

Lab Exercise 14: Ethics I

CS 2334

November 30, 2017

Introduction

The choices that we make as professionals and as citizens can have important implications for individual people, for our communities and for our society. In this lab, we will exercise what we have been learning about ethical theories in general and how they apply to privacy concerns.

Learning Objectives

By the end of this laboratory exercise, you should be able to:

1. read and analyze ethical principles from a range of sources, and
2. apply ethical principles to making decisions in specific scenarios.

Problem Context

For this lab, you may use the following sources:

- Your ethics book
- US Declaration of Independence:
<http://www.ushistory.org/declaration/document/>
- US Bill of Rights:
<https://www.billofrightsinstitute.org/founding-documents/bill-of-rights/>

- The Declaration of Independence:
<http://www.earlyamerica.com/earlyamerica/freedom/doi/text.html>
- The ACM code of ethics:
<http://www.acm.org/about/code-of-ethics>
- COPPA:
<http://www.aaronkellylaw.com/coppa-rules-summary/>

Exercise Process and Proper Academic Conduct

We will solve each of the cases in three phases:

1. The first phase is to be done individually. As you formulate answers to the questions below, you may consult the resources listed above. However, you may not discuss your answers with anyone in the lab other than the TAs. You may also not use a search engine to look for answers on the net.
2. After individuals complete the first phase and submit their answers, pairs will work together to refine their answers to the same case.
3. After pairs have submitted their answers, the class will discuss the case.

For each question that you answer, there could very well be more than one reasonable answer (in fact, we might not agree on what the reasonable answers are). Your answers should be short, but make sure to make appropriate references to the ethical principles that support your answers.

Short Answer

Name(s) and ID(s):

1. True or False and explain: Act Utilitarianism is an example of a deontological theory.

False: Utilitarianism is all about measuring the utility of the outcome of actions. Deontological theories emphasize the following of rules, and do so without regard to the outcomes.

2. According to Act Utilitarianism, is one person stealing from another person ethically required, ethically neutral (permissible) or ethically disallowed? Explain.

*Ethically neutral. Although one person loses utility, the other gains the same amount of utility. Hence, the **net change of utility** is zero. As a result, Act Utilitarianism is neutral to stealing.*

3. Is the right to privacy explicitly protected in the guiding documents of the United States (Constitution, Declaration of Independence, etc.)?

No. The rights to property and protection against search and seizure of one's property are interpreted as providing a general right to privacy.

4th amendment of the US Constitution: "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, ..."

9th amendment of the US Constitution: "rights" not listed in the Constitution are not denied.

4. True or False and explain: The second sentence of the US Declaration of Independence is an expression of Rule Utilitarianism.

False. This is best described as a declaration of natural rights.

Case 1: Web Site Accessibility

Name(s) and ID(s):

In the court cases Access Now, Inc. versus Southwest Airlines (2002) and National Federation of the Blind versus Target Corporation (2006), it was argued that blind customers could not make effective use of the companies' web sites. Furthermore, it was asserted that the *1990 Americans With Disabilities Act* compels these companies to alter their websites to make them more accessible to this population.

1. Briefly describe the ethical theories or principles that could be brought to bear to argue in favor of this assertion. List three.

For discussion:

- (a) *Kant: "Treat people as ends in themselves"*
- (b) *Utilitarianism: "increase happiness/utility". When we look at aggregate utility (customer versus company), one can argue that there are limits to how far a company must go to serve the customer*
- (c) *Declaration of independence: "... all men ... are endowed by their Creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness"*
- (d) *ACM code of ethics: "Be fair and take action not to discriminate"*
- (e) *ACM code of ethics: "Strive to achieve the highest quality, effectiveness and dignity in both the process and products of professional work."*

2. Is the assertion made by Access Now, Inc. invoking a positive or a negative right?

For discussion:

- (a) *This is a positive right, as the assertion compels a company to action.*

3. Make a brief argument for where the “line” should be: which types of commercial services/information should be compelled to be accessible to this population?

