**Executive Summary**

This product aims to address inconveniences associated with identification of persons of interest. TSA and NSPA defined specific requirements for what will be sufficient for each of their use case scenarios. The need for our product is not only crucial but will be revolutionary in how it manages the data, its processing, storage, adjacent to a streamlined UI experience. Backend services for profile matching and databases will be developed and integrated into a complete software package as an android application. This application will allow granular user control and administrator management of the users and all the data available. This is where current alternatives in the local and international market fail to deliver mostly, while in the international marketplace, security is a more prominent issue in addition to lack of services for these devices. Based on our research the north American market lack much competition, due to either discontinued products due to instability and poor software or they are outdated and don’t provide enough features or services leaving the users without any support from the OEMs. The current political landscape does not help either especially now during to a world pandemic that closed a lot of borders. Hence, not all requirements requested by the clients can be addressed due to the scope of this project and its limited resources for development and testing. Some of these requirements include MIL-STD physical endurance standards as well as a IP65 rating. Both of which are unachievable, along with some of EBTS standards for Biometric data capture and storage (Like the required scan area of the fingerprint sensor must be able to fit a full palm print.) The procurement of such equipment is very costly and a lot more complex to develop software for, therefore the project team decided to fore go them. The idea is to address as many requirements as we can resulting in a durable mobile biometric data capture , storage, and identification that performs its stated functions flawlessly. This can be done using less expensive alternatives for each sensor to perform fingerprint, Iris, and facial scans that allow us to identify a person of interest at much lower cost and complexity. For a mobile device this is ideal since it allows for long battery life due to the use of low power components and the addition of hot swappable external batteries for extended usable time of the device. In this report, are all the hardware and software decisions made based explicitly stated metrics and explanation for each decision-making processes. This critical design review documentation also describes, how, what, and when we will be developing the hardware and the software required for this device. The team set out to address other issues seen in a variety of currently available products. Furthermore, this report is an explicitly stated walk-through of the full development plan for this device including hardware components, software integration and protocols used, and the backend software. All requirements that have been changed have been identified and should be crossed checked with previous changes addressed in the preliminary design review and the original requirements review documentations. Moreover, a proposed project timeline and resource management diagrams have also been provided that explain how each team member will contribute to the project. Lastly, Team members have also provided their reflections on their colleagues’ feedback to them and their conflict management reports. This is done to strengthen the team by understanding more about one another allowing us to communicate more effectively, hence the team operate more efficiency with massively reduced conflicts amongst the individuals.