Chapter 11

Social Implications of IT

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Learning Objectives

- Give examples of how social networking technology can improve society

- Describe several tips associated with netiquette and explain the benefits of following them

- Give the requirements of a good password, and how to achieve them

- Name 3 permitted/not permitted uses of licensed software

- Explain what rights are granted to material that is copyrighted

The Power of the Crowd

- The Internet has brought substantial and positive changes to society

- Social interactions have been extended well beyond the experiences that previous generations could enjoy

Crowdsourcing

- Refers to solving a problem or achieving a goal by combining the contributions of a large, unconstrained volunteer population

- Wikipedia is perhaps the most famous of the crowdsourcing enterprises

  - The goal is to build a database of all knowledge through a global effort
- So, what's in it for the participants?

  - It's fun, Earn points, win prizes

  - Participants receive a sense of satisfaction that they are contributing to a project

  - Many projects require skills that are more challenging than watching TV
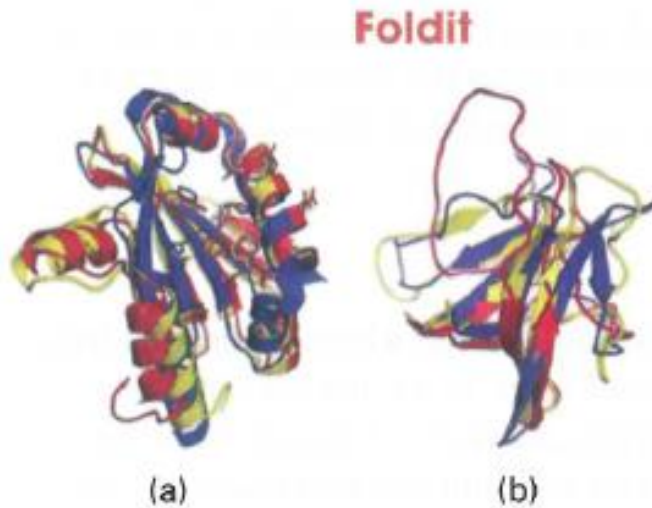
Crowd Sourcing Example: Be a Martian!

- Volunteers help NASA by tagging images from the Mars rovers

  - Owing to the free and easy communication enabled by the Internet

  - A wide variety of skill sets

  - A better solution which is faster and more efficient at the task!

Figure 11.1 Cockpit image from NASA's Be a Martian welcome page, beamartian.jpl.nasa.gov/welcome.

Crowd Sourcing Example: Foldit

- Foldit is a game program in which teams compete to fold a protein

- Proteins get all twisted as they float around in cells and the medicine doesn't "know a protein" until it knows how it folds

- Using Foldit, the structure of the protein associated with the AIDS virus was solved in *3 weeks.* (Other targets: Cancer, Alzheimer, etc)

Foldit

(a)   (b)

Figure 11.2 The protein monomeric retroviral protease, one subject of the Foldit video game.

Crowd Sourcing Example: Freerice

- Vocabulary game
- The player is given an English word and four possible definitions
- Picking the right answer donates 10 grains of rice

  – Benefactor: The game player

  – Beneficiary: The UN World Food Program

You have now donated 80 grains of rice.

Crowd Sourcing Example: Kickstarter

- People with creative projects pitch their ideas:

  - They say what they'll do

  - How much money they need to do it (goal of funding)

  - Why it's important, etc.

- Donors can contribute toward the goal of funding
- If the goal is achieved the project is funded; otherwise, the donors get their money back
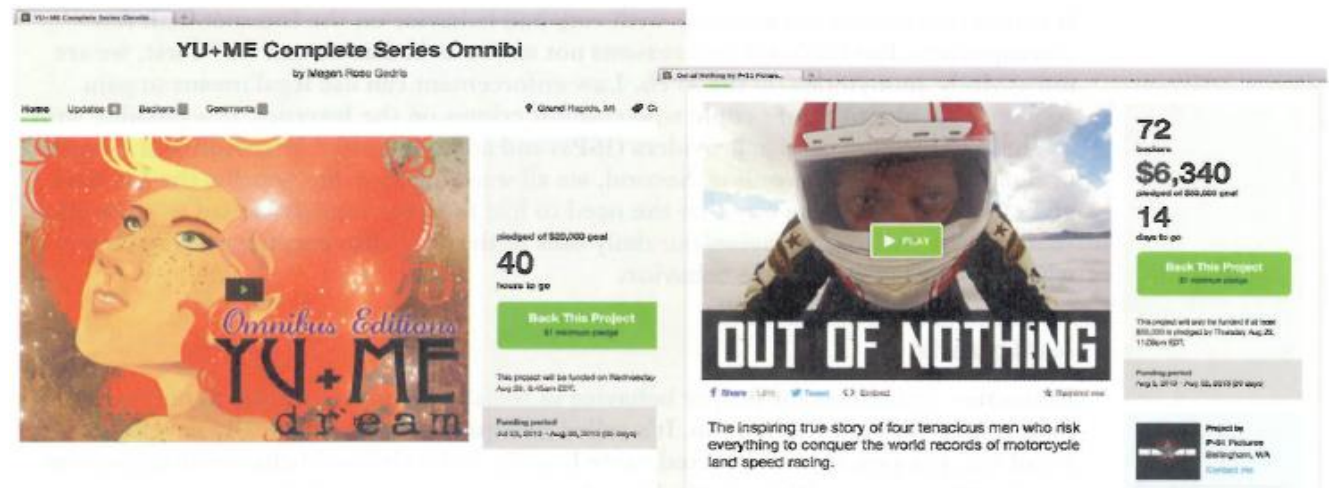
Figure 11.3 Kickstarter pitches to publish a Web comic on paper in two volumes, and to make a video about four guys pushing the limits in motorcycle racing.

