A FAKE PRODUCT REVIEW

PROJECT REPORT

submitted by

ATHIRA JAYAN

SIT20CSCS01

to

the APJ Abdul Kalam Technological University

in partial fulfilment of the requirements for the award of the Degree of

Master of Technology In

Computer and Information Science

Department of Computer Science and Engineering

Sarabhai Institute of Science & Technology Vellanad

JUNE 2022

DECLARATION

I undersigned hereby declare that the project report “Fake Product Review”, submitted for partial fulfilment of the requirements for the award of degree of Master of Technology of the APJ Abdul Kalam Technological University, Kerala is a bona fide work done by me under supervision of **AKHILA VIJAY** This submission represents my ideas in my own words and where ideas or words of others have been included; I have adequately and accurately cited and referenced the original sources. I also declare that I have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in my submission. I understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree, diploma or similar title of any other University.

Place: Trivandrum

Date:

Signature

Athira Jayan

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING SARABHAI INSTITUTE OF SCIENCE &TECHNOLOGY, VELLANAD

CERTIFICATE

This is to certify that the report entitled, "**Fake Product Review**", submitted by **Athira Jayan [SIT20CSCS01]** to the APJ Abdul Kalam Technological University in partial fulfilment of the requirements for the award of the Degree of Master of Technology in Computer and Information Science is a bona fide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

Internal Supervisor External Supervisor

PG Coordinator External Examiner HEAD OF THE DEPT

ACKNOWLEDGENT

First of all let me thank the **God** almighty, who always showers his blessings upon me. The completion of any inter-disciplinary project depends upon cooperation, co-ordination and combined efforts of several sources of knowledge.

I am grateful to **Dr. Gouri. M. S** and **Ms. Akhila Vijay** for their even willingness to give valuable advice and direction, whenever I approached them with a problem. I am thankful to them for providing immense guidance for this project.

I am also thankful to **Dr. C. G. Sukumaran Nair**, HOD, Department of Computer Science and Engineering, Sarabhai Institute of Science and Technology, for his immense guidance. I am also thankful to all other faculties of the department of Computer Science and Engineering, for their support and guidance.

At last but not least, I thank my parents, friends and well-wishers who constantly motivate me and support me throughout my life.

ABSTRACT

I am proposing solution for avoiding fake product review by implementing a monitoring system to find out fake review posted by the user. It will be detected by the system and will listed to admin provision, admin can cross check the detection and can take actions like remove review, block user, etc. Those review rare detected by the system using provided data of that review such like IP address, user purchase history, time etc. those data are taken in account of find the fake reviews posted by user. We are implementing this concept in online shopping side such like amazon, where provides can sell their product through this online platform. Most off the buyers consider previous review before purchasing such product. So implementing such review monitoring system help the user to have better experience with this online selling platform. Our system use AES algorithm for users account security and also filtering technology used to file products as name / price wise.

The final report to the implementation phase includes procedural charts record layout and a workable plan for implementing the candidate system. Conversion is one aspect of implementation. Several procedures are unique to the implementation phase. System Maintenance is the most costly process in the development of software. It is necessary to eliminate the errors in the system during its working life and to tune the system to tune the system to any variation in its working environment. The key software maintenance issues are both managerial and technical. The key management issues are: alignment with customer priorities, staffing which organization does maintenance, estimating costs. Key technical issues are: limited understanding, impact analysis, testing, and maintainability measurement. Best and worst practices in software maintenance because maintenance of aging legacy software is very labor intensive it is quite important to explore the best and most cost effective methods available for dealing with the millions of applications. Modules are designed to be highly flexible so that any failure requirements can be easily added to the modules without facing many problems.

