosted at Gujarat university convention hall in Ahmadabad.

Problem Statement to Find the Development Solution –

Storing email on Mailbox Server in encrypted format Accessible only to owner of the mail?

To find the solution of the given problem, SIMCA-MCA students along with two Mentors work nonstop for 36 hours.

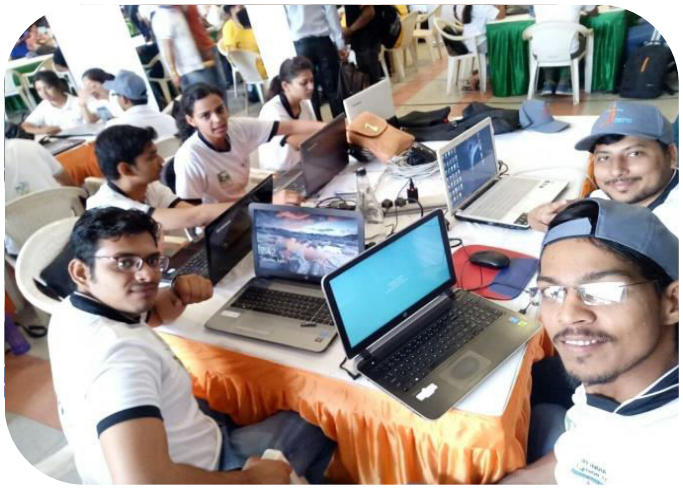
Participating Student's Names

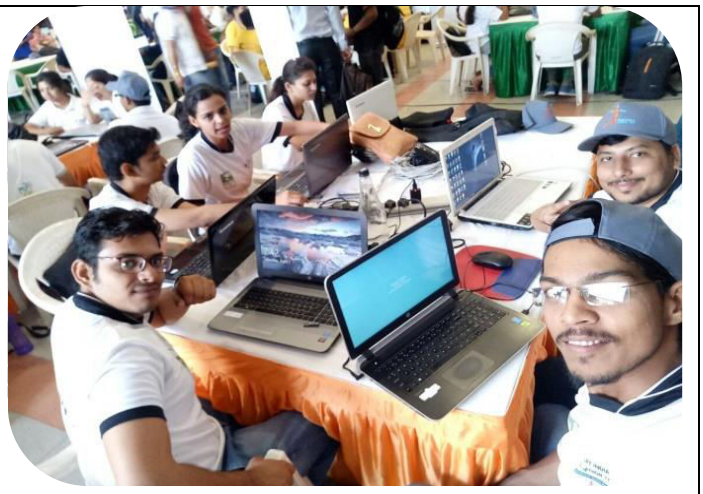
1. *Mr. Kewal N Bagwe*
2. *Mr. Pritesh Singh*
3. *Ms. Aarti Rathod*
4. *Mr. Prashant Kumar Rai*
5. *Ms. Mansi Kumbharkar*
6. *Mr. Dhaval Vaghani*

Mentors

1. ***Prof. Sachin Gupta***

2. Prof. Yogesh Sharma





To find the solution of the given problem, SIMCA students along with two Mentors work nonstop for 36 hours.

During this journal, ISRO team has evaluated the solution 3 times and suggested valuable point towards solution.

Prime Minister Shri Narendra Modi Addressed the Participants of Smart India Hackathon 2017 vai Video Conferencing on 1 Apr 2017 at 10:00p.m.

Gujarat Technical University & ISRO jointed distributed Certificates and Momentum to all the Participants and Mentors. On the Presentation eve, ISRO Chairman and Secretary, DOS, Shri A.S. Kiran kumar were present.

