



## FLOOD RELIEF AND CAMP MANAGEMENT SYSTEM

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**Abstract:** FLOOD RELIEF AND CAMP MANAGEMENT SYSTEM is an android application used for managing after effect of flood and providing goods and services for victims. Our project is about Flood Relief Camp Management System. Our intention through this project is to help the needy one, who are suffering from flood disaster. Where we mainly focused on the camp management where the volunteer can help the victim by manpower, essentials etc. Which include food, medical supplies and related stuff. Here we have a major role in controlling over-flow or lack of supplies where we transfer those to the locations where its more needy. Our concept helps to balance automatically by using data mining and association mining concepts. We balance the camp essentials by comparing neighboring camps and sort it them out based on the nearest point and manage the goods by transferring. We also sort out the nearest volunteer and assign them to the nearest requested area and we track them by updating status which allow others to know whether the requested services done.

**Keywords:** Data Mining

### INTRODUCTION

A lot of the past years, we had been the victims of disasters. The flood hit us last year, and year before that. Many resources have been destroyed like properties, animal lives, partially destroyed the ecosystem. It is unpredictable to know what may be next, this incidences inspired to help the society as engineers, in the platform to contribute for it. F.R.C.M.S or Flood Relief Camp Management System is an app which helps the subscribers to know about the post effects and have many features like volunteering, donating, food stock balancing between camps, camp essentials management etc. The work starts after the flood happens. The app categorizes in two; Victims and Volunteers. Where Victims are the people who are affected by the flood and Volunteers are the people who are willing to help or the resource we have as manpower to help the victims and to restore the affected places. Through the app, to be a subscriber, they have register through its portal. After registering, then they have the full access to gain the features. Where the victims can request for help and the admin will allocate the volunteers and stuff required for that victim accordingly. The people can view camp details, the stock etc where they can donate to it. The app have the algorithm to balance the stock of the camp send the exceeded things to next camps. Through this app, which will help in lowering the pressure of the flood problems, the victims will be relieved as possible through the services provided by the app. The app is very user friendly and have easy interface in order to operate by even non educated person.

### RELATEDWORKS

Stock Market Analysis and Prediction is to create software that analyzes previous stock data of certain companies, with help of certain parameters that affect stock value. Here going to implement these values in data mining algorithms. This will also help to determine the values that particular stock will have in near future. Here

will determine the Month's High and Low with help of data mining algorithms.

Basically the Scope of the project is Application of Analysis of stocks. Here Analysis of stocks using data mining will be useful for new investors to invest in stock market based on the various factors considered by the software. Stock market includes daily activities like sensex calculation, exchange of shares. The exchange provides an efficient and transparent market for trading in equity, debt instruments and derivatives. Our software will be analyzing sensex based on company's stock value. The stock values of company depend on many factors, some of them are: 1; Demand and Supply: Demand and Supply of shares of a company is a major reason price change in stocks. When Demand Increase and Supply is less, price rises. and vice versa. 2; Corporate results: This will be regarding to the profits or progress of the company over a span of time say 3 months. 3; Popularity: Main Strength in hands of share buyer. Popularity of a company can effect on buyers. Like if any good news of a company, may result in rise of stock price. And a bad news may break dreams. The stock value depends on other factors as well, but they are taking into consideration only these main factors. [1]

### THE METHODOLOGY OF THESTUDY

Data mining methodology is designed to ensure that the data mining effort leads to a stable model that successfully addresses the problem it is designed to solve. Various data mining methodologies have been proposed to serve as blueprints for how to organize the process of gathering data, analyzing data, disseminating results, implementing results, and monitoring improvements.

- Understanding the nearest camp location.
- Collect camp detail sof that camps.
- Organize the data on the basis of demand and supply.
- Automatically evaluate the collected data by using data mining concepts.
- Predict the amount of items needed for exceed from each camps.

- Calculate both values according to items values.
- Provide a notification to the volunteer through the application if item needed exceeded.

### THE PROPOSED SYSTEM

In this section, we discuss our presented system, it is an android application used for managing relief activity of after effecting of flood, And comparing camps in the basis of stock and demand automatically using data mining. Our concept helps to balance automatically by using data mining and association mining concepts. We balance the camp essentials by comparing neighboring camps and sort it them out based on the nearest point and manage the goods by transferring. We also sort out the nearest volunteer and assign them to the nearest requested area and we track them by updating status which allow others to know whether the requested service is done. The figure 1 shows System Architecture of our proposed system.

