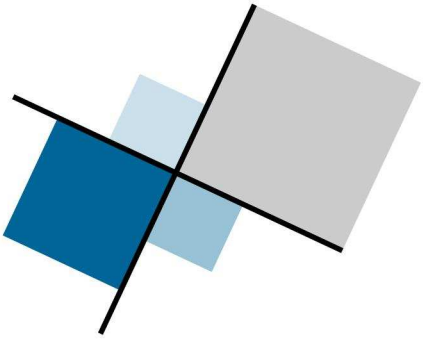
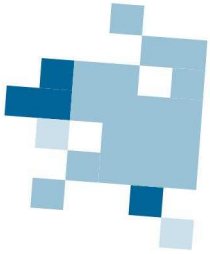
IT Newsletter

((cover story))
Introduction of Web 2.0 technology

Exploring Facebook





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Web 2.0

"Web 2.0" refers to a second generation of web development and design, that facilitates communication, secures information sharing, interoperability, and collaboration on the World Wide Web. Web 2.0 concepts have led to the development and evolution of web-based communities, hosted services, and applications such as social networking sites, video- sharing sites, wikis, blogs, etc.

Web 2.0 websites allow users to do more than just retrieve information. They can build on the interactive facilities of "Web 1.0" to provide "Network as platform" computing, allowing users to run software-applications entirely through a browser. Users can own the data on a Web 2.0 site and exercise control over that data. These sites encourage users to add value to the application as they use it. This stands in contrast to traditional websites, the sort that limited visitors to viewing and whose content only the site's owner could modify. Web 2.0 sites often feature a rich, user-friendly interface and similar client-side interactivity frameworks, or full client-server application frameworks such as OpenLaszlo, Flex, and the ZK framework.

The concept of Web-as-participation-platform captures many of these characteristics. **Bart Decrem**, a founder and former CEO of Flock, calls Web 2.0 the "participatory Web" and regards the Web-as-information-source as Web 1.0.

According to Bart, the characteristics of Web 2.0 are: rich user experience, user participation, dynamic content, metadata, web standards and scalability. Further characteristics, such as openness, freedom and collective intelligence by way of user participation, can also be viewed as essential attributes of Web 2.0

Web 2.0 makes Internet become the technology to enable the true platform, the Social Networks. Social Networks in the Internet context is a term used commonly as the short-hand for social networking services such as **MySpace.com, Facebook.com, Youtube.com**, etc. These Social networking services essentially create an online community for people to socialize. Social Networks have two key features.

- Firstly, Social Networks enable users to express themselves to the world in different ways. People can create a blog on **Blogger.com**, a video on **Youtube.com**, a photograph on **Flickr.com**, or a bookmark on **Del.icio.us**, etc. All these contents or digital assets are created and published by the users to be consumed by other users on the Social Network.
- Secondly, Social Networks allow users to interact with each other in many different ways. Together users can play games, discuss certain topics, share comments, and communicate with each other using email, instant messaging, or voice and video. The power of a Social Network comes from its far reach to millions of users. **MySpace.com** reported it attracts 230,000 new registrations per day and as of September 7, 2007, there are over 200 million accounts. The utility of any user using the social network service directly depends on how many of their friends are on the same network. Once the social network gathers enough critical mass, the growth rate will be exponential due to the users themselves are persuading their friends and families to register.

Social Networks can be classified into 3 tiers. **Tier 1** social networking services provide functions for the users to manage their contacts and to search for other (possibly unknown) users with matching interest. They will also need to provide the essential features of publish and interact as of any social networks. **Facebook, Flickr, LinkenIn, MySpace** are some examples of tier 1 social networking services.

Tier 2 social networking services are like tier 1 except that users can only add contacts that they already know through other channels. **Classmate.com, YouTube, Yahoo! Answers** are some examples for this tier. **Tier 3** services are the ones that only provide the essential functions of publish and interact with minimum or no function to manage your contacts. **Blogger, Amazon, Wikipedia** are examples of this tier.