Out on Good Behavior (선행으로 나가자?)

- The online world we live in today is different in many ways than the real world we grew up in

  – Our range of interactions is much broader; we may never meet face-to-face with the online people

  – Families and relatives influence our online behavior very little

- We are not entirely anonymous online

  – There are means to get the identities of people on the Internet

- We all want to enjoy the benefits that the Internet gives us, so our daily uses of the Internet encourages us to behave

Netiquette (Etiquette on the Internet)

Table 11.1 Netiquette guidelines for responsible behavior

Guidelines	Responsible Behaviors
Act as if you are there in person	Display your best side: In online interactions don't say or do things that you wouldn't say or do to the person face-to-face.
Remember that you aren't there in person	In face-to-face conversation, facial expressions, pauses, volume, emphasis, body language, and so on convey meaning that is not available in email or messaging. Explain yourself more completely. Avoid writing that can be misunderstood—"I can't praise her cooking enough"—and use notations like smilies—**emoticons**—to flag humor. Before sending or posting very emotional content, sleep on it.
One-on-one talks	Never forward email without the sender's permission.
Email isn't private	Your school, company, or email provider may have access to your email. Email can be subpoenaed for court; only put in an email what you'd write on a postcard.
Delete doesn't remove content	Because copies are kept (to recover from crashes), most Web content is still accessible after it has been deleted. Watch what you post—your boss or your future boss may see it. Think carefully about Facebook and Twitter posts.
Don't waste your friend's resources	Sending long rambling "musings" or huge image files wastes your friend's time and slows network connections or possibly server space. Be thoughtful. Don't send, or at least warn about the file size in the subject line.
Avoid flame wars	**Flame wars** are nasty email exchanges in which a few people fight, but cc a group of others. Don't continue a flame war; contact a flamer separately.
Confirm addressees	Before clicking **Send** when emailing, check that the "To" list is correct. If you accidentally send a personal reply to a group—by clicking **Reply All** when you meant to click **Reply**—follow up immediately with an apology.
Consider the time	Don't expect immediate responses; the recipient may live in another time zone and may be busy with other activities, like sleeping. When reading email, remember that the sender might have sent several messages. Check the message list before replying; there may be a "forget it" message.

Subpoena: 소환하다

muse: 골똘히 생각하다

Specific Guidelines for Email [1/3]

1. **Ask About One Topic at a Time**

   – Because most of us handle one matter at a time, the reader of a one-topic message can respond to the matter and then delete or archive the mail

   – With multiple topics, it is likely that one or more topics will be dropped or ignored

2. **Include context regarding issues in the email**

   – include the original message in the reply

   – It provides the context for your answer, so you can give a short reply without leaving the receiver clueless

   – When you're answering, put your reply *before* the included context

Specific Guidelines for Email [2/3]

3. Use an Automated Reply

   – When unable to answer email for a few days, it is polite to set up an automated reply (or vacation message) saying you are away

   – Your friend will know why you're not responding rather than feeling ignored or snubbed

4. Answer a Backlog of Emails in Reverse Order

   – When we keep up with reading our email, we usually answer messages in the order they're received

   – When we haven't answered our email for a while, it's best to answer email in *reverse order*

      • Many of the oldest messages may have resolved themselves while you were away

Snub: 무시하다, 모욕하다

Specific Guidelines for Email [3/3]

5. Clarifying Ownership of Email

    –   Most people assume that sent email is private

    –   It is impolite and inconsiderate to forward email without getting the sender's permission

    –   Asking permission to forward email gives the sender a chance to review the message to decide if there is something in it that should not be passed along

