CS 320

Ethical Decision Making in Software Engineering

Goals

Software engineers often encounter situations with ethical implications. This assignment's goal is to demonstrate examples of such situations and provide students with experience in dealing with ethical issues they may encounter in the real world.

Contact

If you have any questions about this assignment, contact Kien To (ktto@umass.edu) and CC Yuriy Brun (brun@cs.umass.edu).

Due Dates

This assignment consists of four pieces, each with its own due date. The pieces need to be completed in the following order:

1. Consent Form

Due: BEFORE Friday, October 11, 2024, 11:59 PM EDT via DocuSign.

2. Pre-Test Assignment

Due: BEFORE Friday, October 11, 2024, 11:59 PM EDT via Gradescope.

3. PEaRCE Simulation

Due: Friday, November 1, 2024, 11:59 PM EDT via https://pearce-sim.org/#/home

4. Post-Test

Due: Friday, Nov 15, 2024, 11:59 PM EST via Gradescope.

Overview

PEaRCE (Platform for Ethical and Responsible Computing Education) is an interactive simulation platform, developed by CICS students and faculty. PEaRCE aims to provide students in every CICS technical class with a basic exposure to ethical issues that can arise from the technology that they are studying. A typical PEaRCE simulation puts the students in the role of an employee at a company, or another institution, such as a government agency, that is developing technology that can be potentially beneficial, but also has the potential to do harm if not designed and deployed carefully.

This assignment consists of four parts. The first, consent, is to be done online BEFORE Friday, October 11, 2024, 11:59 PM EDT. The second, Pre-Test, will be done BEFORE class on Friday, October 11, 2024, 11:59 PM EDT. The third, the PEaRCE simulation, will be done at home, at your own pace, by Friday, November 1, 2024, 11:59 PM EDT. The fourth, Post-Test, will be done by Friday, Nov 15, 2024, 11:59 PM EST.

Deliverables

In addition to teaching ethics, the team that developed PEaRCE hopes to collect data from your experience to improve PEaRCE for future classes. They will not collect any of your data without your consent. You will need to complete this assignment to get credit for the class, but whether you consent to sharing data with the PEaRCE team will not affect your grade.

Part 1: Consent Form

An email will be sent to your school address asking to fill out the consent form on DocuSign. You must fill out this form BEFORE **Friday**, **October 11**, **2024**, **11:59 PM EDT**. If you approve the PEaRCE team using your data, sign the form. If you do not approve the PEaRCE team using your data, you still must fill out the form, check the box indicating you do not consent to sharing your data, enter your name, and sign the form.

Part 2: Pre-Test

The Pre-Test will be released for you to do on Gradescope and is to be completed BEFORE lecture on **Friday**, **October 11**, **2024**, **11:59 PM EDT**. You will be shown short articles and asked to answer questions.

Part 3: PEaRCE

You will go to https://pearce-sim.org/#/home to perform this activity. Log into the system and select the "SE-Testability" scenario. Follow the directions on-screen to complete this scenario. You must complete this scenario by Friday, November 1, 2024, 11:59 PM EDT.

Part 4: Post-Test

After you finish Part 3, a Post-Test will be released via Gradescope. Complete this Post-Test by **Friday**, **Nov 15, 2024, 11:59 PM EST**.

Submission and Grading

This assignment will be worth 3% of your overall 320 grade. It will be a part of the participation grade.

You will receive full credit as long as you complete all the four parts of the assignment. Due to the complex nature of ethics, we will not be grading your responses based on whether they are "right" or "wrong," nor do we wish to encourage you to think of ethics in that way. Our goal is simply to encourage you to think critically about ethical issues.

Turn in:

- Consent form on DocuSign (Part 1)
- Pre-Test on Gradescope (Part 2)
- PEaRCE Simulation on the PEaRCE website (Part 3)
- Post-Test on Gradescope (Part 4)