Dublin City University
School of Electronic Engineering

Setup Assessment Form for EE5003 Projects

- **Risks associated with project work. Please give specific details of the project work and its associated risks.**

This project is a completely software-based project so there are no risks in relation to hardware and circuits. Due to the nature of working remotely, one of the risks of working on this project could be sitting at the desk carrying out work on the project for long periods of time without taking breaks. To combat this a method of 45:15 will be implemented. This means that for every 45 minutes worked, 15 mins break will be taken from working to talk a quick walk.

As this project is a solely software-based project there will be no need for the gathering of hardware material and building circuits. However, the software used in the project, to set up and manage the blockchain. This software will be *"Hyperledger Fabric"* run inside a virtual machine using *"Virtual Box"* both software packages are open source and free to use. The blockchain itself will be developed and managed by me using a combination of Java and Golang which are the languages used by Hyperledger.

There may be technical difficulties throughout the duration of this project due to this being my first time interacting and developing with Hyperledger. However, the project timeline has been laid out to such a way to give me ample time with troubleshooting technical issues which arise.

As this project is related to storage of data and confidential files. There would be risks associated with this such as the system being compromised during development and the data being accessed by third parties, and the system would also need to comply with GDPR guideline which are in place.

- **Precautions to be taken to reduce the level of risk:**

As mentioned previously to combat the risks associated with working on a screen for too long will be to divide the working hours up into 45 mins of work and a 15-minute break. There are no other risks associated with this project and hardware components and the software being used within this project is free and open source and a reference to where to find the software will be provided in the final portfolio.

As also mentioned there may been technical difficulties with using the two software packages mainly, Hyperledger as I have never used it before, but the project plan allows for time for in depth research into the software and time to complete tutorials and initial setups without negatively impacting the overall project work.

In relation to the confidential data storage aspect of the project the data used during development would be dummy data created by writing user stories in relation to the system. This would mean that during development and while the system is not operating at maximum performance there would be no risk of truly confidential data being accessed.

- **Confirm Supervisor Approval for the safety assessment:**

  Yes or No

  Supervisor on Annual Leave until Monday 19th July 2021

- **Confirm Supervisor Approval that all technical arrangements (software & hardware devices or components) have been made to complete the project remotely:**

  Yes or No

  Supervisor on Annual Leave until Monday 19th July 2021

- **Mentor's signature (if applicable) or a confirmed email to the student**

  Supervisor on Annual Leave until Monday 19th July 2021