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Ethics & Culture Research

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Research purpose

The purpose of this research is to look into what culture & ethics actually are. What are problems that can arise from these topics and how do you deal with them.

Research methods

This research was done following the DOT framework. The following methods were used:

- Literature Study

Ethics

What are ethics?

The Merriam-Webster dictionary (n.d.) defines ethics as follows:

“the discipline dealing with what is good and bad and with moral duty and obligation”

Ethics is the field that attempts to define what actions are good and bad, when speaking about ethical decision-making we are generally talking about making decisions that are considered good.

Importance of ethics in software engineering

Software is becoming an ever increasing part of modern society. With this increasing presence the power software hold becomes proportionally bigger as well. Facial recognition, data gathering and black box algorithms are frequent topics of discussion (Reed, 2021). Ethics are important because it allows software engineers to design these complex systems and answer the question: ‘is this system going to hurt other people?’. With proper ethical knowledge software engineers can ensure that their products will be a good contribution to the world.

Addressing ethics as a software engineer

As we can see ethics is important and a hot topic in software engineering. Luckily the ACM has set out important values for software engineers (2018):

1. PUBLIC – Software engineers shall act consistently with the public interest.
2. CLIENT AND EMPLOYER – Software engineers shall act in a manner that is in the best interests of their client and employer consistent with the public interest.
3. PRODUCT – Software engineers shall ensure that their products and related modifications meet the highest professional standards possible.
4. JUDGMENT – Software engineers shall maintain integrity and independence in their professional judgment.
5. MANAGEMENT – Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.
6. PROFESSION – Software engineers shall advance the integrity and reputation of the profession consistent with the public interest.
7. COLLEAGUES – Software engineers shall be fair to and supportive of their colleagues.
8. SELF – Software engineers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.

Following these principles should provide software engineers with the tools needed to behave ethically in their work.

Collaboration and ethical values

Working together in a group can cause complications when it comes to ethical values. After all how do you insure that everyone can agree on ethical borders? The solution has multiple facets to it but one of the solutions given by ethics.org (2021) is to agree upon a written standard of ethical conduct.

It is my believe that the best way to align ethical values in a group project is to create a written ethical guideline that all members have to sign.

Ethical aspects in group project

How do ethical aspects come up in my group

Ethical topics that come up in our group project are topics such as usage of online code and the data we collect from customers.

Especially code taken from sites such as stackoverflow or youtube can be vulnerable or overreaching for the purpose of the code. This could for example cause collection of data that could be accessible whilst being unrequired.

In our project we also bill customers, the handling of financial data needs to be properly managed and decisions made on this matter are ultimately ethical in nature. How do we best secure financial data?

Potential future ethical conflicts

Future ethical conflicts in my work could be focused on the transparency of algorithms or the questions of what data should be gathered, and how it should be secured.

Cases such as a twitter algorithm preferring white faces over black faces in their previews as mentioned in news articles(Epps-Darling, 2020) and the European GDPR law show that these two topics are currently important, and will probably be important in the future.

Culture

What is culture?

Culture is defined by Merriam-Webster(n.d.) as: “the customary beliefs, social forms, and material traits of a racial, religious, or social group”

Facing cultural differences

When facing cultural differences it is important to recognise how certain cultural aspects play their part. For example Dutch culture is stereotypically very direct. This means that when speaking to a Dutch person their directness might not be intended as rudeness and vice versa a Dutch person should watch how direct they are as it could be confused as rudeness.

Cultural customs vary a lot and can conflict so it's important to take nothing for granted.

Culture clusters

Cultures can be grouped into different categories as seen in this picture (Tellis, 2008)

Cultural clusters	Nordic Europe	Anglo	Germanic Europe	Latin America	Latin Europe	Confucian Asia	Northern Africa	Southern Asia
Countries	Sweden Denmark Finland	Canada USA	Austria Germany Switzerland Netherlands UK	Brazil Mexico Venezuela	France Italy Portugal Spain Greece	China Japan South Korea	Egypt Morocco	India Indonesia Philippines Thailand
Logic for Cluster	<ul style="list-style-type: none"> Geographic proximity Common Nordic history, religion and languages 	<ul style="list-style-type: none"> Ethnic and linguistic similarities Secular, with strong legal infrastructures 	<ul style="list-style-type: none"> Linguistic and religious similarities Tradition of orderliness, standards, and rules 	<ul style="list-style-type: none"> Roman law heritage, common Spanish or Portuguese languages Similar Emphasis on family living, food, clothing, and lifestyle 	<ul style="list-style-type: none"> Shared history of Roman empire Roman Catholic tradition and languages based on Latin Paternalistic role of State Similar emphasis on family living, food, clothing, and lifestyle 	<ul style="list-style-type: none"> Historical influence of China Confucianism Emphasis on hierarchy, diligence, self-sacrifice and delayed gratification 	<ul style="list-style-type: none"> Influence of Arab invasion, Islamic legal and moral code and the Arabic language Geographical proximity to Northern Rim 	<ul style="list-style-type: none"> Peaceful coexistence of diverse religions, languages, customs and cuisines Similarity in values, such as morality, respect for elders and conservation of resources
In-group Collectivism	3.8* (0.3)	4.2* (0)	4.2* (0.4)	5.5** (0.3)	5.1 (0.5)	5.3 (0.6)	5.8** (0.2)	5.9** (0.3)

As can be seen in the picture, cultural clusters can differ in fundamental ways. Take Germanic Europe and Confucian Asia. Germanic Europe has a tradition of orderliness, standards and rules. Meanwhile Confucian Asia has an Emphasis on hierarchy, diligence, self-sacrifice and delayed gratification. This shows that people from these cultures have fundamentally different values.

People experience interactions through the lens that is their culture. An interaction that might show orderliness (positive) to someone in the Germanic European culture cluster might show an unwillingness for self-sacrifice (negative) in the Confucian Asian cluster.

Personal culture

My personal culture is Dutch culture as I was born and raised in The Netherlands by Dutch parents. This means to me that I value punctuality, truthfulness and appreciate directness.

Experiences of culture related tensions

When interacting with people from other cultures many tensions can arise. For example when speaking in a non-native language a simple thing as poor intonation can turn a well meaning sentence into a jab. Even in non-spoken language one can make mistakes communicating. For sticking two fingers up in a 'V' form can mean that one wants to signal that they mean '2' but in England this gesture can be seen as very rude.

Future interactions

Things to take away for the future is that one can not assume that something wont be offensive. A good way to avoid actual insult is to be open-minded, read up on the culture you're interacting with and be clear about what you mean.

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