

Assignment 2 - Ethics

Spring 2018

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Score percentage: 10%

1 Work description

Homework 2 consists of understanding the ethical dilemma in Software Engineering. The reading materials are included in Ethics Module. Students will discuss the topic in classes on March 1, 2018. Then, each student will write a report that reflects their understanding and position.

To prepare for the discussion, you must:

1. Read the paper “Ethics in Software Engineering, Net Neutrality and Badware – What obligations rest on software engineers to act ethically in their profession?”
2. Read the “IEEE Code of Ethics”
3. Read the Virtue Ethics
4. Read the “5 P’s of Ethics”
5. Select and read one of the following case studies:
 - a. The VW Scandal. Start by looking at: <http://spectrum.ieee.org/cars-that-think/at-work/education/vw-scandal-shocking-but-not-surprising-ethicists-say>
 - b. The Therac 25 case. Start by looking at: courses.cs.vt.edu/~cs3604/lib/Therac_25/Therac_1.html
 - c. Hacking cars. Start by looking at: <https://www.youtube.com/watch?v=-FqsW5IodkM>

You may look for other references that discuss the case study that you choose.

We will discuss the ethics issues in each case, the causes of the problems, the responsibility of software engineers, and the alternative decisions if any. We will use the following questions as guidelines:

- What is the purpose of having/following a “Code of Ethics”?
- When you are faced with an ethical situation, how do you, personally, go about making a decision? What factors are involved in making your decision? Be specific!
- What case study was discussed in your small group? How did the ethical considerations introduced by your group members differ from your own? How were they alike? Was your group able to come to a consensus on what the most “ethical” decision would be?
- Reflect on the “Virtue of Ethics” as it relates to the case study your group discussed. Choose three of the six virtues that you feel are most related to your case study and briefly write about them. Why did you choose the three you did? How are they relevant to the case study? Why are the other virtues less relevant? Is there another ethical virtue you feel could apply to your case study that is NOT included in the “Virtue of Ethics?” Why or why not?

2 Report content

Write an essay (4-6 pages) where you describe your analysis of the ethical case that you discussed in class with your team mates. You may use the rubrics table below to structure your essay.

Performance Indicators	Proficiency/Performance Scale			
	Unsatisfactory (1 pt)	Developing (2 pts)	Competent (3 pts)	Exceptional (4 pts)
(f.A) Explain important ethical obligations associated with your discipline.	Cannot adequately recognize or explain an ethical issue.	1. Explain at least one major ethical obligation.	1. Explain at least one major ethical obligation. 2. Explain how the obligation applies to professional action. 3. Use a systematic argument to support the application.	1. Explain at least one major ethical obligation. 2. Explain how the obligation applies to professional action. 3. Use a systematic argument to support the application. 4. Give several specific examples of professional activities where the ethical obligation applies.
(f.B) Apply a systematic ethical framework to an ethical issue or situation in a disciplinary context.	Provide no basis for analysis (e.g., professional standards, code of ethics).	1. Clearly explain the issue or situation to be analyzed.	1. Clearly explain the issue or situation to be analyzed. 2. Show which professional duties apply to the issue or situation by citing a relevant code of ethics. 3. Resolve any conflicts among the applicable duties through a reasoned analysis.	1. Clearly explain the issue or situation to be analyzed. 2. Show which professional duties apply to the issue or situation by citing a relevant code of ethics. 3. Resolve any conflicts among the applicable duties through a reasoned analysis.

<p>4. Show how an appropriate stance on the issue or situation follows from the analysis.</p>	<p>(f.C) Analyze a complex situation involving multiple conflicting ethical interests or principles to support an appropriate course of action.</p> <p>Use incomplete information and provide no resolution.</p> <p>1. Clearly explain the facts relevant to an ethical evaluation of the situation.</p> <p>2. Show what competing interests are at work in the situation.</p> <p>3. Resolve disputes among the competing interests using a systematic ethical framework and/or professional standards.</p> <p>4. Justify an appropriate course of action and explain why it is the best among the available alternatives.</p>
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