SCIENCE AND ENGINEERING FACULTY

INB255/INN255 Security

Semester 1 2014

Week 4 Tutorial questions for Lecture 3: Privacy and Security.

Attempt these questions **before** you attend your workshop/tutorial session, and bring your prepared answers with you. Come prepared to discuss your answers and/or any problems you encountered in trying to answer these questions.

QUESTION 1

The Australian Privacy Act 1988 is available from the Office of the Australian Information Commissioner (see http://www.oaic.gov.au/privacy/privacy-act/the-privacy-act). Use the information from the Australian Information Commissioner's page, or access the Privacy Act 1988, to answer the following questions:

- a) What sort of privacy is this Act concerned with?
- b) Which organizations does the Act apply to?
- c) Referring to Section 6 in this Act (in Part II Interpretation), what do the following terms or phrases mean?
 - i. personal information
 - ii. record
 - iii. sensitive information
- d) What is not regarded as a record under this Act?
- e) How many *Information Privacy Principles* (IPPs) are there (see Section 14 in Part III Information Privacy)?

QUESTION 2

In 2000 the Australian Privacy Act 1988 was amended to include National Privacy Principles. Use the information from the Australian Information Commissioner's page, or access the Privacy Amendment (Private Sector) Act 2000, to answer the following questions:

- a) What was the purpose of the 2000 Amendment?
- b) How many National Privacy Principles (NPPs) are there?

QUESTION 3

In 2012 there was another Amendment; the Privacy Amendment (Enhancing Privacy Protection) Act 2012. This amendment provides 13 *Australian Privacy Principles* (APPs) to replace the previous IPPs and NPPs. Use the information from the Australian Information Commissioner's page, or access the Privacy Amendment (Enhancing Privacy Protection) Act 2012, to answer the following questions:

- a) Under APP1, entities must have a clearly expressed policy about the management of information. What must the privacy policy contain?
 - Use your web browser to go to the home pages of some well known organizations: QUT, your bank, Google, or well known Australian retailers.
 Look at their privacy policies. Do they comply with the Privacy Act?

- b) APP5 is concerned with notification of the collection of information. What must entities collecting personal information do in order to comply with this principle?
- f) APP 6 imposes limits on the use or disclosure of personal information. Under this principle, an entity who holds personal information that was obtained for a particular purpose shall not use the information for any other purpose, although there are exceptions. List the exceptions.
- c) APP11 covers the security of personal information. If an entity holds personal information, what does this principle require them to do?

QUESTION 4

Complaints about breaches of the Privacy Act can be made to the Information Commissioner, and may be investigated. Case notes of (de-identifed) finalized complaints considered to be of interest to the general public are published by the Office of the Australian Information Commissioner. From the Homepage of the Office of the Australian Information Commissioner (http://www.oaic.gov.au), select *Privacy*, then *Applying privacy law, Privacy case notes*, and then select *List of privacy case notes*. From the published case notes for 2011:

- a) Examine the Case Notes for the case **H and Registered Club [2011] AlCmrCN 2** and answer the following questions:
 - i. Which Privacy Principles are alleged to have been breached?
 - ii. How did this alleged breach occur?
 - iii. What was the outcome of the investigation?
- b) Examine the Case Notes for the case **P and Retail Company [2011] AlCmrCN 10** and answer the following questions:
 - i. Which Privacy Principles are alleged to have been breached?
 - ii. How did this alleged breach occur?
 - iii. What was the outcome of the investigation?

QUESTION 5

The Australian Information Commissioner may instigate investigations into potential privacy breaches. These own motion investigation reports are published by the Office of the Australian Information Commissioner. From the Homepage of the Office of the Australian Information Commissioner (http://www.oaic.gov.au), select *Privacy*, then *Applying privacy law*, and then select *Commissioner initiated investigation reports*.

- a) Examine the report for **Telstra Corporation Limited in June 2012** and answer the following questions:
 - i. Which Privacy Principles are alleged to have been breached?
 - ii. How did this alleged breach occur?
 - iii. What was the outcome of the investigation?
- b) Examine the report for **AAPT and Melbourne IT in October 2013** and answer the following questions:
 - i. Which Privacy Principles are alleged to have been breached?
 - ii. How did this alleged breach occur?
 - iii. What was the outcome of the investigation?

QUESTION 6

Many organizations monitor the use of information assets by employees and other entities. At QUT, information assets are monitored, and security audits are also conducted periodically. Refer to Section F/1.2.7 of QUT's Manual of Policies and Procedures (http://www.mopp.qut.edu.au/F/F_01_02.jsp#F_01_02.07.mdoc) to answer the following questions:

- a) What sort of monitoring does QUT perform?
- b) What are the logs of this activity used for?
- c) What are the potential consequences for misuse of QUT information assets?

QUESTION 7

Many internet applications use cookies for session management. Answer the following questions about cookies:

- a) Explain the information transfer that takes place when cookies are used (the sort of information that is transferred, the source and the destination).
- b) What is the difference between persistent and non-persistent cookies?
- c) Locate cookies on your machine (The storage location varies depending on your browser, so search for the folder or file named Cookies or cookies).
 - i. What type of cookies did you find (persistent or nonpersistent)?
 - ii. For persistant cookies, how long have some of them cookies been on your machine? What are they associated with?
 - iii. Did you find any cookies for QUT? Read the information on the use of cookies at QUT (http://www.qut.edu.au/general/privacy.jsp#1). What sort of information is stored in these cookies? Would this be regarded as personal information, as defined in the Privacy Act?
 - iv. Did you find cookies for any other organizations that you regularly visit? Which?
 - v. Did you find any cookies for organizations you don't recognize?
- d) The use of cookies can be beneficial for the user. Explain some of the beneficial
- e) Cookies can also be used in ways that may be regarded as invasive, and potentially a threat to user privacy. Explain how cookies set by third parties can potentially be used to profile the online interests of a user.

QUESTION 8

Web bugs are often used to track user visits to web sites.

- a) QUT uses such tracking mechanisms, and provides information on the details collected in this manner under the heading 'Site usage' in the privacy and security statement available at http://www.qut.edu.au/general/privacy.jsp#1. What details does QUT obtain in this manner?
- b) What sort of technology does QUT employ for the web bug?
- c) Visit the QUT homepage, and find out where the content on the displayed page is coming from (For MS-IE users, choose View -> Webpage Privacy Policy). Is there any content on the QUT homepage that is not from QUT?

- d) Visit the homepages of at least five well-known organizations: (your bank, news and weather services, well known retailers such as Myer and David Jones, other sites you commonly visit).
 - i. Do any of these organizations have content provided by third party providers? Who is the third party?
 - ii. Do any of these sites have third party providers in common?
 - iii. Did you find any organizations that don't use third party content providers?

QUESTION 9

Identity theft is a criminal act that involves one person using the personal identifying information of another in an attempt to impersonate them.

- a) Explain the advantages an attacker gains by doing this.
- b) Describe the methods an attacker can use to gain another person's personal information.
- c) From the *Identity Theft* section of the Australian Competition and Consumer Commission (ACCC) SCAMwatch website (available at http://www.scamwatch.gov.au/content/index.phtml/tag/identitytheft) identify online scams which target personal information.