EVOLUTION OF WEB 2.0

The emergence of "Web 2.0 attitudes" can be traced to the time period following the "dot.com crash" in approximately 1999-2000. It has been suggested that these attitudes resulted from a philosophical examination of the overall usefulness of Web technology given the failures experienced at that time. The volume of information and data sources on the Web had reached a "critical mass" and search engine technologies were grappling with the problem of making the Web searchable. At the same time, Web users had developed an expectation of fulfillment and trust. Simple mechanisms such as Google's "I'm Feeling Lucky," Amazon's personalization features, and eBay's ratings systems addressed some of their user's basic needs and expectations at the time. Many of the most successful Web companies at that time (e.g., Google, Amazon, eBay, etc.) could be described as embodying a convergence of 'individual traits and social and technological forces.' The introduction of blog and wiki technologies during that time period served to further support strong user involvement in the future direction of the Web.

Tim O'Reilly cites the basic paradigm shifts that he observed during this time frame from the existing application of Web technology (unfortunately referred to as "Web 1.0" to the new user-centric "Web 2.0"(Table 1).

	Web 1.0	Web 2.0
Governance	Top down	Bottom Up
Communications	People to Machine	Machine to Machine and People to People
Information Discovery	Search and Browse	Publish and Subscribe
Information Retrieval	Transactional	Relationships
Information Aggregation	Portals, Commercial Aggregators	Mirco-Aggregation
Marketing, Selling	Push, Contextual	Conversational, Personal
Content Control	Publishers, Aggregators	Content Authors
Content Structure	Documents, Pages	Tagged Objects
Applications	Closed, Proprietary	Open, Standards-based
Technology	HTML, Solaris, Oracle	XML, AJAX, RSS, PHP, MySQL, XQuery

Table 1: "Web 1.0" to "Web 2.0" Paradigm Shift

The technology shifts shown in Table 1 help to define the fundamental characteristics of a "Web 2.0"infrastructure.

1. "The Web as a Platform" - the familiar model of the Web as a client server application limits its functionality. The Web instead needs to become a distributed system of services and applications integrated as a software platform.

2. "The Web as a Point of Presence"-"Web 1.0"perpetuates the model of "visiting Web sites" "Web 2.0"emphasizes the popular notion of a user navigating through and becoming immersed within 'cyberspace'

3. "A Web composed of Microcontent"- information defined in terms of microcontent supports an open, decentralized, bottom-up, and self-organizing infrastructure.

4. "A Web of MetaContent" - the content of Web sites, services, etc. should be meaningful 'Out of context' and viewed as 're-usable objects' for applications not intended by the content authors/creators.

5. "A Semantic Web" - a Web of objects connected by rich and meaningful semantic relationships.

Conclusion

Web 2.0 is right on our doorsteps. Companies not supporting Web 2.0 will bound to loss their global competitiveness. Yet on the other hand Web 2.0 could not be advanced without information sharing. This is a serious dilemma we are facing in this part of world.

The pace of adoption of the Web 2.0 paradigm in the Chinese communities is relatively slow. This is partly due to the cultural differences between our societal and the Web 2.0 paradigms. In terms of content sharing, Chinese are less open than westerners and most of us are very reluctant to express their opinions publicly worrying that we may be held responsible. In fact, there are numerous examples in China, where Web portals were ceased and the owners arrested for criticizing the government. Chinese is also very unwilling to share knowledge, e.g. tools, solutions, etc., as they regard those as proprietary family or company assets, which should only be inherited by direct relatives. With this mindset, advancement in Web 2.0 will inevitably be sluggish rendering Chinese including Hong Kong uncompetitive in the growing Web business arena.