6. Use Emoticons

    –   The point of email is to communicate clearly

    –   Emails (and texts) are casual writing and others may misunderstand if we don't choose the right word

    –   *Emoticons* (aka smilies) are familiar and may help indicate your intent

Joy.   Melancholy.   Indifference.   Astonishment.
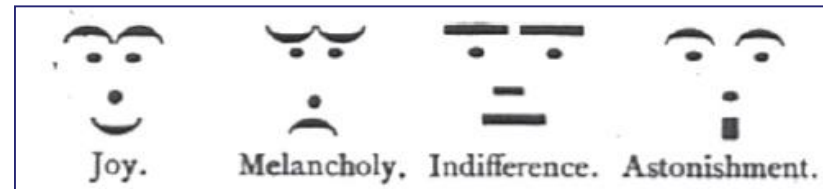
Please, Don't Be "Easily Offended"

- The *"Offensensitivity"* perspective can be summarized as follows:

  - Your post will be seen by people all over the world, and you will see posts from people all over the world

  - You can easily and unintentionally offend them and vice versa

  - The "problem" is our different cultures, social norms, backgrounds, religions, assumptions, and so forth

    - You're not wrong; they're not wrong.

    - They are no more likely to change their thinking than you are

- Be tolerant and be respectful in the cyber world!

Offensensitivity

(The word "offensensitivity" was, so far as I'm aware, first used by Berke Breathed in *Bloom County*.)

When posting to css-discuss, **remember that your message will be sent to (literally) thousands of people all over the world.** They all have likes and dislikes as individual as your own. They will also be offended by certain things which you may not find remarkable. While you can't foresee every potential area of conflict, there are certain guidelines that are fairly obvious: avoid swearing, cultural insults, blasphemy, proselytizing, and things of that nature. If you wouldn't say it out loud in front of your grandmother while in a place of worship, then you probably shouldn't say it on the list either.

At the same time, recognize that you are receiving messages from (literally) thousands of people all over the world. They all have likes and dislikes as individual as your own. They will also not find remarkable certain things by which you may be offended. Odds are that they probably didn't set out to offend you on purpose, so try taking a deep breath and counting to a nice high number if you feel a rising sense of offense. If, after this calming break, you still feel you must say something, **e-mail the poster directly** (and not on the list) to explain your feelings calmly, reasonably, and above all clearly without attacking them. They may be unaware of the effect of their words, so this is your chance to educate them. If you just slag them for being "insensitive," you may get flamed in return and create a resolve to keep offending you just for being so uptight and irrational (from their point of view).

Above all, remember that other people are about as likely to change their basic natures and habits as you are to change yours. You may at some point have to make a choice between tolerating other people's views and participating in the list. Please make this choice privately, and follow through quietly. Thank you.

Figure 11.4 A portion of the policies page at www.css-discuss.org/policies.html.

Expect the Unexpected

- Expecting the unexpected is a valuable survival skill in life and in computing

- When something unexpected happens, we should ask "Why did that happen?" / "What's going on?"

- The Onion (www.theonion.com)

  – a humor magazine specializing in news satire and produces "news" stories that are *almost believable*

  – Rather than checking an unbelievable story by asking if it makes sense, many people simply believe it and repeat it

- Suspicious Activity

  – Is your software "acting" strange? or "behaving" unusually?

  – These could be indicators of a software problem such as disk fragmentation, or a computer virus infection

  – If the behavior continues after a reboot, you might need some help

Password: Mechanism

- The password is encrypted into a *cipher* text that cannot be easily read
  - 1-way cipher
- No one knows your password except you
  - The computer doesn't even know it, but knows only the encrypted version
  - It only compares what you typed in with the encrypted version
- What if forgetting the password, how can your password be "recovered"?
  - For systems using a 1-way cipher, it cannot be recovered
  - The system administrator resets a new, known password
  - Then you will change it and you are again the only person who knows it
- When there are millions of users, what proof does anyone have that you are the owner of the account?
  - Security questions or some evidence that you are you (ex. 인증서)

Password: Common Sense

- A good password is one that no one is likely to guess, but you can easily remember
    - Many of us focus on the "easy to remember" part, then someone familiar with us might easily guess them
- Other weak passwords include:
    - short passwords (example: x),
    - obvious number or letter sequences (example: 123),
    - standard single dictionary words (example: password)

- Generating all possible combinations is possible
- But, software system will not allow zillions of attempted logins
    - The superuser takes some preventative action

Password: Based on Your Special Topic

- Goal 1 [Easy to remember]:
  - pick a topic from which all of your passwords are chosen to avoid forgetting a password (예, 프로야구광이면 한국에 프로야구가 시작된 년도)
  - Using one topic helps you remember passwords because they will be associated in your mind
  - When you try to remember your password, you will know where to start thinking

