

**CRIMINAL PROFILING SYSTEM FOR CRIMINAL
RECORDS DIVISION**

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Abstract

A crime is an unlawful action or omission that is punishable by the court of law. The person who commits this crime would be known as a criminal. A modus Operandi is the behaviour in which a crime is committed by a criminal and each criminal has a unique behaviour which can be used to classify a criminal. A grave crime is a subsection of a crime, this crime when committed in Sri Lanka would prosecute the suspect in trial. However, currently the police department in Sri Lanka collects and stores these grave crime details in books which pose several short-term and long-term processes. Another issue faced is when crimes are being solved the police officers take an extensive amount of time linking the new crime to similar previous crimes to narrow down the possible list of suspects which still might not provide the expected results.

The project aim is to create a criminal profiling system. This system provides an IT solution for the police department in which it contains a grave crime report and records function that allows the user to create, delete and modify records. Additionally, this would address the problem faced by the police officers when solving a crime and implement a profiling system which links the new crime Modus Operandi to a criminal Modus Operandi achieving a suspect shortlist. Further interviews and questionnaires among police personnel allows an in-depth look into the list of requirements.

Having conducted the requirement elicitation new functionalities were added to the system, these included the ability of the user to view the crime map which shows a heat map of Sri Lanka with the most affected to the least affected areas from a specific crime. Another functionality that was added to the system is the ability to use witness descriptions of the criminal to further narrow down the possible list of suspects for a crime.

This solution was then evaluated by experts in the field and which were then further used to update the system or to be added as a future improvement to the system.

Keywords: Grave crime, criminal, criminal profile, crime map, suspect shortlist, image recognition, Modus Operandi, grave crime report, grave crime record, witness statement.