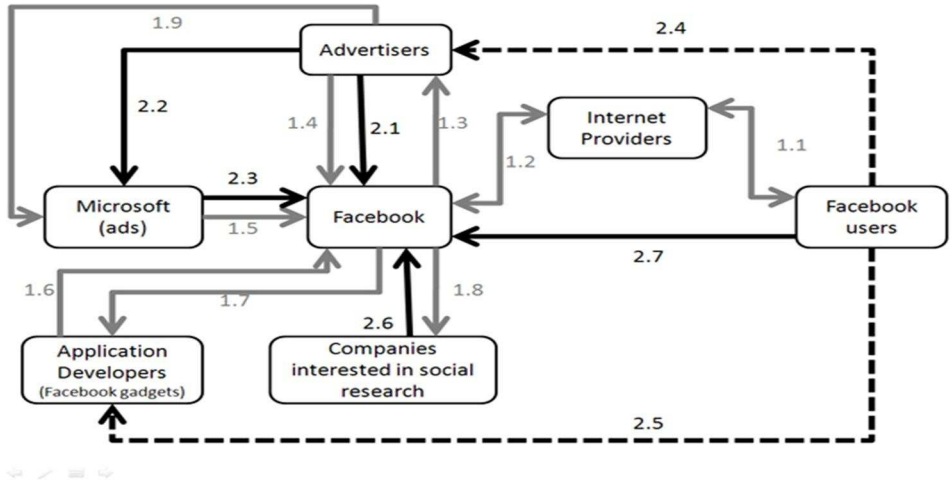
You spend all your leisure time here?

New Business

In Facebook

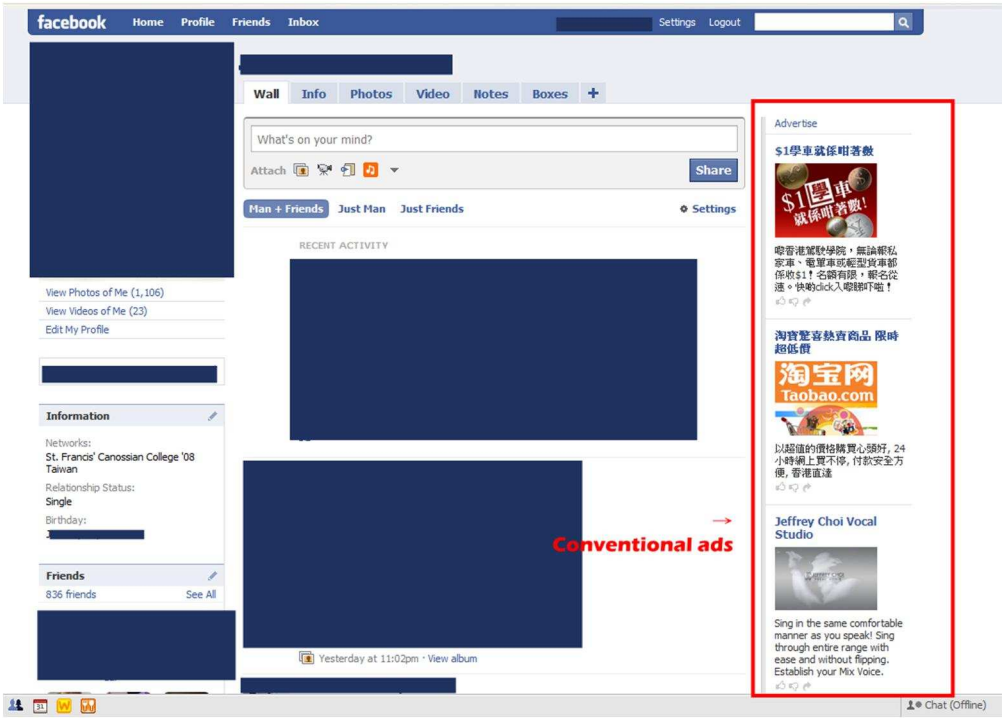
exploring facebook

The following is a business model showing how information flows in Facebook and how the advertisements work on the Facebook webpage.

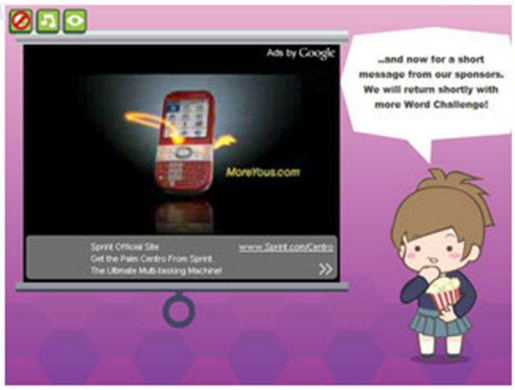


Generally speaking, there are two basic types of adverts on the site: (1) conventional ads which companies can buy directly from Facebook and (2) banners provided by Microsoft.