- Goal 2 [Hard to guess]: compress, scramble, and recode a password phrase to be unintelligible
  - Rule 1: Choose a password that is eight characters or more
  - Rule 2: Include numbers and letters (and if allowed, symbols like % and *)
  - Rule 3: Mix upper- and lowercase letters
  - Rule 4: Avoid "dictionary words"

EXAMPLE 1

Begin with the quote "May the force be with you"

Drop the "the", it's boring:	Mayforcebewithyou
Change May, the fifth month, to 5:	5forcebewithyou
Change "for" to 4:	54cebewithyou
Change "you" to u:	54cebewithu
Change "cebe" to CB:	54CBwithu

EXAMPLE 2

Begin with the title "The Matrix Trilogy"

Drop the "The", it's boring:	MatrixTrilogy
Change the "tri" letters to 3:	Ma3x3logy
Change 3 x 3 to 9:	Ma9logy
Change which letters are capitalized:	ma9Logy
Change "y" to "EE":	ma9LogEE

EXAMPLE 3

Begin with the name "Hollywood"

Change "oo" to 2o:	Hollyw2od
Change "ll" to 2l:	Ho2lw2od
Change "w" to 2u:	Ho2l2u2od
Change "o" to zero:	H02l2u2od
Change capitalization:	h02l2u2oD

Tips on Managing Passwords

- One strategy is to have 3 passwords to use in a variety of circumstances and always use one of them

  1. 4-Digit Numerical Password: for PINs and NOT "obvious"

  2. 6-Letter/Digit Password: when little risk if compromised

  3. 8+ Symbol Password: for cases where serious risk exists

- By using the passwords repeatedly, you will have no problem remembering them

- If you forget which one you used, there will be only two other possibilities to try

- Chances are that you won't remember all these places, so just change it when you revisit sites where you've used it

- Eventually, the password will be changed everywhere

Spam: Unsolicited commercial email (UCE)

- There are laws against spam in many places, and spammers are prosecuted, but it still persists

- Spam filters separate legitimate mail from spam mail

  – In most cases, your ISP has a spam filter installed

  – The program scans the email and assigns a score that measures how many properties typical of spam are also properties of the email

  – If the score is above the threshold, the email is considered spam

- Some mistakes are inevitable

- Setting the threshold lets you control how to handle the "close calls."

  – Users can check the spam quarantine box to be sure no legitimate mail is being stopped

Table 11.2   How spam thresholds affect email delivery

Change Threshold	Effect on Legitimate Messages	Effect on Spam
Higher	Fewer legitimate messages quarantined	More spam gets through to inbox
Lower	More legitimate messages quarantined	Less spam gets through to inbox

Scams (신용사기)

- The scam is known as an advance-fee fraud or as *419 fraud*
- Nigerian Widow/419 Scam Scenario

  – Someone you never heard of claims to have great wealth that they cannot access

  – They ask your help (some money) in transferring the money out of their country

  – For your help, you will receive a large share of the money

  – They said money is to bribe officials or pay various fees and it is confidential

  – After you agree to help, things go wrong with the transfer

  – The scammers need more and more money as time passes

  – Eventually you threaten them, and they disappear

- Unfortunately, the 419 scam has been extremely successful

  – The U.S. Secret Service claims Americans lose tens of millions of dollars every year

  – In a recent variation, the email says that you have won a lottery in another country

SUBJECT: URGENT RESPONSE

DEAR SIR

IT IS WITH HEART FULL OF HOPE THAT I WRITE TO SEEK YOUR HELP IN THE CONTEXT BELOW. I AM MRS. MUNIRAT ABACHA THE SECOND WIFE OF THE FORMER NIGERIA HEAD OF STATE, LATE GENERAL SANI ABACHA, WHOSE SUDDEN DEATH OCCURRED ON 8TH OF JUNE 1998.

HAVING GOTTEN YOUR PARTICULARS FROM THE FAMILY LIBRARY _, I HAVE NO DOUBT ABOUT YOUR CAPACITY AND GOOD WILL TO ASSIST US IN RECEIVING INTO YOUR CUSTODY (FOR SAFETY) THE SUM OF US$20MILLION WILLED AND DEPOSITED IN MY FAVOR BY MY LATE HUSBAND, PLUS 24 CARAT GOLD DUST WORTH USD$5M.

...

Figure 11.5 Beginning of a typical "Nigerian Widow" scam email.

