

# Ethical design

Group: 1

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# 1 INTRODUCTION

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Together with the class we played the TICT ethics game using fictional projects. Seeing as this deliverable expects us to think of ethics in the context of the group project, we decided to split this document into two parts the played game and an analysis of our group project.

## 2 TICT ETHICS GAME

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During the game we were required to discuss a fictional project idea with other 3 groups, the goal of this exercise was to improve our overall understanding of ethics in the software industry by discussing possible devils with the other groups.

### 2.1 PITCH YOUR IDEA

People are constantly harassed by ads when watching on a platform such as YouTube and other websites. Therefore, our general idea for the ethics game was an adblocker, this would be used to block ads on websites such as YouTube, blogs and other examples. The target group of this idea is pointed towards people who use a browser such as Chrome, Opera or safari.

### 2.2 CRUSH THE IDEA OF YOUR OPPONENT

The ideas of the other groups were more ethical in their base, with ideas such as preventing unnecessary food disposal and water saving. Therefore, we decided to attack the amount and type of data they were collecting and the user's dependence of the solutions.

This in turn resulted in them defending with the argument that the product does not collect detailed personal information. On which we countered that it could be used for such purposes in the future if the ideals of management were to change.

### 2.3 DEFEND YOUR IDEA

During our defence we encountered questions about data collection and the ethics of blocking ads themselves.

Whilst the data collection could be easily countered as an adblocker only needs to block incoming requests. Which requires no data collection what so ever.

The ethics of blocking ads however proved to be a difficult one. Whilst it is considered wrong to block someone of their source of revenue. The fact that this revenue is at the detriment of the user could also be considered wrong. Therefore the compromise of allowing a user to stop blocking adds for specific websites or content creators was reached. This solution would keep a user in control of who benefits from their ad consumption.

## 3 GROUP PROJECT ANALYSIS

### 3.1 TECHNOLOGY IMPACT CYCLE TOOL

<p><b>NAME:</b> Globe Protocol - Research Data</p> <p><b>DATE:</b> April 7, 2022 3:52 PM</p> <p><b>DESCRIPTION OF TECHNOLOGY</b> By stopping the impact of data leaks and identity fraud. Globe Protocol wants to stop the proliferation of places where an individual has his data online. The basic principle is that the functionalities of the organizations remain the same, but that the privacy of the end-users is guaranteed.</p>	<p><b>HUMAN VALUES</b></p> <p>The personal data of the users (age, gender, email, address) is aggregated depending on the amount of aggregation.</p>	<p><b>TRANSPARENCY</b></p> <p>Companies can buy this software and use it to gather survey results.</p> <p>In the prototype, it is not explicitly explained which data is stored and how the technology works. However when the product is eventually deployed a privacy policy will have to be added.</p>
<p><b>IMPACT ON SOCIETY</b></p> <p>The goal is to give respondents control over the data they create when they participate in research (surveys, questionnaires, etc.).</p> <p>This will be achieved by improving security via consent management of individual users, and privacy via aggregation, and/or differential privacy.</p>	<p><b>STAKEHOLDERS</b></p> <ul style="list-style-type: none"> <li>- Globe protocol</li> <li>- Organization researchers</li> <li>- Survey Respondents</li> <li>- Project Group (us)</li> </ul>	<p><b>SUSTAINABILITY</b></p> <p>Direct energy use: - Server costs to run the application.</p> <p>By using Kubernetes the environment will scale based on demand. Therefore minimizing energy use on off hours.</p>
<p><b>HATEFUL AND CRIMINAL ACTORS</b></p> <p>The answers are bound to a user, whilst the system has no functionality to get another user's answers. A maleficent actor could use the stored data to violate a user's privacy.</p>	<p><b>DATA</b></p> <p>The data that is collected is: personal data (age, gender, email, address) and survey answers the user filled in.</p>	<p><b>FUTURE</b></p> <p>Currently there are no survey tools that allow a user to alter their data after submission. Therefore this technology will significantly improve the user's ability to control their survey answers. Which will ensure the quality of the research overall. The research can then be used to improve the community itself.</p>
<p><b>PRIVACY</b></p> <p>This technology registers personal data like Name, age, email, gender, address, and survey answers. The data that can be traced back to an individual person is aggregated in this application.</p>	<p><b>INCLUSIVITY</b></p> <p>The data can be biased due to the expectation that the user wishes to change their survey answers after they have been submitted.</p>	<p><b>FIND US ON <a href="http://WWW.TICT.IO">WWW.TICT.IO</a></b></p> <p>THIS CANVAS IS PART OF THE TECHNOLOGY IMPACT CYCLE TOOL. THIS CANVAS IS THE RESULT OF A QUICKSCAN. YOU CAN FILL OUT THE FULL TICT ON <a href="http://WWW.TICT.IO">WWW.TICT.IO</a></p> <p>Fontys University of Applied Sciences</p> <p>CC BY NC SA</p> <p>TICT</p>

### 3.2 ETHICAL CONCERNS

- Storing personal data can be abused by a maleficent actor.
- Transparency should be improved as the user is currently told nothing about the application.

### 3.3 POSSIBLE SOLUTIONS

#### 3.3.1 Storing personal data can be abused by a maleficent actor.

Globe protocol is developing a secure storage solution using a user's storage provider. This solution will have to take data abuse into account. Therefore adding another layer of defense to the personal data.

#### 3.3.2 Transparency should be improved as the user is currently told nothing about the application.

The transparency can be improved in a multitude of ways:

- The solution provides the user with full control over their survey consent.
- Transparency for the prototype will not be explicitly explained, however the deployment version a privacy policy will be added.

- A researcher will only be able to search/inspect/download aggregated data with an approved consent.