When you are browsing Facebook, the right column with small boxes shows the conventional ads. These advertising spaces can be bought directly by literally anyone who has a Facebook account, which means even you can advertise your personal website through Facebook.

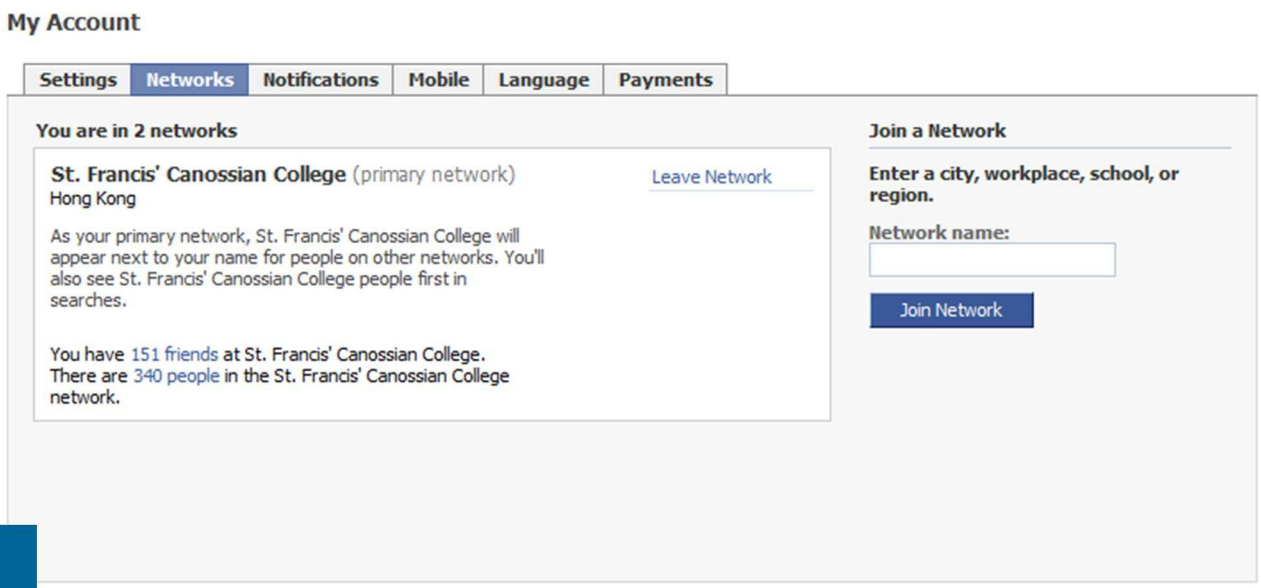


However, larger companies need more sophisticated ads, so they buy banner spaces, which you sometimes see on the top and bottom of application pages. These two are the main sources of profit that keeps Facebook running free of charge.