As most of the people require review about a product before spending their money on the product. So people come across various reviews in the website but there views are genuine or fake is not identified by the user. In some review websites some good reviews are added by the product company people itself in order to make product famous this people belong to Social Media Optimization team. They give good reviews

for many different products manufactured by their own firm. User will not be able to find out whether the review is genuine or fake. To find out fake review in the website this “Fake Product Review Monitoring and Removal for Genuine Online Product Reviews” system is introduced. This system will find out fake reviews made by the social media optimization team by identifying the IP address. User will login to the system using his user id and password and will view various products and will give review about the product. To find out the review is fake or genuine, system will find out the IP address of the user if the system observe fake review send by the same IP Address many at times it will inform the admin to remove that review from the system. This system uses data mining methodology. This system helps the user to find out correct review of the product.

LIST OF FIGURES

ABREVATIOS

AES	Advanced Encryption System
DES	Data Encryption Standard
OOV	Out of Vocabulary
OTP	One Time Password
PHP	Preprocessor Hypertext
PIN	Personal Identification Number
SMS	Short Message Service
SV	Step Verification

NOTATION

R	Round
K	Key
F	Fail
T	True

CONTENTS

CHAPTER 1
INTRODUCTION

1.1 Objective of the project

As most of the people require review about a product before spending their money on the product. So people come across various reviews in the website but these reviews are genuine or fake is not identified by the user. In some review websites some good reviews are added by the product company people itself in order to make product famous this people belong to Social Media Optimization team. They give good reviews for many different products manufactured by their own firm. User will not be able to find out whether the review is genuine or fake. To find out fake review in the website this “Fake product detection” system is introduced. This system will find out fake reviews made by the social media optimization team by identifying the IP address. User will login to the system using his user id and password and will view various products and will give review about the product. To find out the review is fake or genuine, system will find out the IP address of the user if the system observe fake review send by the same IP Address many at times it will inform the admin to remove that review from the system. This system uses data mining methodology. This system helps the user to find out correct review of the product. We are proposing solution for avoiding fake product review by implementing a monitoring system to find out fake review posted by the user. it will be detect by the system and will listed to admin provision, admin can cross check the detection and can take actions like remove review, block user, etc. Those review rare detected by the system using provided data of that review such like IP address, user purchase history, time etc. those data are take in account of find the fake reviews posted by user. We are implementing this concept in online shopping side such like amazon; where provides can sell their product through this online platform. Most off the buyers consider previous review before purchasing such product.so implementing such review monitoring system help the user to have better experience with this online selling platform. Our system use AES algorithm for users account security and also filtering technology used to file products as name / price wise.

Online markets have from their first days struggled to deal with malicious actors. These include consumer scams, piracy, counterfeit products, malware, viruses, and spam. And yet online platforms have become some of the world's largest companies in part by effectively limiting these practices and earning consumer trust. The economics of platforms suggest a difficult trade-off between opening the platform to outside actors such as third-party sellers and retaining strict control over actions taken on the platform. Preventing fraudulent or manipulative actions is key to this trade-off.

One such practice is manipulating reputation systems with fake product reviews. Conventional wisdom holds that fake reviews are particularly harmful because they inject noise and deception into systems designed to alleviate asymmetric information, cause consumers to purchase products that may be of low quality, and erode the long-term trust in the review platforms that is crucial for online markets to flourish (Cabral and Hortacsu, 2010; Einav et al., 2016; Tadelis, 2016).

We study the economics of rating manipulation and its effect on seller outcomes, consumer welfare, and platform value. Despite being illegal, we document the existence of large and active online markets for fake reviews. Sellers post in private online groups to promote their products and pay customers to purchase them and leave positive reviews. These groups exist for many online retailers, including Walmart and Wayfair, but we focus on Amazon because it is the largest and most developed market. We collect data from this market by sending research assistants into these groups to document which products are buying fake reviews and when. We then track these products' outcomes on Amazon.com, including their reviews, ratings, prices, and sales rank. This is the first data of this kind, providing direct evidence on the fake reviews themselves and on the outcomes from buying fake reviews.