EUROMILLIONS

EUROPE'S RICHEST & MOST POPULAR DRAW JUST GOT BIGGER

We are pleased to inform you of the release of the SPANISH SWEEPSTAKE LOTTERY/INTERNATIONAL PROMOTION PROGRAM for the Year 2012. Your email address drew the lucky numbers 01-04-12-21-25-32 that consequently won the lottery in the 3rd category. You have therefore been approved for a lump Sum Pay of £5,500,000.00 Five Million Five Hundred Thousand Great British Pounds Only) in cash Credited to File Ref number EUR-891/7700p. This is from A Total Cash Prize of £100,000,000.00 (One Hundred Million Great British Pounds only) Shared among International winners in this category.

Your fund is now deposited with a financial institution (Royal Bank Of Canada London United Kingdom insured in your name. Please note that your claim and batch number are the key to your funds, your are to keep this confidential until your claim has been processed and your money remitted to your account as this is part of our protocol to avoid double claiming or unwarranted taking an advantage of this program by participants. All participants were selected through a computer ballot system drawn from 25,000 names from Africa, Asia, Europe and America as part of our international promotion program that we conduct once in a month. We hope with a part of your prize, you will take part in assisting the less privileged in the society.

PAYMENT OF PRIZE AND CLAIM

Remember all prize money must be claimed within Six (6) Month of this notice. Six 6) Month, all funds will be returned to the Ministerio De Economia Y Hacienda as unclaimed.

Stated below is your identification numbers:

Batch Number: EUR-401/709p
Pin Number: EUR -23 811

These numbers fall within the England Location file. Urgently email your full name and mobile Number/Pin/Batch number to our fiduciary agent in London via his contact details below to claim your prize.

Overseas Claims/Exchange Online Payment Unit
Contact Dr. C   Gibson
Mobile: + 44 7700089   Telephone +447024033   Office Fax: +447024063
Office Address: 300 Oxford Street London W1A1EX United Kingdom
Email: 18@hotmail.com
Email: 18@hotmail.com

Congratulation again from all members of our staff and thank you for being part of our promotion program

Yours faithfully,
Mrs. Janet Hessian, Network Online Coordinator.

WARNING!!!!!

Do not tell people about your Prize Award until your money is successful handed over to you to avoid disqualification that may arise from double claim. You may also receive similar e-mails from people portraying to be other Organizations or Network Inc. This is solely to collect your personal information from you and lay claim over your winning.

Figure 11.6 A recent variation of the advance-fee fraud claiming the recipient is a lottery winner.
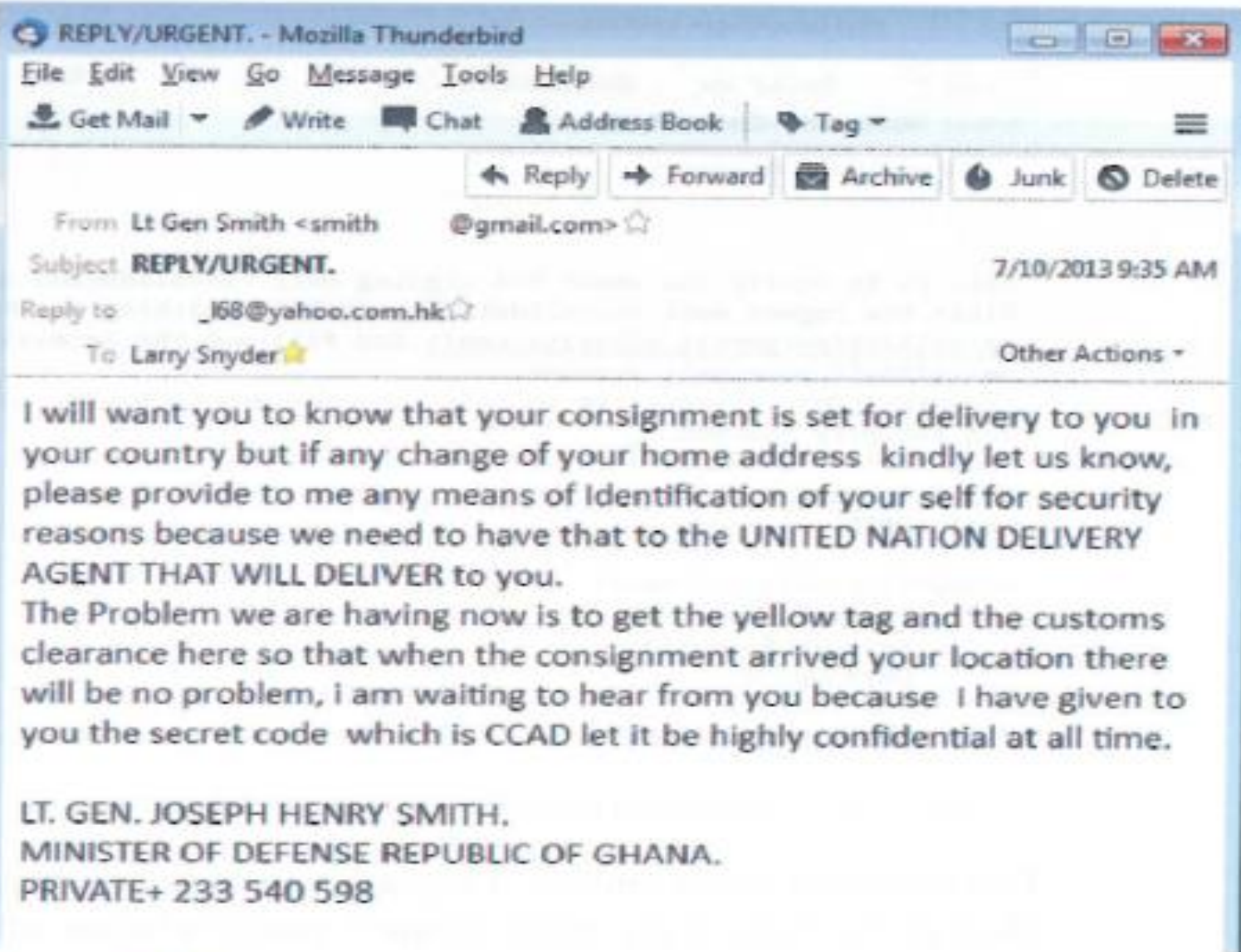
Figure 11.7 A request for personal identification to complete a shipment from Ghana.

