

Privacy en Beveiliging

Exam

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21st October 2008

Instructions: Questions should be answered in Dutch or English. Each question is worth at most 10 points. The final grade will be the sum of the points (max 80) divided by the number of questions (8), rounded up/down to the nearest half point. This exam determines 50% of your end grade for the course, the other 50% is determined by your hand-in assignments. A final grade of 5.5 will be rounded up to a 6. You have 2 hours to complete this exam. Please read all questions carefully before starting. This is a **closed book** exam. The only attributes you are allowed to use are **pen and paper**.

1. (a) Society has changed significantly over the past 20-30 years. Social networking is common. What is social networking? How quickly has it developed? (3 points)
- (b) Discuss the privacy implications of social networking. Discuss also the privacy implications of at least two other new developments/applications that influence today's society. (4 points)
- (c) Name three strictly technological developments that influence integrity of the underlying systems. (3 points)
2. (a) What are the main differences between the American 'Privacy Principals' and the European Data Protection Directive? Name at least two such differences. (4 points)
- (b) List four Dutch government measures that invade the privacy of Dutch citizens. (4 points)
- (c) Name two organizations in the Netherlands that protect consumers' interests against such privacy invading measures. (2 points)
3. (a) Airports such as Schiphol allow some passengers to register for a voluntary authentication mechanism using iris scans. Registered passengers can use this to circumvent queues at security checkpoints.
 - i. What do you call the use of iris scans to identify and authenticate people? (2 points)
 - ii. List two privacy/security advantages and two disadvantages of this scheme. (4 points)
- (b) What is the difference between an 'opt-in' and an 'opt-out' policy. (2 points)
- (c) From a privacy point of view, which is more preferable, opt-in or opt-out? Explain your answer. (2 points)
4. (a) Different technologies are used for data collection and use. Name two technologies that are used for this purpose. (2 points)
- (b) Name five privacy principals for personal information. Which of these principles do you believe to be most important and why? (4 points)
- (c) Discuss the need for and feasibility of anonymous interaction on the Internet. (4 points)

5. (a) Which categories of publications are distinguished with respect to copyright and for which reasons? (3 points)
- (b) What is Intellectual Property? What is copyright? Does copyright have a specific duration? Explain your answer. (4 points)
- (c) Name three factors considered in copyright cases, i.e., Fair Use Doctrine in the USA, also used in EU. (3 points)
6. (a) Briefly define 'identity theft'. (2 points)
- (b) Describe two techniques criminals can use to gather the information they need to steal an identity. (4 points)
- (c) Describe two ways a person can protect their identity. (2 points)
- (d) Describe two ways a business can protect its customers from identity theft. (2 points)
7. (a) Is monitoring of company employees by their employer a violation of privacy? Does the employer (in the Netherlands) have to follow any rules regarding this practice? (3 points)
- (b) Why are Wikipedia pages generally not used as references in 'long lived' publications such as books and academic works? (3 points)
- (c) Wikipedia has a policy that allows anonymous edits of its pages. The idea is that anonymity for editors can sometimes be very useful and that (obviously) incorrect changes in pages will be spotted fast enough and will be changed back within minutes. However, projects such as 'WikiScanner' that can reveal the source and identity of Wikipedia editors are ending this practice. In your opinion, is this wanted or an unwanted development? Motivate your answer. (4 points)
8. (a) Consider the 'Road Pricing' (Rekeningrijden) proposal that is currently being prepared for deployment in the Netherlands.
- i. List three risks of this system (not counting Privacy risks). (3 points)
- ii. List two privacy risks of this system. (2 points)
- (b) Describe the difference between symmetric and asymmetric encryption. (3 points)
- (c) Give the name of a symmetric and an asymmetric encryption algorithm. (2 points)