

# CS4320 Software Engineering

## **4.1 - Systems Theory**

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# Assignment Overview

## Steps

1. Review each of the four articles on systems theory in the [readings](#)
2. Review the lecture and slides from Tuesday
3. Consider one of these public cases where ethical boundaries were crossed (to varying degrees, depending on your perspective).
  - A retailer selling your personal information to others for profit
  - Edward Snowden's release of Top Secret information about National Security Administration security and surveillance practices
  - Cambridge Analytica's use of fake social media accounts to influence the 2016 presidential vote in the United States of America
4. For whichever case you chose, make a spreadsheet where the first column is "Ethical Quandary", and the subsequent columns are for listing individual systems affected. I want you to think about technical systems, as well as larger scale socio-technical systems.
5. In each cell, place a checkbox for each ethical quandary that affected each system. Review class video from Tuesday to better understand the context for this action.
6. Write two paragraphs summarizing your grid.
7. Commit your grid, and the summary to a GitHub repository (public or private) that GitHub user "sgoggins" can access.
8. Submit a link to that repository in Canvas as your assignment.

Responsibility Priority(RP): Ordered from most important to least. 1 being most important. Signifies responsibility to a given system by Snowden. If not listed Snowden had no responsibility to that system.

## Public Case (Ethical Dilemma)

Ethical Quandary:	United States Government RP(4)	American People/World RP(1)	Government Contractors RP(2)	Commercial Sector	NSA RP(3)	Russia (Indirectly)
<ul style="list-style-type: none"><li>• Edward Snowden's release of Top Secret information ...</li></ul>	✓	✓	✓	✓	✓	✓

## Ethical Quandary Summary

When Edward Snowden released classified documents on domestic government surveillance in the United States it sparked the “right to privacy” debate across the world. Since 2013 people's perceptions about the collection of private information from governments and the commercial sector has only grown and has contributed to massive privacy legislation. Recently, the California Consumer Privacy Act ([CCPA](#)) went into effect (1/1/2020, the right to opt out of data collection). Privacy legislation has had a profound effect on the commercial sector and its monetization plans.

The United States government was the most heavily damaged from the leak and has [charged Snowden](#) with theft of government property, Communication of National Defense Information and Willful Communication of Classified communication intelligence to an Unauthorized Person. Although I agree with Snowden's whistleblowing complaint I understand the US's charges. In situations of leaked classified information the government must charge individuals as to prevent espionage. However there is a super succeeding responsibility of the whistleblower to inform the public if the actions of their government conflict with the fundamentals of the constitution. Nonetheless the greatest responsibility lies on the american public to question the words and actions of their government.

Although commonly unthought of government contractors were affected in two major ways by the Snowden leak. Government Contractors may no longer have to work on the ethically troubled surveillance project. Government Contractors similar traits to snowden will likely get removed through an updated government vetting process.

Russia did allow asylum to Edward Snowden and was affected indirectly politically because of the leak. Not because they sympathized with Snowden's cause but to encourage possible United States defectors. Interestingly, [Russia has secretly been increasing surveillance](#) of its own people in cities such as Moscow using the excuse of COVID19.