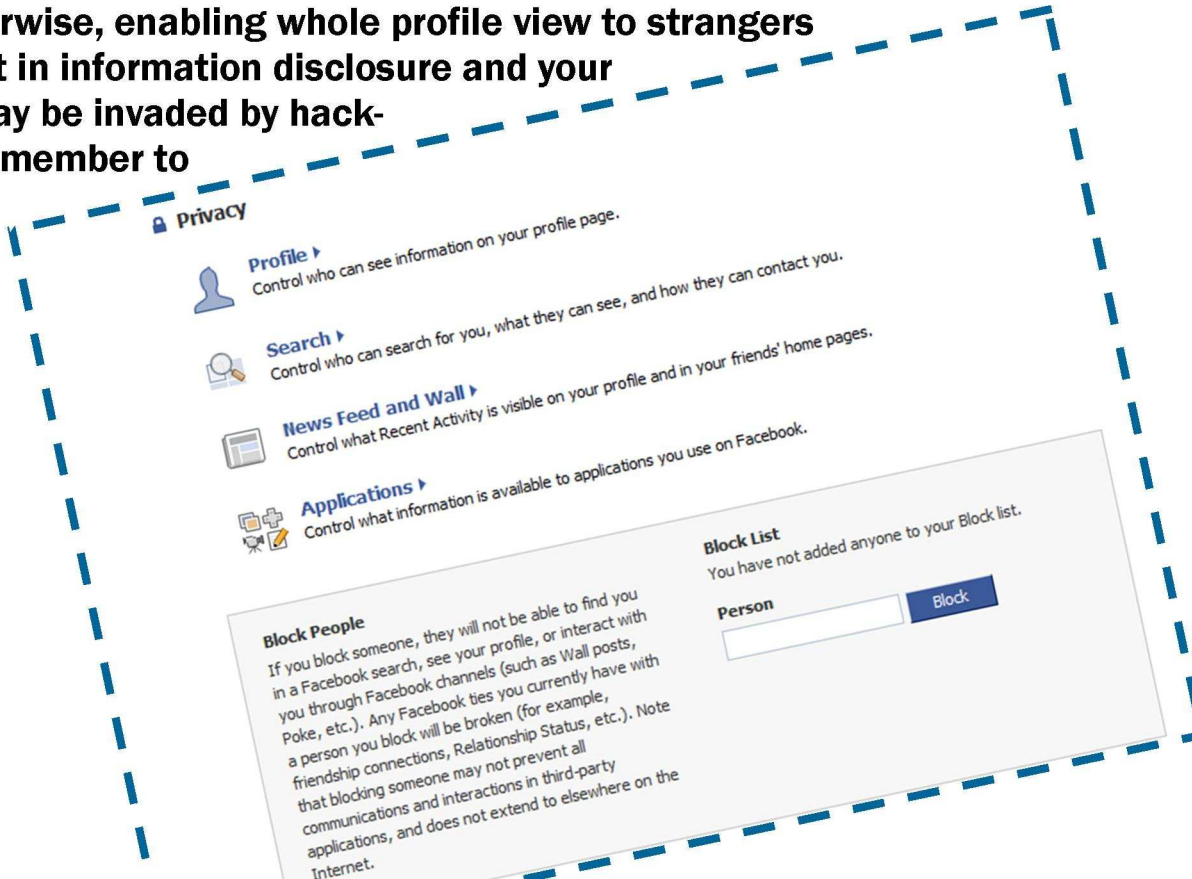
Although most social networking websites are free of charge, Facebook still remains the most common one. **What makes Facebook so popular?**

We can find our friends easily on Facebook, and share resources with them. Regional networks, school networks, company networks etc. are established, which only people belonging to that organization are able to join. As a result, users in the same network as you are might be able to view your profile, if you have set your privacy settings as such. For example, when we join the network of SFCC, our schoolmates who also joined the network can see the photos and videos we have posted to our profile pages.

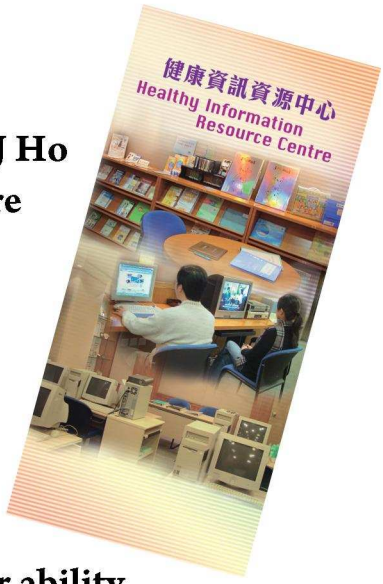


The applications are another factor adding to the addictiveness of Facebook. Since Facebook has launched the Platform in 2007, providing a framework for software developers to create applications that interact with core Facebook features, different types of applications have been developed on Facebook. The Platform is open for everyone, just like the ad spaces mentioned above, so basically you can start learning the Facebook Markup Language today and develop your own application.

