

Informatics Institute of Technology

In collaboration with

University of Westminster, UK.

# **Kiyanna - Public Issues Crowdsourcing System**

A dissertation by

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Submitted in partial fulfillment of the requirements for the

BEng (Hons) Software Engineering Degree

Department of Computing

May 2016

# Abstract

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General public of every country in the world has to go through various kinds of hardships in their day to day life. We can name them as “public issues”. Developing countries like Sri Lanka has a huge number of public issues. It can be a simple issue regarding a public transportation service or a major issue regarding healthcare services, all of these fall under the same category “Public Issues”. The purpose of this project is to create a crowdsourcing platform named “Kiyanna” where people can report, track and rank public issues online.

The target audience of the project is the general public who has the access to internet. People will be able to get registered with the system and post their issues. Posted issues will be listed publicly for everyone to see. Users have the ability to up-vote or down-vote the issues listed. The system then calculates score of each issue based on the votes received and ranks issues accordingly.

All the issues posted on the system are analyzed and automatically classified into categories using MALLET which is a Java based machine learning toolkit for natural languages. More useful data about issues are extracted and visualized on a separate analytics page on the system.

The system is operating in its beta version and available to the public at [www.kiyanna.info](http://www.kiyanna.info) . System has been built on Meteor platform using Telescope framework along with MALLET for document classification and analytics. MongoDB was used as the database. The whole system is hosted on Amazon EC2.

## **Subject Descriptors:**

Information systems~Crowdsourcing

Information systems~Clustering and classification

## **Key Words:**

Crowd-sourcing, Automatic Text Classification, Meteor