Phishing: (<u>p</u>assword <u>h</u>arvesting <u>fishing</u>)

- The fraud process of convincing trusting people to give up personal data voluntarily

- Spam or phone call is designed to look like it comes from a reputable organization

  - Your account has been accessed by unauthorized people

  - You are owed some amount of money

  - There has been a security breach, which they are trying to fix

  - They are performing an audit and find possible problems with your account

  - They ask that you log on to a Web site to help resolving the issue

- Protecting yourself from phishing by doing the following:

  - Open attachments only when you know who sent them and why

  - Only give information online when you have initiated the transaction yourself

  - Before entering information, think: "How did I get to this company?"

  - Pay attention to the domain name of the company

From "   Brooke" <br   @davidson.edu>   ← Reply → Forward   Archive   Junk   Delete

Subject **Mail security alert notification !**   11:40 AM

To undisclosed-recipients;   Other Actions ▾

This is to notify you about the ongoing mail re-validation against phishing
Visit the rogers mail re-validation portal by clicking on RE-VALIDATION<http://automatic-
re-validation-portal.yolasite.com/> and fill-out the necessary requirements to automatically
re-validate your mail account.
IMPORTANT NOTE: Failure to do this, SENDING and RECEIVING mail operations will be suspended
for security reasons.

ITS help desk
Mail ADMIN

....

©Copyright 2013 Microsoft
 *   Terms
 *   Privacy & cookies
 *   Developers
 *

....

