

Identifying Indian Stock Market for Monthly Based by using Apriori Algorithm

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Abstract— Market analysis is an important component of analytical system in retail organizations to improve determine the placement of goods, designing sales promotions for different segments of customers satisfaction to improve customer satisfaction and hence the profit of the supermarket. These issues for a leading supermarket are addressed here using frequent itemset data mining. The frequent itemsets are mined from the market basket database using the efficient K-Apriori algorithm and then the association rules are generated. The stock market is a non-linear, unpredictable system that is extremely difficult to improve these model with any reasonable accuracy. Investors have been trying to find a current way to predict stock prices and to find the right stocks and right timing to buy or sell. To achieve this goal, the techniques of fundamental analysis as well as technical analysis are used. Fundamental Analysis is based on the study of factors external to the trading markets which affect the supply and demand of a stock market. It mainly focuses on factors like technological invention, growth of the company, PE ratio, weather, government strategies, financial and political events and prospects of business. It strongly believes that by monitoring such factors for a stock market a state of potential disequilibrium of stock market conditions may be recognized before the state has been reflected in the share price of the company. Technical analysts strongly believe that the current price of company share completely replicates all fundamental information. As all the fundamental information is already replicated in the price, technical analysts consider the current price as the fair value and strongly believe that current price should form the basis for the research. It refers to the various techniques that aim to predict future price movements using past stock prices and volume information.

Key words: Rules Data Mining, Educational Mining, Performance, Classification, Association

I. INTRODUCTION

The stock market is a non-linear, unpredictable system that is extremely difficult to model with any reasonable accuracy. Investors have been trying to find a way to predict stock prices and to find the right stocks and right timing to buying or selling. To achieve this goal, the techniques of fundamental analysis as well as technical analysis are used. Fundamental Analysis is based on the study of factors external to the trading markets which affect the supply and demand of a stock market. It mainly focuses on factors like technological invention, growth of the company, PE ratio, weather, government strategies, financial and political events and prospects of business. It strongly believes that by monitoring such factors for a stock market a state of potential disequilibrium of stock market conditions may be recognized before the state has been reflected in the share price of the company.

A new algorithm for producing message authenticating code (MAC) was recently proposed by NIST. The MAC protects both a message's integrity - by ensuring that a different MAC will be produced if the message has changed - as well as its authenticity - because only someone who knows the secret key could be able to generate a valid MAC. The proposed process incorporates a FIPS approved and secure block cipher algorithm which was standardized by NIST in May, 2005. The first implementation of the CMAC is presented in this paper. Throughput has been the main design target. The proposed implementation goes one step further introducing an optimized ciphering core to achieve competitive throughput for CMAC, compared to alternative MACs.

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II. RELATIVE STUDY

A. Model to Predict Stock Price with Respect to Day of the Week

In the business sector corporation, it has always been a difficult task to predict the exact daily price of the stock market index. There is a great deal of research being conducted regarding the prediction of stock market direction of stock price index movement. Many factors such as political events, general economic conditions, and traders expectations may have an influence on the stock market index. There are numerous research studies that use similar indicators to forecast the direction of the more number of stock market data. In this study, we compare two basic types of input variables to predict the direction of the daily stock market data.

The main concept of this study is the ability to predict the direction of the next day's price of the Japanese stock market index by using an optimized artificial neural network (ANN) model. To improve the prediction accuracy of the trend of the stock market index in the future, we optimize the artificial neural network (ANN) model using genetic algorithms (GA). We demonstrate and verify the predictability of stock market price direction by using the hybrid genetic algorithms-artificial neural network (GA-ANN) model and then compare the performance with prior studies. Empirical results show that the Type 2 input variables can generate a higher forecast accuracy and it is possible to determine performance of the artificial neural network (ANN) model.

B. Application of Integrated Data Mining Techniques in Stock Market Forecasting

Stock market is considered too uncertain predictable price. Many individuals have developed methodologies or models to increase the probability of stock market profit investment. The overall stock market hit rates of these methodologies and models are generate too low to be practical for real-world application. One of the major reasons is the huge fluctuation of the stock market. Therefore current research focuses in the stock market forecasting to improve the accuracy of stock market trading forecast data. This paper introduces a system that addresses the particular information. The system integrates various data mining information techniques and supports the decision-making for stock market trades. The proposed system embeds the top-down trading theory, artificial neural network (ANN) theory, technical analysis, dynamic time series theory, and Bayesian probability theory.

To determine experimentally examine the trading return of share market the presented system, two examples are studied. The Taiwan Semiconductor Manufacturing Company (TSMC) data-set information that covers an investment horizon of 240 trading days from 16 February 2011 to 23 January 2013. Eighty four transactions data were made using these stock proposed system approach the investment return of the portfolio was 54% with an 80.4% hit rate during a 12-month period in which the Taiwan Semiconductor Manufacturing Company (TSMC) stock price increased by 25% (from \$NT 78.5 to \$NT 101.5).