STES's Sinhgad Institute of Management & Computer Application [SIMCA]
MCA Department

Course: MCA III SEM V(A)

SR No	Roll No	Name of Students	Project Title
3	14103	AVIJIT ROY	Fransee manager for next electronics
4	14104	SHIKHA PRAMOD BAJPAI	Digital Rewards Wallet
5	14105	BAJPAYEE ANURAG LAXMIKANT	online Shopping(scope) 25jan-20feb
6	14106	BANDAGALE KRUTIKA CHANDRAKANT	Job Finder
7	14107	BANDGAR UJWALA DASHRATH	Food &Event Organization
8	14108	BEDRE SHUBHAM SANJAY	Investment consultancy
9	14109	ROHAN BELDARE	Penny:ERP System
10	14110	SHRADDHA S. BHAT	HR Payroll ERP
12	14112	BODHALE PUJA SHAHAJI	Doctor Appointment &inventory management Syst
13	14113	CHAWAN VITTHAL EKNATH Will change	MSTC Kolapur Training Centre
14	14114	DANDALE HARSHALI ASHOKRAO	MLM- 20 feb Concepts not clear nedd to talk with e
15	14115	DEORE CHETAN ISHWAR	ONLINE MEDICAL EQUIPMENT SHOP
16	14116	DESHMUKH SONULIKA ASHOKRAO	Non Government Organization
18	14118	GAURI DEVRAM	Hotel Booking and Reservation
19	14119	AKSHAY DIXIT	Online Recharge Portal
20	14120	DOIFODE GAJANAN KONDIBA 9049727769	Hotel Mgt
21	14121	FANIBHARE MANISH RAJENDRA	Online Crime File System(Pending 2nd review crime
22	14122	GAJBHIYE SWAPNIL GHANSHYAM	secure server (pending)
23	14123	DESHMUKH GAURI SHANTARAM	Blood Bank Management System
27	14127	GOTAD ARATI KRISHNA	job portal
28	14128	GUNJAL RAHUL BABASAHEB	Red Apple-Subzi Mandi
29	14129	PAWAN K GUPTA	Live Wedding
30	14130	HIRAL KOTAK	PROPERTY BUFF(Pending for FR Detaling and usecas
32	14132	JADHAV MAROTI MURLIDHAR(will mail)	E-VOTING FOR ASSOCIATION
34	14134	JATHAR SNEHA CHANDRAKANT	E_Project
35	14135	JAWANJAL DHANASHRI PRAMOD	Easy Export Portal pending for all use case and FR
36	14136	JOSHI MADHUSUDHAN	Industrial Manpower resource Organiser
37	14137	KADAM RAHUL RAM	College Mgt System (Fr Discussion)
38	14138	GAYATRI KELKAR (Will Mail)	LIC Portal(Agent module)
39	14139	KHARWADE CHAITALI PRAKASHRAO	website keystroke
41	14141	TAJNE AYUSH RAJENDRA	travel system (check concepts and usecase)e.q pack
42	14142	KULKARNI PAWAN SURESHRAO	E-Property(Scope-table design)
43	14143	KUMBHAR CHETAN BABAN	Mesco career acadamy,satara
45	14145	KUMBHAR KOMAL DILIP	Online Bhadji

46	14146	KUNDAL PUNIT SHANKARLAL	Classifieds Ads System
47	14147	KUSREY MAYANK SHIRISH	Kadki no more
48	14148	LANDKAR YOGESH VINOD	Hostel Mgt
49	14149	LOKHANDE NISHIKANT ANIL	HR Management
50	14150	AISHWARYA DHANRAJ MAHAMUNI	Mediclaim System(scope)
51	14151	SONAWANE RESHMA	Grocery Shop Management
52	14152	MALKAPURE AJIT BHASKARRAO	Supply Chain Mgt (pending for usecase)
54	14154	CHAUHAN MANISH BRIDDHI	om sai Engg.
56	14156	MOHAMMAD AFZAL	Online Job Portal
57	14157	MORYE SONAM JAYWANT	Car bazzar

STES's Sinhgad Institute of Management & Computer Application [SIMCA]
MCA Department

