Project Semester 4 (IoT)

**Socio-Technical Analysis Report**

Project Title: <Project Title>

Student Name: <Name>

Student Id: <Student Id>

# 1. Project Outline and Objectives

Briefly describe the purpose of your project/artefact, and why it would be useful, etc.

# 2. Functional Requirements

Outline the main high-level functions of the project/artefact.

# 3. Technologies Used

Outline/list the software and hardware components you intend to use for the project.

# 4. Social Analysis and Issues

In this section you should consider the broader social, human, legal and ethical issues pertaining to your project/artefact. You simply have to reflect on each of the following issues and comment briefly on their relevance to your project. If you do not think a given issue is relevant then be sure to explain why. If it is relevant, outline how the project will take appropriate account of it.

## 4.1. Privacy Issues

Consider any potential privacy issues using e.g. the ISD Privacy Framework. Remember to look beyond issues such as data security to take a broader perspective of privacy.

## 4.2. Data Protection Issues

Consider any data protection issues here. You can use e.g. the GDPR guidelines as a useful starting point.

## 4.3. Intellectual Property

Consider the IP of any software and hardware components you intend to use for the project. Also consider whether your project would (if marketed/sold) potentially infringe on any IP rights (e.g. copyright) of other products on the market.

## 4.4. Stakeholder and Risk Analysis

In this section, consider who the stakeholders are regarding your project/artefact i.e. people (and organisations) that could be affected by your system. Consider both positive and negative stakeholder risks and impacts. Consider how to minimise negative impacts/risks, and maximise positive impacts.

# 5. Technical Analysis and Design

In this section you should present a technical analysis and design for your project/artefact. You are free to use text, UML diagrams, and screenshots as appropriate. Keep things concise, though. Remember that the technical aspects of the system should take account of the social aspects previously considered.

## 5.1. Functional Design and Non-Functional Requirements

Outline, in some detail, what the system will do and how it will do it. Use case and other UML diagrams may be useful here. Also consider non-functional requirements, which will help take account of the social issues previously considered.

## 5.2. Data Requirements and Design

Detail the data gathered, how it is gathered, and how it is stored/represented, etc. Consider appropriate issues such as data protection too as it relates to data design, storage, etc.

# 6. Professional Conduct and Ethics

Reflect briefly on how you would strive to ensure a high degree of ethical professional conduct and behaviour (if you had time to develop your product/artefact into a fully marketable product).

You should keep the formatting and section headers in this document and simply replace the section descriptions with your own summaries. Note that this report should be no more than 10-12 pages long.

Indicative marking scheme for this report:

* Project Outline and Objectives = 10%
* Functional Requirements = 10%
* Privacy Issues = 10%
* Data Protection Issues = 10%
* Intellectual Property = 10%
* Stakeholder and Risk Analysis = 10%
* Functional Design and Non-Functional Requirements = 15%
* Data Requirements and Design =15%
* Professional Conduct and Ethics = 10%