The second example examines the stock market data of Evergreen Marine Corporation, an international marine shipping company. Sixty four transactions contain were made and the investment return of the portfolio was 128% in 12 months. Given the remarkable investment returns in trading the example Taiwan Semiconductor Manufacturing Company (TSMC) and Evergreen stocks, the proposed system demonstrates promising potentials as a viable tool for stock market forecasting.

Is used over real historical data of three major companies listed in Amman Stock Exchange (ASE).

C. Predicting Movement of Stock on The Basis of Daily Fluctuation Using Data Mining

Forecasting stock market return to the number of financial market that has attracted researchers attention for number of years. An assumptions that fundamental information publicly available content in the past has some predictive relationships to the future stock market returns these society. This study help the investors in the stock market to decide the better timing for buying or selling stocks based on the knowledge extracted from the historical availabull prices of such stocks. The decision taken technologies will be based on decision tree classifier which is one of the data techniques. The proposed model, the (data model)DM methodology.

III. PROPOSED ALGORITHM

A. Apriori Algorithm

Developed by Agarwal and Srikant 1994 Innovative way to find association rules on large scale data, allowing implication outcomes information that consist of more than one item, Based on minimum support data. Apriori is designed to operate on databases containing transactions (for example, collections of items website frequentation). The algorithm attempts to find subsets which are common to at least a minimum number C (the cutoff, or confidence threshold) of the data item-sets.

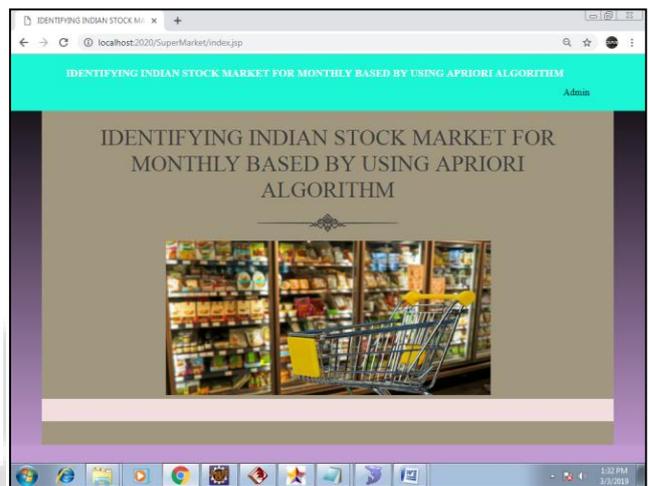
Apriori uses a “bottom up” approach, where frequent subsets are extended one item at a time a step known as candidate generation, and groups of candidates are tested against the data. The algorithm terminates when no further successful data extensions are found. Apriori uses breadth-first search and a hash tree structure to count candidate item sets efficiently. It is the most popular algorithm to find association rules on large scale dataset and makes use of the downward closure property. The algorithm employs level by search or an iterative approach, where K-item sets are used to explore (K+1) - item sets. The algorithm terminates when no more frequent K-item sets can be found.

B. Procedure

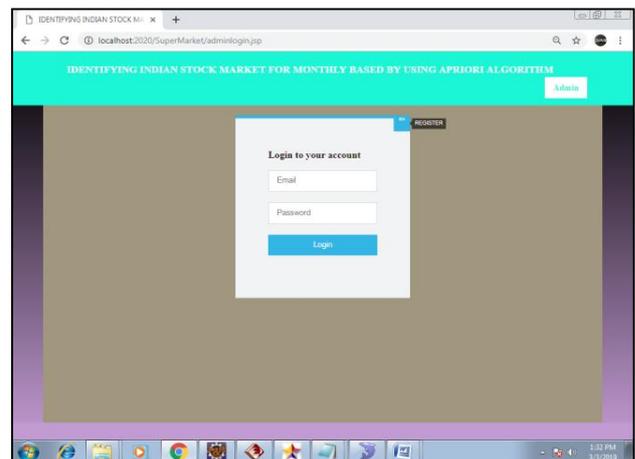
- In indian stock market website every user can register and login to their account to buy the product and login to their account to bug the product which they are needed.
- For some product we provide discount also for example.If the customer purchased above
- Rs.1000/- we have certain discount for that customer with an applied terms and condition.
- It generate day to day report by usingApriori algorithm.
- For every month,it generate monthly report for the business if the business running successfully or not.
- By using this algorithm it is easy to calculated the monthly basic.

