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Project Name: Holorepository(Team 19)

The project is the implementation of the NHS/GOSH DRIVE Holorepository with different tools for 3D viewing of models on HoloLens and storing data in cloud storage accessible anywhere. The project is from a legacy codebase which means that the project was in a partly developed stage when handed to us by the client's team.

The project involves sensitive data of patients which must be stored securely. To make sure that the data is accessed by authenticated users only, a login page layer will be put in place. With a software project involving data processing comes the liability of processing it correctly.

The end product will be used to plan patient's surgery, so it is important that there are no defects within software for e.g. not displaying all the required details in the 3D holographic image properly. If there is such an error, then the developer could possibly be liable for that. However, since the project is only at one of its several iterations it should be thoroughly checked by the client and client's development team using acceptance testing to look for any errors that could have a lasting impact.

Therefore, as with the previous iteration there is a limitation of liability which restricts me and my team to be liable for anything excluding negligence by us. This is stated in the License of the project which limits the developer to accept any liability for the product user as a condition. This software and code are not guaranteed safe to use in a clinical or other environment and you should make your own assessment on the suitability for such use as stated in the conditions.

The intellectual property or IP allows one to protect their work and there are different types of protection properties available, for e.g., copyright and Trademarks. The types are split into two sections – automatic and manual protection, which means your work is protected automatically or not depending on what work it is.

The intellectual property type for this project is the copyright which is automatic. The property is copyright because the type of work created/developed is web content. However, if the name of the project was to be registered it will be Trademark and will have to be done manually by submitting an application.

The copyright property has also been specified in the License document which has a condition that a copyright notice must be given.

The Holorepository for GOSH DRIVE is an open source project which means that the source code is available to everyone in the community to access. To progress with this iteration of the project, we have and will be using other open source components. To make the front end of the Holorepository, React (JavaScript library) has been used for user interface. The React library uses MIT License (more on licensing later) that's the react code remains under MIT License but can be used in another project license. The other component that the project uses is the SMART on FHIR, an open source apps platform for electronic health records (EHR) to access

data smartly. This component uses Apache License, Version 2.0 which is a permissive license and doesn't really impose restrictions, but you must specify the license in your work.

These components have been derived into the current project. The source code agreement that is in place is Affero General Public License (AGPL) v3.0 and hence, any components used will go under this license, while anything that will be derived from this project must also be under AGPL v3.0. There are different types of source code agreement and the type used depends on how much freedom the user should be given in terms of using it, modifying, redistributing and commercial use.

The License I suggest for this project is the GNU Affero General Public License v3.0 because the license gives users the freedom to use it, modify, redistribute, private and for commercial use while the work stays open source even when used as a server software. You must publish the new code under same license. The suggestion has been made because the project is being developed as an open source for the NHS and it should stay open source for the community to continue to make changes and improvements. The other important reason is that the project is being derived from legacy codebase which is licensed under AGPL v3.0, so the new project must be under same license, as well as because the software will be hosted on a server. This protects it.

It shall be noted that AGPL is a strong copyleft license which gives freedom while work stays copyrighted and is also compatible with other licenses such as Apache 2.0.

The other accepted license is MIT license. This license is very simple from all and allows anyone to use the code and modify it, distribute, commercial use without disclosing the source. However, you only have to use same MIT license in place. This license is not suitable as the distributor doesn't have to give source code under this, meaning if you want to include modifications someone has made you will not have the code. Hence, the project will benefit if it stays open source. Even the GeneralPublicLicense(GPL) is not suitable as it does not protect your work if hosted on a server.

The General Data Protection Act(GDPR) which replaces the data protection act came into effect in 2018 with revised definitions. It has a huge impact on the project I am working on as it manages and processes data. The project is based on processing patient's data which includes personal data. Therefore, the data privacy must be considered so that GDPR requirements are fulfilled.

The project needs to comply with GDPR by taking several measures including by design and transparency etc. The data that's processed shall only be the required data and processed in a lawful and fair manner. That is, if you did not say in the privacy notice you were going to do X with data then you should not do it, as the purpose of the data collected was not transparent to users. The logic of how the data is processed shall be transparent.

The data shall also be processed in a secure way and kept in identifiable form no longer than necessary. That is, there should be a retention policy so that the data is

destroyed when no longer needed. The data subject should be able to erase any inaccuracies and be able handle their data of their lawful interests. The subject can claim for compensation if unauthorised disclosure, inaccurate data and for loss or destruction of data.

To protect the data for this project it will be password protected and encrypted so only authorised users only have access to data with certain permissions. Since the data will be used from GOSH it will need to be transmitted in a secure way. To further comply with GDPR any breaches should be reported.