PRACTICAL LIST for JAVA

1 WAP to find the average and sum of the N numbers Using Command line argument.
2 WAP to Demonstrate Type Casting.
3 WAP to find the number of arguments provide at runtime.
4 WAP to Test the Prime number.
5 WAP to calculate the Simple Interest and Input by the user.
6 WAP to create a Simple class to find out the Area and perimeter of rectangle and box using super and this keyword.
7 WAP to find G.C.D of the number.
8 WAP to design a class account using the inheritance and static that show all function of bank (withrowal, deposite).
9 WAP to find the factorial of a given number using Recursion.
10 WAP to design a class using abstract Methods and Classes.
11 WAP to design a String class that perform String Method(Equal,Reverse the string,change case).
12 WAP to handle the Exception using try and multiple catch block.
13 WAP that Implement the Nested try Statements.
14 WAP to Create a package that access the member of external class as well as same package.
15 WAP that import the user define package and access the Member variable of classes that Contained by Package.
16 WAP that show the partial implementation of Interface.
17 WAP to Handle the user defined Exception using throw keyword.
18 WAP to create a thread that Implement the Runable interface.
19 WAP to create a class component that show controls and event handling on that controls.(math calc).
20 WAP to Draw the line, Rectangle,oval,text using the graphics method.
21 WAP to create a Menu using the frame.
22 WAP to create a Dialogbox.
23 WAP to Implement the flow layout And Border Layout.
24 WAP to Implement the GridLayout, CardLayout.
25 WAP to create Frame that display the student information.
26 WAP to perform Linkedlist example
27 WAP to perform Tree Set example.
28 WAP to perform HashMap example.
29 WAP to create Math package. Add the addition class, Subtraction Class, Multiplication class, Division class in the package.
30 WAP for Hast table example.

 ISBN:978-93-5254-640-4

Go Green with Green Computing

Prof. Anuradha Kanade, Sonali Pasalkar, Aakansha Srivastava

MCA, SIMCA, Pune

anuradha3279@gmail.com, sonalipasalkar13@gmail.com

***Abstract* - The goal of green computing is simple reduction in the use of harmful materials, maximize energy efficiency, and promote recyclability. Here, we discuss the concept of green computing and its core ideals in detail, including what it is, why it's needed and some ideas for the future.**

In the recent past another focus has got immense importance and that is achievement of energy efficiency, minimization of power consumption of E-equipments. It has also given utmost attention to minimization of E-waste and use of non-toxic materials in preparation of E-equipments.

Keywords- Green IT, Recycle, Reduce, Reuse, Green Computing, Carbon Footprint, Government Legislation

I. INTRODUCTION

The first step toward the green computing movement was the commencement of the Energy star program in 1992. This served as a voluntary label that was awarded to computer products that were successful in proving that they used minimum energy while maximizing efficiency. The rating was awarded to monitors, refrigerators, television sets, air conditioners, and other household appliances.

The first result of green computing research resulted in the Sleep mode function for computer monitors. This function allows the computer to enter standby mode after a pre-set period passes without any user activity. After this, various concepts like energy cost accounting, thin client solutions, e-Waste, and virtualization were developed.

II. GREEN COMPUTING

Green computing is commonly referred as Green IT. The idea is to ensure the least human impact on the environment. Apart from this, it aims to achieve environmental sustainability.

It is clear from the Figure 1 that the decision must be taken depending upon the factors such as CO2 footprint, the availability of the site and cost for choosing that web site from the cloud.