Lastly, we would like to remind you to be cautious when accepting friend requests on Facebook. Make good use of the privacy settings, and keep your personal information away from the public. You should also use the 'Limited Profile' feature when necessary. Otherwise, enabling whole profile view to strangers may result in information disclosure and your privacy may be invaded by hackers. So, remember to use Facebook wisely!



Visit to Healthy Information Resources Centre



On 27th November.2008. 18 of our IT prefects and Ms. J Ho have paid a group visit to the Healthy Information Centre (健康資訊資源中心),located in the Wanchai Revenue Tower.

On that they, we listened to a talk given by the representative officer from the Television and Entertainment Licensing Authority(影視及娛樂事務管理處). The topic mainly focus on providing guidance to enhance our ability to deal with objectionable information on the internet and how can we do to minimize the adverse effects of such materials on young people.

The Centre has a large collection of reference materials on the Control of Obscene and Indecent Articles Ordinance and other relevant topics, including media education, sex education and a wide range of child and teen issues.

After the talk, we have a Question and Answer section and watch a few videos on appropriate action to reject unhealthy materials in the internet. We all received a pack of souvenirs afterwards. It was really an informative and remarkable visit.

CLEAN PC DAY

Do you still remember there are a few form teacher time that an IT prefect come to visit your classroom and do some cleaning and checking for the computer in your class?

We had held 3 Clean PC day this year on 3/12/2008, 22/4/2009,20/5/2009, IT prefects are assigned to go to each class to update the setting of firewall and anti-virus program of the classroom computer.

We strongly encourage everyone of you to "Clean Your PC" regularly (e.g. once every week/month) so as to enjoy surfing the Internet in a safer environment.

5 Steps to clean your PC:

Steps 1: Change the Password

Most users have different passwords to manage their businesses, such as Windows login, webmail account login, etc. We should change our passwords periodically. Please be reminded that passwords should not be easily guessed, and should be avoided using the combinations of names, date of birth, telephone numbers, etc. The appropriate combination can be mixed-case alphabetic characters, numerals and special characters.

Step 2: Check the Firewall Status

Personal firewall can help to keep external parties away from your PC. Some operating systems such as Windows XP, Vista and RedHat Linux Desktop have already been bundled with basic firewall functions. You may also choose and install your own firewall to protect your PC against attacks.

Step 3: Update Program Patches

It is quite common that application software, including Operating Systems, has bugs or vulnerable codes in it. Application software vendors will provide patches/ updates for users to download and apply to fix those bugs or vulnerabilities.

CLEAN PC DAY

Step 4: Update Anti-virus/Anti-spyware Definition Files

In order to give your computer the most protection, you need to use the latest definition files for the installed anti-virus/anti-spyware software. Most anti-virus and anti-spyware software are equipped with automatic definition updating feature. When you switch on your PC, the software will automatically check for updates and download them. Alternatively, you may also manually download and update the definition files from the Internet.