Figure 11.8 A phishing scam claiming to be validating email accounts against a phishing scam.
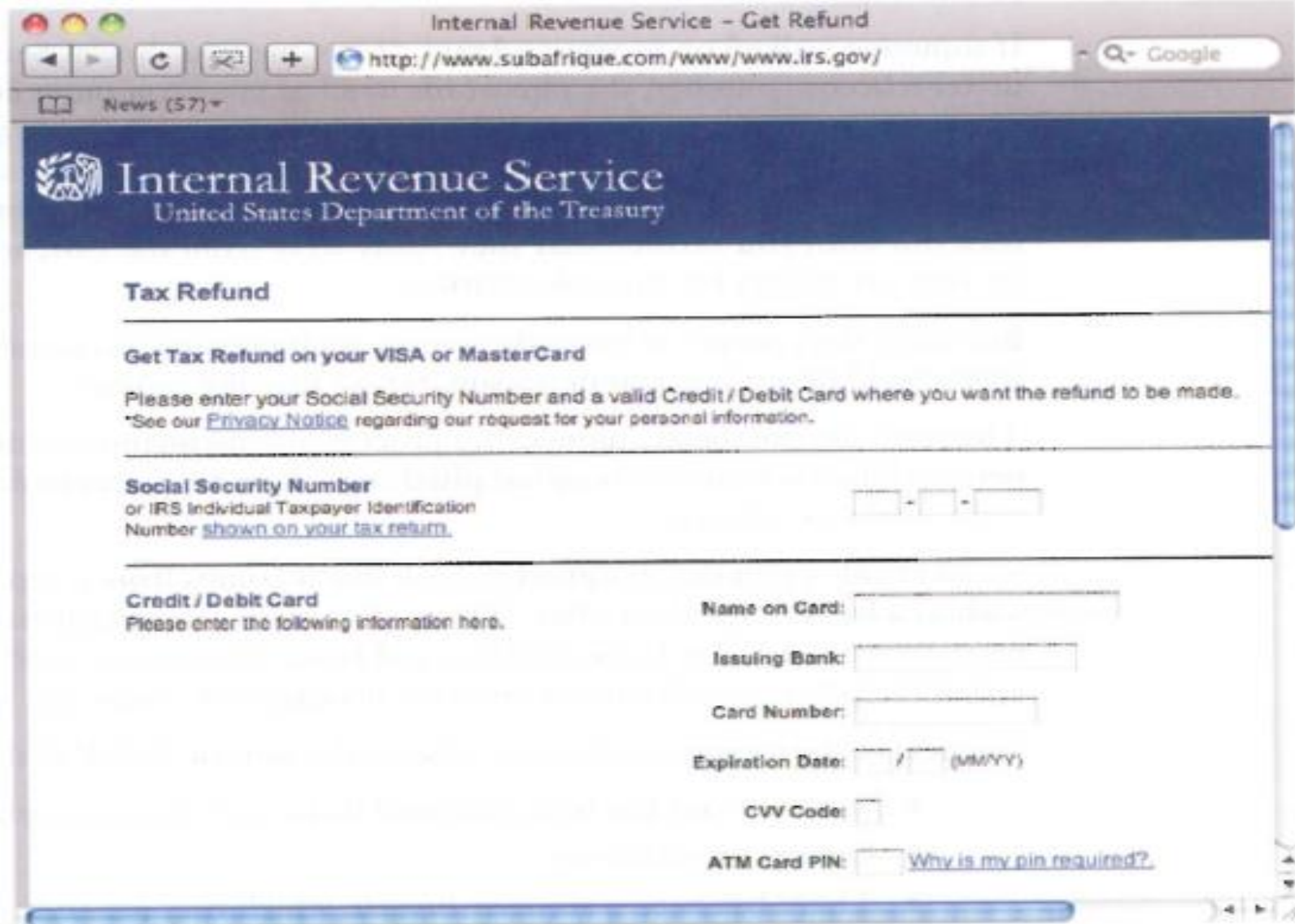
Figure 11.9 An example of a fraudulent email phishing attempt claiming to be from the tax people at the U.S. Internal Revenue Service; notice that the domain is not the IRS, but www.subafrique.com.

Protecting Intellectual Property (IP)

- Information is the result of the creative process and the creator ownership of the result in the US and many countries is protected

- Sometimes there are multiple forms of ownership
  - If on her tour Katy Perry sings a song written by Paul Simon, Paul Simon owns the words and music, Katy Perry owns the performance
  - If a person creates something while working for a company, the company generally owns the information

- The two aspects of intellectual property that we are interested in are:
  1. Software Licensing
  2. Copyright of content on the Web

1. Software [1/3]

- Commercial Software
  - When you buy software, you actually didn't *buy* the software, you *lease* it
    - You have the right to use of software, but the ownership remains with the company that marketed it
  - Use of the Software
    - If the agreement allows us to use the software, we can use it on *at least one* computer
    - We *may* be permitted to use it on all of the computers we own, but we can use *only* one instance at a time
    - Because you don't *own* commercial software you cannot sell or give it to your friend
      - If you do, you would violate the terms of the contract that you agreed to when you *opened* the software package

1. Software [2/3]

- Shareware (Try Before You Buy)

  - Usually distributed over the Internet

  - You can try out the software, and if you like it, then you pay the person who created it later

  - It is an honor system:

    - If you use the software, you should pay for it

    - It is unethical to download software on the implied promise of paying for it if you use it, then to use it without paying

1. Software [3/3]

- Open Source Software

  – Software from vendors is *proprietary,* (the vendors keep the source code private)

  – Publicly available software seems not to make sense:

    - Who pays for the technology?

    - How can a company make money if the product is publicly available?

  – Companies developing technology often make their products open source to promote wide distribution

  – Money is made by selling specialized versions to corporate clients, providing customer support, and selling other software

  – Advocates of open source point out that if the software is publicly available, other people work on it and improve it

2. Copyright on the Web [1/4]

- When a person writes a term paper, builds a Web page, or creates a sculpture on the web, s/he automatically owns the copyright on that "web work" in the US and most nations of the world

- It's the creator's copyright unless the creation is "work for hire"
  - The owner is the person who paid the creator

- What rights are included in a copyright?

- Copyright law protects the owner's right to do the following:
  - Make a copy of the work
  - Use a work as the basis for a new work
  - Distribute or publish the work
  - Publicly perform the work
  - Publicly display the work

2. Copyright on the Web [2/4]

- According to the copyright law, <u>the copyright on the web contents</u> is formed as below

  – No application or approval is required

  – the work doesn't require the © symbol.