For discussion:

- (a) *This is an incredibly hard line to draw. Possible tests include: how universal is the service (do many people require use of the service in their regular activities)? Does this population make substantial use of the service? Are there (good) alternative means of accessing this information?*

4. Suppose the web site of the *State Elections Board* (a state government organization) were in question. Should this organization be compelled to serve this population?

For discussion:

- (a) *I would argue that because information provided by this agency is vital to the proper functioning of our democracy and government, that this agency should take extraordinary measures to serve this population.*

5. Suppose the population in question spoke only Cherokee. Should the State Elections Board be compelled to serve this population? What about Basque? Spanish?

For discussion:

- (a) *Wikipedia and Cherokee.org: The Cherokee Nation is a federally recognized tribe and constitutes approximately 5% of the population of Oklahoma. (incidentally, the Cherokee Nation itself has a 180 years of experience with a democratic-style government)*

- (b) *The population of Basque-only speakers in Oklahoma is likely to be extremely small.*
- (c) *Wikipedia estimates that 5.4%-9.9% of the population of Oklahoma speaks Spanish in the home.*
- (d) *The fraction of the population in Oklahoma of both Cherokee and Spanish speakers is substantial, while Basque is not. I would argue that it is a reasonable expectation for Oklahoma to provide election-oriented information in the first two languages.*
- (e) *Note: Oklahoma voters approved a constitutional amendment in 2010 declaring that English is the official language of the state (“Oklahoma English as the Unifying Language” amendment). This restricts state services to be provided in English only. However, Native languages are explicitly allowed (making it clear that the target of the bill was, indeed, Spanish). The amendment remains in force today.*

Case 2: Gator Smart Watch

Name(s) and ID(s):

The *Gator Smart Watch* is a product that connects to both cellular and WiFi networks and provides basic global positioning (GPS), and text and audio communication capabilities. The product is marketed to parents of young children and to children of aging parents. As such, the smart watch can be associated with an app running on the caregiver's smart phone that shows in real time the location of the watch. In order to provide this service, the location of the watch is sent to a central server in China, which, in turn, transmits this information to the associated app instances.

1. List the three most relevant points of the ACM code of ethics that cover the ethical concerns for these devices. Focus on the primary points (not the secondary ones).

Discussion points:

- (a) *Respect the privacy of others (protecting a person from having information gathered about them).*
 - (b) *Honor confidentiality (protecting information that has already been gathered about someone).*
 - (c) *Avoid harm to others (maintain privacy and confidentiality).*
 - (d) *Contribute to human well being.*
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2. What Federal Trade Commission rule applies to this situation? What types of information are we concerned with?

Discussion points:

- (a) *Because children are involved, the Children's Online Privacy Protection Rule is applicable.*
 - (b) *This rule limits the type of data that should generally be collected about the children (name, address, location, phone number, social security number, etc.) and requires that these data be properly secured when they must be collected.*
3. In October, the Norwegian Consumer Council (NCC) reported that the Gator Smart Watch (among many others) does not encrypt data being transmitted to and from the central server. Germany has since banned the sale of smart watches that are marketed to children. Briefly discuss two types of abuses that become possible without encryption.

Discussion points:

- (a) *Because the data are not encrypted, they may be intercepted by third parties. This exposes the position information of the users to potentially hostile parties or to parties that would abuse the information.*
 - (b) *The data can also be spoofed: artificial position information can be injected into the server.*
4. Suppose the Gator Smart Watch company decided that it wanted to use position data to create models of users' preferences so that advertisements could be customized to the users. Which *natural right* could guide their decision as to whether to allow the users to opt-in or opt-out of this data collection program? Which one should they choose according to this natural right?

Discussion points:

- (a) *The natural right in play is: “maximize free choice” or “right to privacy”.*
- (b) *According to this natural right, the company should allow users to opt-in to this program - i.e., the user must actively choose to participate.*