**MAKERERE UNIVERSITY**

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**COLLEGE OF COMPUTING AND INFORMATION SCIENCES.**

**DEPARTMENT OF NETWORKS.**

**BACHELOR OF SCIENCE IN SOFTWARE ENGNEERING (EVE).**

**BSE 2301**

**Professional Software Engineering Mini Practical Project II**

**GROUP 58 (EVE)**

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**SYSTEM AND OPERATIONS CONCEPT DOCUMENT**

**Background**

ACLED (Armed Conflict Location and Event Data Project) is a project that collects data on political violence in developing states from 1997 to the present.

ACLED is directed by Professor Clionadh Raleigh and operated by senior research manager Caitriona Dowd, both affiliated with the University of Sussex, while data collection involves several researchers. The dataset was introduced by Raliegh and co-authors in a 2010 paper in the journal of peace Research.

ACLED was originally hosted by the Peace Research Institute Oslo but later moved to an independent home. ACLED is now registered as an independent, non-governmental organization in the United States.

ACLED data contain information on specific dates and locations of conflict events, the types of events, the groups involved, reported fatalities and changes in territorial control. ACLED covers political violence in all African countries.

**Problem Statement**

Since the change of power from the Europeans Uganda has gone through different series of chaotic turmoil and insurgences that have resulted into the death of many citizens, loss of property and retarded national development. The violence has been mainly political unrests that have existed in particular regions of the country, these have been perpetuated by rebel groups, and some have been a result of civil unrest.

Since 1997 there has been an increased occurrence of these violence up to date, it’s upon this basis that we use the data from ACLED to make analysis and provide long lasting solutions such that we can have a violence free country.

**Aim**

Design and development of an analytics software solution that will analyze and visualize the occurrence and impact of violent crimes within Uganda using advanced techniques and visualization tools in R Programming.

**Goal**

To help security forces in balancing deployment of efforts around the country as well as preventing the violence before it happens.

**Objectives**

* To predict the areas where violence may arise in the different parts of Uganda.
* To determine the fatality rate in Uganda.
* Assess the impact of violent incidents in different parts of Uganda.
* Determine level of peace in Uganda.
* Show which parties have caused most insurgencies.