IV. RESULT & ANALYSIS

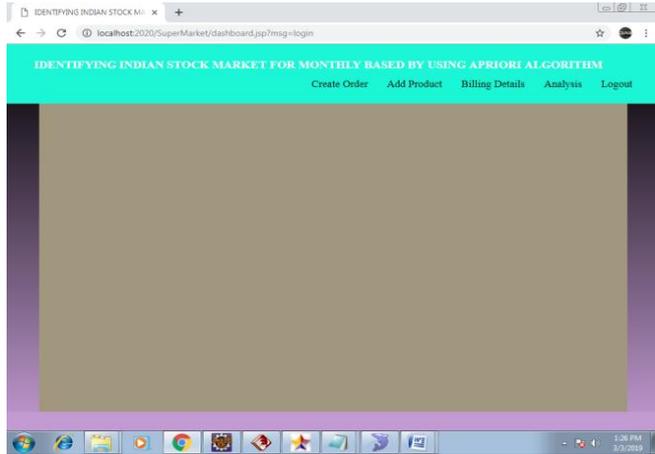
A. Home page



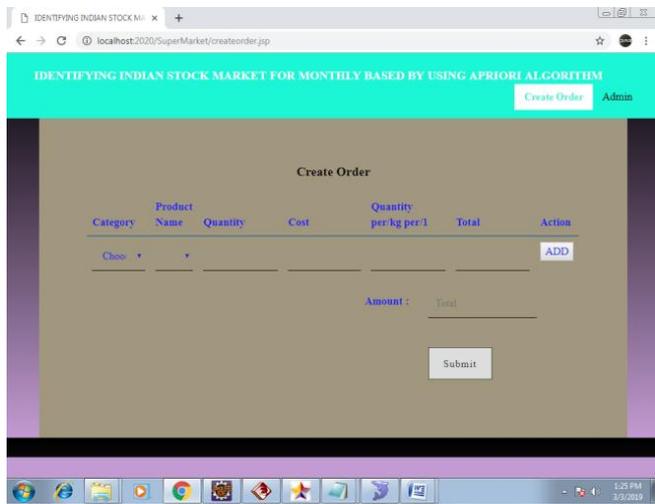
B. Admin login page



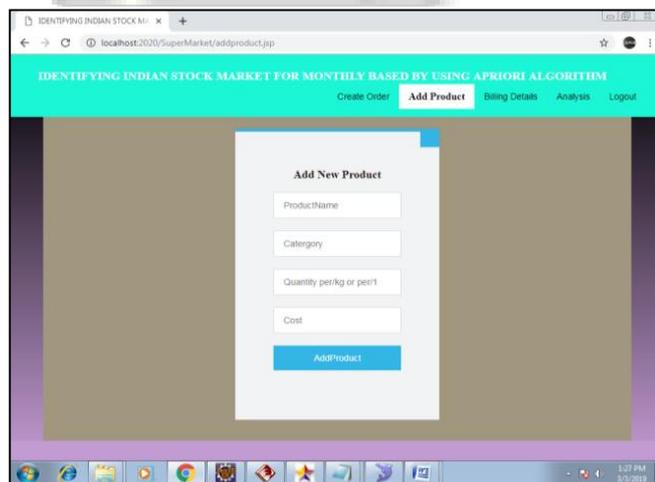
C. Admin home



D. Create order



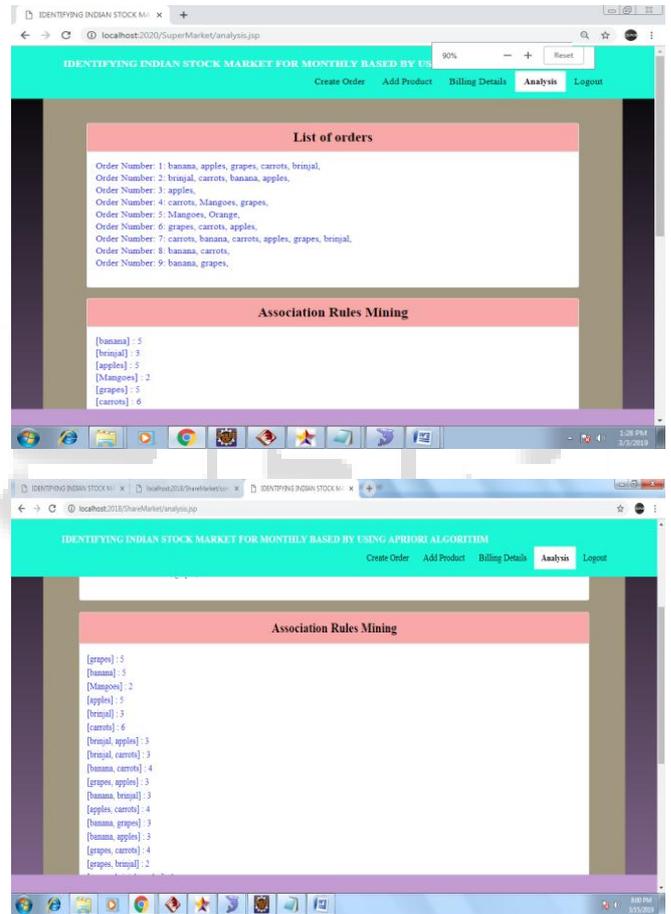
E. Add product



F. Billing details:



G. Analysis



V. CONCLUSION & FUTURE SCOPE

On ensuing evaluation we discover that segment primarily based method as a promising one for getting rid of some association tenets of prescient nature from Indian Stock Market which could be utilized for forecast or proposals in Stock changing ranges and bundles. We completed two wonderful techniques on our dataset; characterization used to fabricate a forecast version and affiliation guidelines were applied to discover captivating shrouded records with regards to the Stock Market facts. In the following year, the Apriori calculation became proposed, which enhances the execution from AIS by using diminishing the quantity of superfluous

competition. Additionally, an OCD calculation with a comparative methodology was proposed by means of Hipp et al. (2000) concurrently.

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