SoluTek Feasibility Report

# Introduction

The Jes Foord Foundation has requested us, SoluTek (WIL Group 6), to create a software solution to capture, organise and prepare the census data of the demographics of the locations they visit, moving this from its existing, paper-based system to a digital format.

The concept of the application is to offer a medium that will allow the management of volunteers to have increased efficiency and provide information to the Centre about their volunteers for the purposes of assigning tasks to volunteers that may be pending to receive a task, as well as providing statistics for the number of volunteers that they have

# Operational Feasibility

The operational feasibility attempts to answer the questions pertaining the ability to accomplish the task based on the available human resources, while also providing an analysis the intended organisation’s ability to support the system in planning.

**Does the System Solve existing issues within the organisation?**

* As the system being implemented is intended to replace an existing system, it instead contributes towards the concept of convenience while maintaining a familiar data capturing system.
* The capture of the census data will be securely stored in a cloud-based storage, which can be managed from a desktop system and prepared for external audits.

**Can the proposed system provide any advantages?**

* Due to the nature of developing this system with the intent of using cloud-based storage, this will allow for all the data captured to remain consistent across all devices used and limits the physical resources that would generally be required using the original paper-based system.
* It is currently estimated that

**Does the management of the organisation support the system?**

* The system in question was put forward by the management of the Jes Foord Foundation and discussed in great detail.

**Will this system alter the current work environment of the involved employees?**

* As the system in question is a digital medium of an existing system, the development surrounding the system aims to ensure that the transition will not alter the work environment too much of an abrupt change by requiring more use of computers to complete their tasks.

# Technical Feasibility

Each member of the development team for **SoluTek** possess at least two years of software development experience, developing applications primarily in the languages of Java and C# for that duration, and at least one year of Android Development experience, therefore the members of the development team do have the knowledge and experience necessary to accomplish the development of this application.

However, should an aspect of the application’s development require more experience, resources are available for access from relevant development guides found online and lecturers are also available for consultation concerning software and cloud application development.

Upon further assessment of the team, certain group members have shared insight into their preferred roles in development, we have 2 front-end developers, 2 back-end developers and 1 Database Manager, this allows for a good division of workload as there are multiple developers working on either the front-end or back-end simultaneously.

We all possess the physical hardware and software required to develop the application, no external hardware would be required to interface with the system, nor would we or are we required to intervene with the operations of the system in any way, except for maintenance, from day of launch onwards, the maintenance, upkeep, and cost to run the system would be fairly minimal, with the only potential consistent cost being hosting for the database.

A high concern for the application’s development is the accessible technology to the **Jes** **Foord** Foundation, should this situation present itself, it would allow us to optimally alter the scalability of the application’s communication capabilities for its functions.

We have been informed that we would have access to the source code of the **Jes Foord** Website as well as the fact that workers who would be using the mobile application, would have access to smartphones in which to do so, this means that there is no extra cost associated with the purchase of a smartphone on the client’s side, as well as less time spent on developing a website for the dev team. In terms of upkeep of the website, a dedicated webmaster exists, being an associate of the Jes Foord foundation, hence website updates can be handled independently.