

In this essay, I will be outlining the legal issues concerned with the software product developed by team number 18 such as the potential liabilities which are events or scenarios where the software product is likely to act in the way it isn't intended to, causing harm or damage to the user. Also, intellectual property of the software product including usage of open source materials, the license type proposed by the client and the license type that I proposed. Finally, I will be discussing the data privacy considerations of the software product.

Regarding potential liabilities, the first one is the inaccuracy or incorrectness of data. The software product is responsible for managing and displaying the input health data as visualizations. However, there might be some cases that the data gets incorrectly displayed or inaccurately due to bugs or rounding values at some situations.

The second potential liability is the loss of the data, it is possible that the health data of the user gets lost due to possible events such as hard drive failure. Moreover, another possible liability would be that the data gets leaked in an event as an adversary getting access to the users' private health data.

Moving on to the next topic which is the intellectual property of the software product. It is worth mentioning that the intellectual property of the software product belongs to the client but also can be fully used by UCL. The first subject at hand is the open source usage of materials, all of the libraries and frameworks used in this software product are open source meaning that they are made freely available and may be redistributed and modified.

Throughout the development of the software product, we have come up with several new features and components, those components' license are under the MIT license which basically allows anyone to use those components and modify them as long as they reference us.

Regarding the license type of the software product, the work that team number 18 is doing is the extension of an already existing software product and so, we had to have the same type of license that the software product that we are building on has which is the MIT license, this license allows commercial use, distribution, modification and private use, however, it doesn't provide a warranty and it states that the company releasing the software product will not be held responsible regarding any potential liabilities.

I believe that the MIT license is very suitable for this software product as this product will still need much more development and upgrading even after my team and I finish fulfilling our requirements and thus publishing it as an open source software will give other developers the opportunity to further develop and improve this project. While on the other hand side, if it was a more restrictive license that didn't allow other developers to use the source code, the development of the software product would have stopped at this stage which is not enough for being a high-quality product.

The GNU AGPLv3 license was carefully considered by me due to some similarities with the MIT license and having some advantages over it. However, the largest disadvantage that made me prefer the MIT license over it was the fact that for the GNU AGPLv3 license the user of this license has to state the changes that has been made on the software if released or published which is a large restriction that discourages many developers to use this open source project as part of their software product development. And therefore, the only two licenses that didn't include stating the changes made to the software product were the MIT license and the Unlicense, we picked MIT because we wanted people who used our project to still reference it and mention the usage of our software product as a component or their product.

Moreover, the last section I will be discussing is the data privacy considerations of the product. This product is mainly concerned with managing and representing data and therefore this subject is very crucial to its sustainability and offering it's users reassurance that their data is private and secure enough. A user registration system has been developed such that every user can have private access to his data and it can't be seen by anyone else unless this user gives them his credentials. It is also significant that when users attempt to input their health data through their smart watches (Fitbit), the software product is to ask them for consent to use their data, it also gives them a detailed list of the data it is going to access and they can select any kind of data that they don't wish to share and thus increasing their privacy as much as possible. To furthermore boost users' privacy and provide them with reassurance about the safety of their data, my team and I will develop a decentralized data storage system such that the data is not controlled or under the possession of a single entity. In addition to that, security measures have been put into place when storing some of the users' data such as passwords making it much more difficult for adversaries to acquire users' data which enhances the data privacy.

To sum up, the two potential liabilities of this software product are false or inaccurate representation of data and loss or destruction of data. The license of this product is the MIT license due to two main reasons which are the making it available for other software developers to use and improve, and not having to state the changes they made to it while still referencing it. Finally, as far as data privacy considerations are concerned, there has been many measures put in place that vastly boost the data privacy of users for this software product ranging from data encryption to taking users consent and informing them about the usage of their data.