University of Regina

Computer Science

Social Engineering

Group Members

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in

Information Technology

# Progress of the project

In general, our team has completed half of the written components of our project. The outline of our project and our works can be found below. Up to this stage, Corey Safinuk has finished writing component for some backgrounds of social engineering (history and famous social engineers) and two social engineering methods which relate to a technique called “fishing”. Bao Cao has finish writing component for four social engineering technique: Quid Pro Quo, Pretexting, Tailgating and Baiting. For the completion of our project, we may reassess the rest of the outline (the parts that we haven’t done yet) and decide which part will be done by who. When the writing component is done, we will combine our works, reformat it in order to create a complete report. We intent to record our presentation in the form of a two-minute video which will be uploaded on Youtube.

Unfortunately, because of our working schedule, we cannot combine our works for this week assignment. On Sunday March 11, Corey works in the morning until evening and Bao Cao works from the evening until midnight. Therefore, we have to submit our work separately but we will submit the same outline and the progress of our project. The referenced sources will be different since each of us submit our works separately.

# Outline

## History of Social Engineering

* Nowadays social engineering is about information privacy on the Internet. However, the term social engineering appeared in history before the computer era.
* Examples of famous social engineers

## Common Techniques in Social Engineering (terminologies)

* Phishing: Definition and examples. Personal opinions. Variances of phishing: Vishing and Spear phishing
* Quid Pro Quo: Definition and examples. Personal opinions.
* Pretexting: Definition and examples. Personal opinions.
* Tailgating: Definition and examples. Personal opinions.
* Baiting: Definition and examples. Personal opinions.

## How to prevent from social engineering attacks

* Phishing
* Qui Pro Quo
* Pretexting
* Tailgating
* Baiting

## Laws that relate to social engineering

* Canadian laws
* U.S laws
* Other countries

The history of social engineering stretches back as far as history itself. Famous examples of ancient social engineering are the Trojan Horse from ancient Greek mythology, and Eve being deceived by the snake in the bible. The former is such a famous example that it became the name for an entire branch of cyber-attacks. These rely on seeming harmless to gain entry into the targets system and once inside, causing havoc. Social engineering as a term was coined by Kevin Mitnick, a hacker from the 1990s. Social engineers in the modern day are in essence conmen from the past, but now instead of only being able to target a few marks at a time they are able to use the internet to attack millions of people simultaneously.

Reference: <https://medium.com/threat-intel/social-engineering-techniques-history-fa80b7eacfe2>

In the early 20th century one conman rose above the rest. His name was Victor Lustig. The most phenomenal thing about Victor Lustig is that there was never any proof found that he had been born. His birth certificate was never found and his identity could have been another of his fabrications. Furthermore, although he claimed to have grown up in Hostinné, a search of the school records found no one under his name. He contributed to the idea of social engineering by successfully utilizing many schemes to trick people out of their money.

He is famed for having “sold” the Eifel Tower to scrap metal companies twice. He did this by acquiring official state seals and inviting scrap metal magnates to an auction. Once gathered Lustig posed as a member of the French government and told the scrap metal companies that the Eifel tower was being dismantled. They began bidding immediately. Moreover, he wrote what he called “The Ten Commandments of Con Men”, which included tips such as: Never get drunk, and Never boast, just let your importance be quietly obvious. These tips are incredibly useful to social engineers in our time.

Reference: <https://www.smithsonianmag.com/history/man-who-sold-eiffel-tower-twice-180958370/>

Another early social engineer was Charles Ponzi famous for the Ponzi Scheme. His plan began initially by exploiting a loophole in international postage to gain up to four hundred times the value of the investment. Eventually he decided to start taking in investors and here is where his infamous Ponzi Scheme comes into play. He would offer investors huge amounts of profit to get them on board and then use money he received from investors to pay off previous investments. In doing so he was able to gain more and larger investments and keep his operation afloat so long as several of the investors did not pull out their investments at once. His scheme was so successful that he made an estimated 250000$ every day. The problem with this scheme is that it cannot last and the last investors before it is exposed end up losing the entire investment.

Reference: <https://www.biography.com/people/charles-ponzi-20650909>

In 1978 Stanley Rifkin pulled off America’s largest bank robbery. However, Rifkin operated alone, and without a single weapon. He managed to rob the bank using only social engineering. In 1978 he was a consultant for a company that serviced the computers of the Security Pacific National Bank. In October of that year he walked into the bank and managed to talk his way into the room which contained the day’s code for authorizing wire transfers between banks. Later that day he arranged a transfer of a fairly large sum of money to an account at another bank. He then picked up the money and had it converted into diamonds through an associate. He got away with 10.2 million dollars and the bank did not even realize they had been robed until the FBI informed them. He was later caught and jailed but this is an example of how, utilizing social engineering, a person can break through an otherwise impenetrable system.

Reference: <https://www.social-engineer.org/wiki/archives/Hackers/hackers-Mark-Rifkin-Social-Engineer-furtherInfo.htm>

The best best-known, and most successful social engineer of modern times is Kevin Mitnick. His first real trial with social engineering happened at age 12. He asked a friendly bus driver where one might purchase a punch card, gathered unused transfer slips from the garbage and was thusly able to ride the Los Angeles bus system for free. His main area of recognition however is when he used social engineering to perform “phone phreaking”. He was eventually , through careful research, and impersonating phone company employees, to gain control of the entire Pacific Bell network. Although he never hurt anyone or stole from anyone he still gained the attention of the authorities. He went on the run and managed to avoid them for two years before being caught. He spent five years in prison and came out as a “white hat” hacker selling his knowledge of exploits and more importantly how to stop them.

Reference: <http://bigthink.com/think-tank/hacker-for-the-hell-of-it-the-adventures-of-kevin-mitnick>

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