  – It's copyrighted the moment it's finished.

- You might be tempted to bypass copyright law by restating a work in your own words

  – If your creation is too much like the original, you've produced a derivative work (plagiarism)

Therefore, the traditional copyright law is too much for web content!

2. Copyright on the Web [2/4]

- Free Personal Use on the web stuff

  - Just because someone else owns a work doesn't mean that you can't use it

  - You are free to enjoy, read, view, or listen to it

  - You can even print it (and/or save it) as long as it is for future personal enjoyment

- When do you need permission on the other person's web contents?

  - Make a copy

  - Use a work as the basis for a new work

  - Distribute or publish the work

  - Publicly perform the work, you must get permission from the owners

2. Copyright on the Web [4/4]

- The Concept of Fair Use on the web contents
  - This is the gray area in which limited use of copyrighted materials is allowed without getting permission
  - Fair use is recognized in copyright law to allow the use of copyrighted material for educational or scholarly purposes, to allow limited quotation of copyrighted works for review or criticism, to permit parody, and a few other uses
- When Is It Fair Use? ➔ Criteria Questions
  1. What is the planned use?
  2. What is the nature of the work in which the material is to be used?
  3. How much of the work will be used?
  4. What effect would this use have on the market for the work if the use were widespread?

** 일반적인 copyright law의 violation은 건당 $150,000의 벌금 ➔ 절대 주의 필요!

To: Date:

I am writing to you to request permission to use the material described below. This material will be posted on a Web site that receives approximately __30__ hits per month. The URL is

www.bloghoster.com/mySuperPage.html_____.

The material will be posted on ___July 1st_____ and will remain on the Web site for an indefinite period. I am asking permission for the nonexclusive, worldwide right to publish this material.

Description: Include title, author and source of the work (if from a book, give the ISBN; if from a Web site give the complete URL), and a copy of the work if possible (the text or art you want to use).

Full credit will be given to the source. A release form appears below along with space for indicating your desired credit line.

If you do not control these rights in their entirety, please let me know to whom else I should write. Thank you.

Sincerely,

Your Name

Your Contact Information

I warrant that I have the right to grant the permission to republish the material specified above.

Permission is granted by: _____

Title: _____

Address: _____

Date: _____

Preferred Acknowledgment: _____

Figure 11.10 Sample request for copyright permission; revise the red text. Find the file at pearsonhighered.com/snyder.

Creative Commons [1/2]

- Copyright Law: "All Right Reserved" to the author
  - Too much burden for WWW content (too strong and burdensome to keep!)

- The Creative Commons (creativecommons.org) is a social movement as its goals to increase the sharing of intellectual property, and greater creativity in WWW

- They have developed licenses that allow works to be shared easily:
  - When a creator posts his or her work on the Internet with a CC license, people are allowed to copy and distribute it

- The Creative Commons licenses are not the same as public domain
  - Placing a work in the public domain gives up all rights
  - The CC licenses are middle ground with some rights reserved

Creative Commons [2/2]

- Options for What to Keep, What to Give
  - Attribution:

    Others are allowed to copy, distribute, perform, remix, etc., the work, as well as create other work based on it, <u>as long as</u> you get credit for it

  - Noncommercial:

    Others are allowed to copy, distribute, perform, remix, etc., the work, as well as create other work based on it, <u>as long as</u> the result is not for sale

  - No Derivative Work:

    Others are allowed to copy, distribute, perform, etc., the work, <u>as long as</u> those are verbatim; no derivative works can be created from it

  - Share Alike:

    Others are allowed to distribute derivative works <u>only under</u> a license identical to the one governing your work.

A summary of the CC concepts and implications:

- Creators keep the traditional copyright to their work
- CC developed licenses for the general "good" ; they get no extra rights beyond other users
- CC provides tools for tagging your work with the license link
- CC licenses allow copying, distributing, and performing
- Attribution(귀속), which most CC licenses have, gives credit to the creator
- Creators can waive any of the rights they keep for themselves in WWW

- The Creative Commons is communal and contributes web-content sharing

Summary

- "Expecting the unexpected" as a useful survival skill: The challenge is to think about the unexpected event and correctly determine whether and how to respond.

- Spam, Scams, and Phishing: They are everyday occurrences, but skepticism is a handy tool to avoid trouble.

- Creating an easy-to-remember password emphasizes selecting passwords that are connected to a common topic
  - It is smart to choose simple passwords when little security is needed and to choose more obscure passwords when there is greater risk.

- Characteristics of copyright
  - When we create intellectual property, we immediate have copyright to it.
  - When others hold copyright, asking permission is always the safest thing to do.

- Creative Commons licenses provide a simple way to create and share intellectual property within the existing laws. It promotes creative communities.