# **Project Design**

**Project Overview**

The purpose of this project is to design, implement and test a simple java program using the waterfall methodology.

Glasgow Clyde Runners Club manually sorts data captured from various races. They want a program that can read a text file, sort data, print the sorted data to a text file and to the console. They want to develop a trial program using test data as a proof of concept.

They would like a menu interface for their non-technical staff and results to be printed to a text file as well as a suitable message output to the user.The application to be password protected with code from a previous developer and the name of their club to be displayed in the program.

They would also like the Software to run without having to upgrade and for it to run from 03/05/2023 and be completed by 26/05/2023 for £10,000. They would like us to produce a trial program based on their last 2 recorded 400m final races.

The goal of This document is to produce:

* A list of Functional, Non-Functional Requirements and constraints for the whole system**…Page 2**

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| **Backlog** | | | |
| **Functional Requirements** | | | |
| **#** | **Requirement** | **Status** | **Resources** |
| 2 | Login | Complete | Engineer |
| 3 | Menu | Complete | Engineer |
| 4 | Read text file | Complete | Engineer |
| 5 | Full name | Complete | Engineer |
| 6 | Everyone's time in seconds | Complete | Engineer |
| 7 | Fastest and slowest time combined | Complete | Engineer |
| 8 | Ordered list of times | Complete | Engineer |
| 9 | Search and occurrences | Complete | Engineer |
| 10 | Output sorted text file | Complete | Engineer |
| 11 | Output text file to console | Complete | Engineer |
| **Non-Functional Requirements** | | | |
| 1 | Company name displayed | Complete | Engineer |
| **Constraints** | | | |
| 1 | They would like the development to begin on 03/05/2023 and be completed by 26/05/2023. They have allocated a budget of £10,000 for the entire project. | | |
| 2 | produce a trial program based on their last 2 recorded 400m final races. | | |
| 3 | Implement login code from previous developer | | |