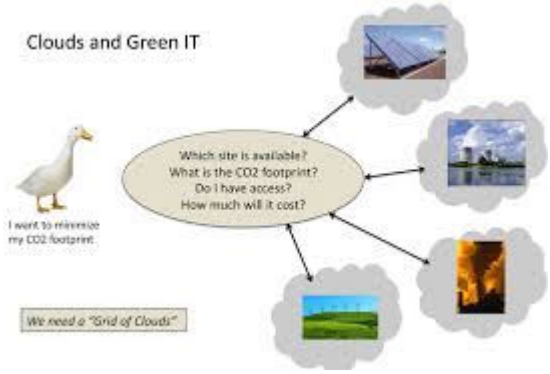


Fig. 1 Factors for Choosing Cloud Application [2]

In simple language, green computing is the scientific study of efficient and effective designing, manufacturing, using, disposing, and recycling of computers and computer related products like servers, network systems, communication systems, monitors, USBs, printers, etc. The study uses science to create technologies that help to preserve natural resources and reduce the harmful impact on the environment.

III. GOALS OF GREEN COMPUTING

Besides other goals of green information technology, most notably objectives of green computing at the design and manufacturing stages are given as follows.

- To cut down to as little as possible the amount of energy used.
- To minimize the inclusion of harmful materials.
- To use as many biodegradable materials as possible.
- To extend as far as possible the life of the equipment.
- To use Energy-Saving Computers

IV. ACHIEVING GREEN COMPUTING

Organizations all over the world are beginning to understand their corporate social responsibility toward the environment. Most companies now believe in conserving energy and power and using environmentally friendly products that help in reducing their carbon footprint. In fact, in many organizations, the need for green computing is put at the top of the agenda. Nowadays, it is imperative for all sized organizations to implement aspects of green computing in their daily workings.

 ISBN:978-93-5254-640-4

The most common actions organizations have undertaken are as follows.

- Virtualization - Virtualization is the consolidation of servers and systems to reduce power consumption and energy utilization. It leads to usage of more than one system on a single piece of physical hardware. This allows for minimum power consumption and maximum cooling.

- Power Saving - Industry standards like ACPI design and manufacture computer components in such a way that they result in power controlling and saving. Also organizations must prepare the environmentally sound purchase decisions to reduce the power consumption and to enforce the efficient usage of eco-friendly material.

- Telecommuting - Employees working from home reduce the fuel emission created during commuting by vehicles. Moreover, there is reduction in overhead costs on utilities, etc. All of these initiatives result in increased power and energy savings.

- VoIP - VoIP stands for Voice over Internet Protocol and results in less telephone wiring and lower costs.
- Developing the sustainable green computing plan - Any organization must have proper policies and checklist. The plan should include recycling policies and recommendations for disposal of used equipment, government guidelines and recommendations for purchasing green computer equipment. Green computing best practices and policies should cover power usage, reduction of paper Consumption, as well as recommendations for new equipment and recycling old machines. Organizational policies should include communication and implementation.

- Recycling – the use of unwanted and used electronic equipment should be discarded in a convenient and environmentally responsible manner. Computers have toxin metals and pollutants that can emit harmful emissions into the environment. Never discard computers in a landfill. Recycle them instead through manufacturer programs such as HP's Planet Partners recycling service or recycling facilities in your community. One can donate still-working computers to a non-profit agency.

V. Government Legislation

The Carbon Reduction Commitment (CRC) scheme is designed to reduce carbon emissions, in the UK, by 1.2 tonnes by 2020. Through the use of green technologies the mandatory UK standard aims at improving energy efficiency through cutting UK carbon emissions 80% by 2050. The CRC covers all forms of energy – electricity, gas, fuel and oil – with the exception of transportation fuels.

A. *CRC legislation drives demand for green IT skills*

Companies will soon be forced to hire new staffs that are skilled in green technology due to the mandatory Carbon Reduction Commitment (CRC) scheme brought in recently. The scheme encourages companies to improve their energy efficiency levels.

B. *Knowing which carbon compliance scheme you fall under*

You might find this flow chart useful for finding out whether you will be affected by the Carbon Reduction Commitment (CRC) scheme, the Climate Change Agreement (CCA) or the European Union Emission Trading Scheme (EU ETS). With more and more carbon compliance schemes, being introduced, it is important for businesses to look in to using green technologies for better energy efficiency rates.

