



American International University- Bangladesh (AIUB)

Faculty of Engineering (EEE)

Course Name:	Engineering Ethics	Course Code:	EEE 3107
Semester:	Summer 2019	Section:	F
Faculty:	DR. M. TANSEER ALI		

Assignment:	Report on presentation topic
--------------------	------------------------------

Student Name:	Sultan, Md Tawhid	Student ID:	16-32275-2
Student's Department:	CSE		

Submission Date:	31.07.2019	Due Date:	31.07.2019
-------------------------	------------	------------------	------------

Marking Rubrics (to be filled by Faculty)

Category	Proficient [4]	Good [3]	Acceptable [2]	Unacceptable [1]	Secured Marks
Explanation of issues	Issue/problem to be considered critically is stated clearly and described comprehensively, delivering relevant information necessary for full understanding.	Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions.	Issue/problem to be considered critically is stated, but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined,	Issue/problem to be considered critically is stated without clarification or description.	
Influence of context and assumptions	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.	
Student's position (perspective, thesis/ hypothesis)	Specific position (perspective, hypothesis) is imaginative, considering the complexities of an issue. Limits of position (perspective, hypothesis) are acknowledged. Others' points of view and assumptions are synthesized within position (perspective, hypothesis).	Specific position (perspective, thesis/hypothesis) considers the complexities of an issue. Others' points of view and assumptions are acknowledged within position (perspective, hypothesis).	Specific position (perspective, hypothesis) acknowledges different sides of an issue.	Specific position (perspective, hypothesis) is stated, but is simplistic and obvious.	
Innovative Thinking or uniqueness (of idea, claim, question etc.)	Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.	Reformulates a collection of available ideas.	
Conclusions and related outcomes (implications and consequences)	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence.	Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are not clear.	Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.	
Comments:				Total Marks (Out of 20)	

Topic: General Motors Ignition Switch Recall Scandal**Introduction:**

A new car named "Chevrolet Cobalt" released in 2004. This car has some problems in GM (General Motor) ignition switch. For that reason, it has caused many problems in case of people's death, several injuries, time, cost, money etc. This report will summarize the whole thing describing the unethical things that were happened in the case study and also some possible activities that could be done.

Car Description:

Chevrolet Cobalt is a compact car initially introduced by Chevrolet in 2004 for the 2005 model year. The cobalt replaced both the Cavalier and the Toyota based Geo Prizm as Chevrolet's compact car.

Case Summary:

In early 2007, after it was found that they did not fulfill federal security standards, 98,000 Cobalt coupes from the 2005–06 model years were recalled. This led to an unacceptable vulnerability to head injuries, although GM claimed that the vulnerability would only impact drivers without a seat belt. On March 2, 2010, due to power steering issues, GM announced a recall of 1.3 million compact cars in North America, including the Chevrolet Cobalt. Faulty Cobalts ignition switches were eventually connected to many accidents resulting in deaths, beginning with a teenager who drove her fresh Cobalt into a tree in 2005 [2]. The switch continued to be used in vehicle production even after GM was aware of the issue. GM recalled more than 700,000 Cobalts on February 21, 2014 for problems traceable to faulty ignition switches. The NHTSA fined the company \$35 million in May 2014 for failing to remember a decade of vehicles with defective ignition switches, despite the knowledge that there was a switch issue. During the moment the business failed to remember the vehicles, thirteen fatalities were related to the defective switches [1].

Unethical Situations and observations:

There is a memorandum that was sent to the members of the subcommittee on oversight and investigations about the GM ignition switch recalling. There was a meeting that was held in 2005 for that. But Engineers decided that they will not fix this because it would take too long time and cost too much money. It is one of the unethical act, because rather than giving the solution about the problem of ignition switch they think about money and time. In engineering, in some organization like ACM, NSPE code of ethics it is discussed about the public safety assurance is the major priority and it is also important in this case because that's been linked to at least 13 deaths.

And generally thinking about the business side there are some times where everyone face decisions that test the moral code, whether it is the need to cut costs or times for various reasons, But for that cutting if it takes one life that will not be fair in engineering code of ethics

Another thing that needs to be mentioned here is that there was an accident that was related to the faulty ignition switch problem had occur in that same year. But for that there was no investigation that had been done in that which is another unethical issue in this.

Organization named as “NHTSA (National Highway Traffic Safety Administration)” did not take any severe action and no investigation has been done over this. For getting high paying jobs on automobile companies they went easy on GM by overlooking the situations happened in between the year 2007. All vehicle manufacturers have a public duty to create secure cars and take prompt remedial action to repair safety deficiencies on their cars. Personal injury claims based on manufacturer's liability as well as wrongful death claims (submitted by the deceased's surviving family members) may be submitted as a consequence of accidents or fatalities from faulty cars [3].

Conclusion:

Risk can be acceptable if that event probability of occurrence is small, whose consequences are so light or whose benefits are so great. But for this case this cannot be acceptable as a risk because many people have died over year and year again. Other than these lots of unethical activities have been discussed for this ignition switch faults. By Thinking of the business ethics as well as the engineering it can be understand that, all things have to be balanced side by side. Because if one side is imbalanced then there can be some loss that cannot be affordable to be bring back again. Business side thinks about the cost and time in their situation and engineering ethics always gives priority on public safety assurance. That is why one has to think all sides of a strategy to be succeed in their work.

References:

1. <https://www.npr.org/2014/03/31/297312252/the-long-road-to-gms-ignition-switch-recall>
2. https://en.wikipedia.org/wiki/Chevrolet_Cobalt
3. <https://www.brookslawgroup.com/law-practice-areas/gm-ignition-switch-recall/>