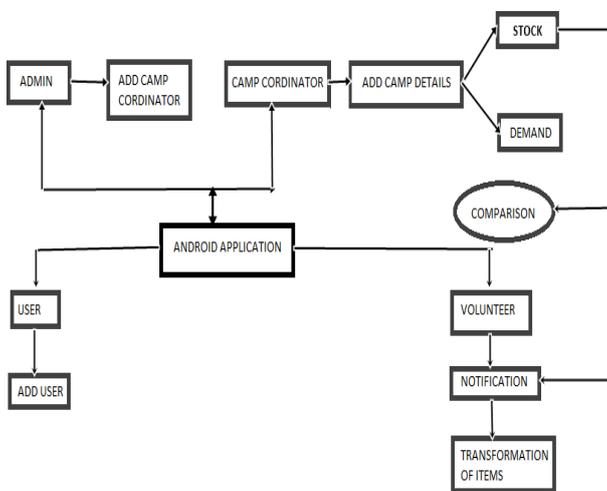


Fig. 1. system architecture of proposed system

Process mining is an ewe rain the science of data mining and is a subset of business intelligence. Process mining analysis provides an idea about a general process by comparing each process with others in the terms of time and responsible people who deal with the process. For this reason, event logs are checked. Event logs consist of large data. Because the event logs keep all the records that occur during short time intervals.[2]

Agrawal et al. (1998) were early pioneers of process mining. Their algorithmic approach to process mining allowed the construction of process flow graphs from execution logs of a workflow application.

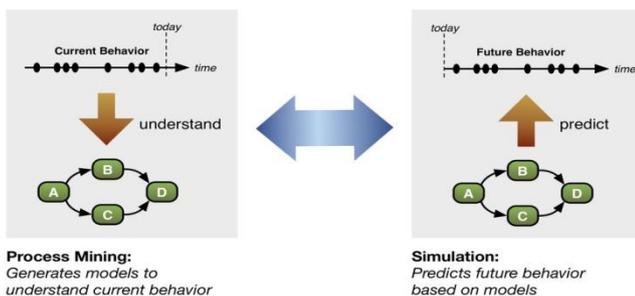


Fig. 2. Process mining

The discipline of process mining also has its roots in the work of Cook and Wolf (1998a) who attempted to discover software process models from the data contained in event logs. Vander Aalst (2004a) compares the method of extracting process models from data with that of distillation.[3]In terms of business process mining Vander Aalst (2004a) states that almost any transactional information system can provide suitable data.

Vander Aalst (2003) identifies two broad types of workflow met a models.The searegraph-and block-orientated models; each with their own language and graphical representation. Aguilar Saven (2004) adds net-based languages to this definition (with block-oriented models/languages being grouped under the term workflow languages).Vander Aalst (2003) does not make this distinction between net and graph models describing net-based models, such as Petri nets as a form of graph-oriented model. The most common form of graph oriented meta-model is the directed graph. Agrawal et al. (1998) was one of the first to use directed graphs in process mining.

This author describes a number of constructs involved in the actual graph. Activities, usually enclosed in boxes or circles, are referred to as vertices and the arrows between the activities, that indicate the direction of flow, are known as edges. Some workflow meta-models may be used to define workflow models as well as act as a language for the display of process-mining activities. An example of this is provided by Herbst and Karagiannis (2004) and their In WoLvE workflow mining system. It is often useful to be able to define an “ideal” workflow template so that mined process models may be compared against it for conformance purposes.

### APPLICATION

The user interface of the project includes a mobile application. The application balancing the camp using Data mining algorithms and managing other after flood relief activities .The peoples can be a part of relief activity through the user registration such as volunteers.

### CONCLUSION

In this project, we can manage the relief activity of the after effect of flood and balancing the stock in camp automatically. Here we are providing goods and services for victims. Here we have a major role in controlling overflow or lack of supplies where we transfer those to the locations where it’s needier. Future research may also focus on more sophisticated methods of automated Data mining without the need for human input. So this is useful for future disaster management. This software project, we can be a hand for the needy one who are affected by the flood and can be used as a monitor to maintain the emergency camps which where established. Our project will provide camp in-formations like camp food stock, manpower helping, camp total strength, what’s needed by the camp inmates, essentials like clothes, necessary

medicines, etc. The two sided project for the victims and the people willing to help, which allows the people out side can donate to the camp, where we have an algorithm to maintain the stock of each camp. Where we can maintain them by sending them to camps where needed from the exceeded camp to a camp which have more space. The project comes with easy interface allows user friendly to the subscribers which will give a smooth experience through the app. This will be great contribution to the disaster management sector.

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