C. *CRC Energy Efficiency Scheme tutorial*

There was industry spread confusion when the Carbon Reduction Commitment (CRC) was introduced recently. For those that are still confused about energy efficiency, or those that are yet to read up on how the CRC may affect you, get the latest green technology, advice, news and tips here.

VI. Advantages of Green Computing

Being part of the universe, it is our priority to maintain the environmental balance and save the life. Making the environment green is the first duty of all beings. The green computing implementation has following obvious benefits.

- Reduced energy usage from green computing techniques translates into lower carbon dioxide emissions, stemming from a reduction in the fossil fuel used in power plants and transportation.

ISBN:978-93-5254-640-4

- Conserving resources means less energy is required to produce, use, and dispose of products.
- Saving energy and resources saves money.
- Green computing even includes changing government policy to encourage recycling and lowering energy use by individuals and businesses.
- Reduce the risk existing in the laptops such as chemical known to cause cancer, nerve damage and immune reactions in humans.

VI. Disadvantages of Green Computing

Green computing could actually be quite costly.

Some computers that are green may be considerably underpowered. Rapid technology change demand for the high computing power or super computer power that can emit lot of heat.

VII. Green Computing implementations

There are various systems available now that help to implement the green computing. Blackle is one of such systems. The principle behind Blackle is based on the fact that the display of different colours consumes different amounts of energy on computer monitors. It reduces the energy consumption of the computer monitor by keeping the screen black. Fit PC is a very tiny computer that can replace the standard, bulky, power consuming and noisy PC. The Fit PC consumes only 5 W and still can work 24/7, without noise, much of the electricity. It is fit to run Windows XP or Linux. Zonbu is also new and very energy efficient PC. Sunray thin client is the product from Sun Microsystem. A Sunray on a desktop consumes 4 to 8 watts of power, because most of the heavy computation is performed by a server. Sun says Sunrays are particularly well suited for cost-sensitive environments such as call centers, education, healthcare, service providers, and finance. The Asus Eee PC and other ultra portables: The "ultra-portable" class of personal computers is characterized by a small size, fairly low power CPU, compact screen, low cost and innovations such as using flash memory for storage rather than hard drives with spinning platters. These factors combine to enable them to run more efficiently and use less power than a standard form factor laptop. The Asus Eee PC is one example of an ultraportable. It is the size of a paperback, weighs less than a kilogram, has built -in Wi-Fi and uses flash memory instead of a hard drive. It runs Linux too.

VIII. Future of green computing

The plan towards green IT should include new electronic products and services with optimum efficiency and all possible options towards energy savings. That is enterprise wise companies are laying emphasis on moving towards Eco Friendly Components in Computers, the use of eco-friendly sustainable components will become the norm rather than the exception in future.

IX. Conclusions

Computing is involved in our day to day lives and it was said that use more computers and less papers. Green Computing is basically elaborates on using less paper, and conserve energy for the environment. Green computing is not about going out and designing biodegradable packaging for products. Now the time came to think about the efficiently use of computers and the resources which are non renewable. It opens a new window for the new entrepreneur for harvesting with E-waste material and scrap computers.

References

[1]. http://www.brighthub.com/environment/green-computing/articles/62742.aspx
[2]. https://www.google.co.in/search?biw=1366&bih=623&noj=1&tbm=isch&sa=1&q=green+computing+logo&oq=green+computing+logo&gs_l=img.3..0.13872.14388.0.14728.4.2.0.2.2.0.160.284.0j2.2.0....0...1c.1.64.img..0.4.290.6oqGizsiNnQ
[3]. .https://en.wikipedia.org/wiki/Green_computing .http://www.computerweekly.com/guides/Using-green-computing-for-improving-energy-efficiency
[4]. http://www.brighthub.com/environment/green-computing/articles/62742.aspx
[5]. http://maulik-kamdar.com/2010/08/green-computing/7.http://www.sersc.org/journals/IJGDC/vol2_no3/4.pd