Step 5: Scan your Computer

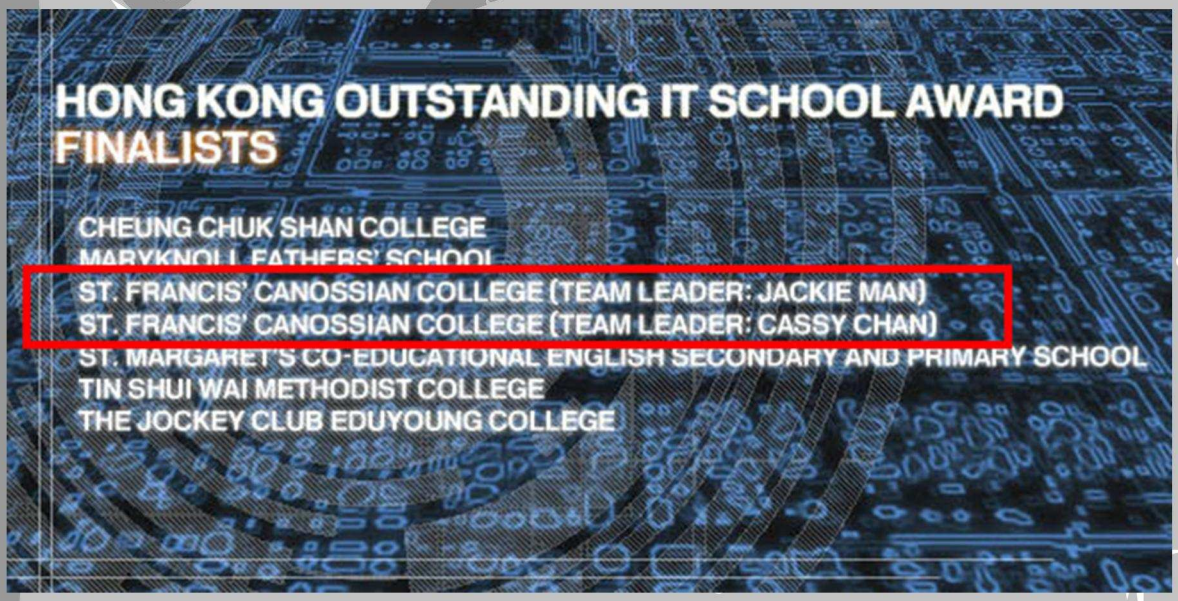
To protect your PC effectively, you need to scan it regularly at least once a week (apart from real-time scanning) so as to prevent it from virus and malicious codes infection. You can configure scheduled full scan on your PC, e.g. every Monday at lunch hour. On the other hand, you can also manually scan your PC to check if there is any virus or malicious code. Certainly, you should make sure the latest definition files have been applied for an effective scanning and protection.

More information to protect your Personal comuter and steps tutorial, please visit http://www.infosec.gov.hk/tc_chi/main.html

Students Achievements

Both teams of our school have entered the final of the Hong Kong Outstanding IT School Award Competition, held by Hong Kong Joint School Electronics and Computer Society .

All the finalist will set up a booth exhibition during the Joint School Computer and Electronics exhibition in August. Do come and support them!!



Participants::

(Team 1)

6S Jackie Man,6A Anthea Suen,4B Jeanne Lee,4C Claudia Tse,4D Denise Ho

(Team 2)

4D Sharon Chan, Cassy Chan,Macy Kwok,Winnie Mok,Iris Mok Victoria Ng

Updates of final round and exhibition details can be find at:

http://www.jsecs.org/

Two of our school IT Prefect (3B Cayla Wong and 3C Rebecca Lu) had been nominated and selected to join the Healthy Information Student Ambassadors Scheme 健康資訊學生大使計劃 held by The Television and Entertainment Licensing Authority (TELA). After attending 10 hours of enhancement of leadership skills and Information technology training, they have completed the program and will be arranged to participate in different publicity and public education activities which aim to promote healthy use of the Internet, including teaching the parents basic computer skills and introducing the relevant provisions to the students.

Here come some pictures when they are participating in the training session:

Boy's Band

Teacher Advisors

Mr. K. Law
Mr. C.W. Shek
Ms. J. Ho
Ms. Irene Ho
Ms. V. Yan
Ms. A. To

Exco-memebers

Chairlady: Jackie Man***6Sc***
Treasurer: Anthea Suen***6A***
Webmaster: Denise Ho ***4D***
Secretary: Claudia tse***4C***
PRO: Jeanne Lee***4B***

IT Prefects

Tiffyn Li	6Sc
Jenny Chan	6A
Shalom Ho	4A
Tracy Mak	4B
Rita Law	4C
Angelina Lui	4C
Angel Ng	4C
Victoria Ng	4D
Cassy Chan	4D
Macy Kwok	4D
Cissy So	4D
Grace Wong	4D
Sharon Chan	4D
Cayla Wong	3B
Rebecca Lu	3C
Janice To	3D

WEBSITE:
HTTP://WWW.SFCC.EDU.HK/STUDENT_FORMATION/IT/IT_TEAM/