## Assignment # 04



# Fall 2021

## **Professional Ethics**

Submitted by: Shah Raza

Registration No.: 18PWCSE1658

Class Section: **B** 

"On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work."

Student Signature: \_\_\_\_\_

Submitted to:

Engr. Madiha Mushtaq

February 28, 2022

Department of Computer Systems Engineering
University of Engineering and Technology, Peshawar

### **Question 1:**

Consider an engineer who develops a program used as a tool in developing other programs assigned to her. Subsequently, she changes jobs and takes the only copy of the first program with her for use on her new job. Suppose first that the program was developed on company time under the first employer's explicit directives. Will taking it to a new job without the original employer's consent would be a violation of that employer's right to the product (and possibly a breach of confidentiality)? As a variant situation, however, suppose the program was not written under direct assignment from the first employer but was undertaken by the engineer at her discretion to help her on her regular work assignments. Suppose also that to a large extent the program was developed on her own time on weekends, although she did use the employer's facilities and computer services. Did the employer own or partially own the program? Was she required to obtain the employer's permission before using it on the new job?

#### **Answer:**

The engineer taking the only copy of the first program with her for use on her new job without the employer's consent would be a violation of the employer's right to the product and a breach of confidentiality because the program was developed on company time under the employer's directives. However, if the program was not a direct assignment and the engineer developed it for her own use and on her own time on weekends then she does not need the permission of the employer to take the program with her even if she used the employer's facilities and computer services. The employer cannot claim any ownership of the program. Although, because the employer's facilities and computer services were used, she could provide a copy of the program to the employer if she want but she is not obliged to ask the employer's permission in this situation.

#### **Question 2:**

Suppose Susie works for a company that designs commercial solar panels. Her job is to test prototypes for defects and risks. In the company's new design SP3344, there is a defect: short circuits and overheating of a key component are likely when the ambient air temperature rises above 50 degrees Celsius. However, despite testing SP3344, Susie never comes across any defect because none of her tests are carried out above 50 degrees. Because Susie approves SP3344, it is developed for the market. When SP3344 has been on the market for one year, a fire is reported due to a short circuit that happened in conditions of high ambient air temperature. Susie claims that she is not responsible for the fire. What is the best thing to conclude about this situation? Is she morally and/or legally responsible?

#### **Answer:**

Susie is not morally responsible in this situation because she did not know that there was a defect in SP3344, it would be a completely different scenario if she knew about the defect and despite that approved SP3344 then she would've been considered morally responsible. But Susie can be considered legally responsible because it was her job to test the prototype for all kinds of environments and she failed to do that, due to which a fire was reported. Precious lives could have been at risk because of her mistake.