COMPSCI-320 Section 2

Fall 2024

Assignment 1: Ethics

# Task 1

Mention the name of your project. Mention your group number. List all of your group members, including your manager.

Project: flotE (group 4)

Group 1: Dila Ozersen, Macy Graves, Ashley Bhandari, Austin Henlotter, Jamie Denley, Anushka

Trehan (Manager)

# Task 2

Write a short description of the project you are developing (not the one you are a client for), in a paragraph.

The current method for tracking finishing times in a regatta is fairly archaic: an admin hand writes the order they spot racers crossing the finish line. The finish line for a regatta is not overly visible so viewers have to wait for the standings to be posted. We are digitalising this process so that viewers have a more current knowledge of finishing orders. Our app will allow some admin to create a race and mark when racers finish. Viewers will be able to see this log in real time and be able to access stored race data from previous events. Logs of previous races will be stored and organized by regatta.

# Task 3

• Describe one potential ethical consideration you need to be aware of in your work as a developer, from the list of principles found at <a href="https://ethics.acm.org/">https://ethics.acm.org/</a>.

If the way of inputting data is not secure, the results of the race data could be tampered with. This would be a violation of principle 2.9, designing a usably secure system.

- Describe which principles you are incorporating into your thought process (what the ACM use cases calls Analysis).
  - 1.7 All personal/private user information should be stored properly and never shared
    with the wrong party. This is one of the most important points to consider to make
    sure information isn't put into the wrong hands.
  - O 3.1 The good of the customers is very important in this case. Skewed race results or lies within the data could lead to ethical concerns and mistakes made in the rewards being distributed. This is why we need to ensure that every single user logging in is trustworthy and that their access is secure.

 3.7 - This also ties in to the ethical principles mentioned above. If this website were to be integrated into society, the same ideas above would need to be followed. It needs to be secure and trustworthy for all clients to use in regards to racing.

# • Mention your conclusion about how you should proceed based on this analysis. Based on the ethical principles that we chose to follow, we should take active steps to protect the data input by the user and to ensure that there is no accidental sharing of data to unwanted parties.

# Task 4

Repeat what you did in task 3, this time with <u>Principle 2: Client and Employer</u>, found at <u>https://ethics.acm.org/code-of-ethics/software-engineering-code/</u>.

 Describe one potential ethical consideration you need to be aware of in your work as a developer, from the list of principles found at

https://ethics.acm.org/code-of-ethics/software-engineering-code/.

A concern could come up if we did not consider principle 2.07, identifying, documenting, and reporting significant social concern issues. If there is a flaw in the system and a data leak did occur, we would want to have the client know and have a record of when and how the issue happened. Without doing that, the system could be a security risk.

- Describe which principles you are incorporating into your thought process (what the ACM use cases calls Analysis).
  - 2.01 Our client has worked as a timekeeper at several regattas. They know lots about sailing races in general. Our team is not very familiar with sailing, so it is our goal to continue to ask questions, do research, and seek the knowledge we need while recognizing our limitations and voicing them to our client through our willingness to learn.
  - 2.02 As UMass students, the UMass CICS academic honesty policy is pertinent to our work. As a team, we will come up with our own work and avoid untrustworthy and unethical sources.
  - 2.04 As our group is not familiar with sailing, it is essential that any resources we use are approved by the client as trustworthy.
- Mention your conclusion about how you should proceed based on this analysis.
   We should be proactive when coding to make our app secure, as well as communicate with the client to decide how leaks should be communicated.