The mere existence of such a large and public market for fake reviews on the largest e-commerce platform presents a puzzle. Given the potential reputation costs, why does Amazon allow this? In the short run, platforms may benefit from allowing fake positive reviews if these reviews increase revenue by generating sales or allowing for higher prices. Itis also possible that fraudulent reviews are not misleading on average if high-quality firms are more likely to purchase them than low-quality firms. They could be an efficient way for sellers to solve the "cold-start" problem and establish a good reputation. Indeed, Dellarocas (2006) shows that this is a potential

equilibrium outcome. In an extension of the signal jamming literature on how firms can manipulate strategic variables to distort beliefs, he shows that fake reviews are mainly purchased by high-quality sellers and, therefore, increase market information under the condition that demand increases convexly with respect to user rating. Given how ratings influence search results, it is plausible that this condition holds. Other attempts to model fake reviews have also concluded that they may benefit consumers and markets.4 The mechanism is different, but intuitively this outcome is similar to signalling models of advertising for experience goods. Nelson (1970) and later Milgrom and Roberts (1986) show that separating equilibria exist where higher quality firms are more likely to advertise because the returns from doing so are higher for them. This is because they expect repeat business or positive word-of-mouth once consumers have discovered their true quality. If fake reviews generate sales which, in turn, generate future organic ratings, a similar dynamic could play out. In this case, fake reviews may be seen as harmless substitutes for advertising rather than as malicious. Therefore, we are left with an empirical question as to whether or not to view rating manipulation as representing a significant threat to consumer welfare and platform reputations.

Research objective is to answer a set of currently unsettled questions about online rating manipulation. How does this market work, in particular, what are the costs and benefits to sellers from buying fake reviews? What types of products buy fake reviews? How effective are they at increasing sales? Does rating manipulation ultimately harm consumers or are they mainly used by high quality products? That is, should they be seen more like advertising or outright fraud? Do fake reviews lead to a self-sustaining increase in sales and organic ratings? These questions can be directly answered using the unique nature of our data.

It construct a sample of approximately 1,500 products observed soliciting fake reviews over a nine-month period. We find a wide assortment of product types in many categories. Many products have a large number of reviews and few are new to Amazon. These products do not have especially low ratings, with an average rating slightly higher than comparable products we do not observe soliciting fake reviews. Almost none of the sellers purchasing reviews in these markets are well-known brands, consistent with research showing that online reviews are more effective and more important for small independent firms than for brand name firms (Hollenbeck, 2018).

Then track the outcomes of these products before and after the buying of fake reviews. In the weeks after they start to purchase fake reviews, the number of reviews posted per week roughly doubles. The average rating and share of five-star reviews also increase substantially, as do search position and sales rank. The increase in average ratings is short-lived, with ratings falling back to the previous level within two to four weeks, but the increase in the weekly number of reviews, sales rank, and position in search listings remains substantially higher more than four weeks later. We also track outcomes after the last observed post soliciting fake reviews and find that the increase in sales is not self-sustaining. Sales begin to fall significantly right after the fake review campaign ends. New products with few reviews, which might be using fake reviews efficiently to solve the cold-start problem, see a larger increase in sales initially but a similar drop-off afterward.

The document how the platform regulates fake reviews. We see that Amazon ultimately deletes a very large share of reviews. For the products in our data observed buying fake reviews, roughly half of their reviews are eventually deleted, but the deletions occur with an average lag of over 100 days, thus allowing sellers to benefit from the short-term boost in ratings, reviews, and sales.

Next, to understand how effective and profitable this practice is, we leverage review deletions to measure the causal effect of fake reviews on sales. Our previous results are descriptive, and the increase in sales we document could be attributed in part to factors other than fake reviews, include unobserved demand shocks, advertising, or price cuts. To isolate the effect of rating manipulation on sales, we take advantage of a short period in which Amazon mass deletes a large number of reviews. Products that purchased fake reviews just before this period do not receive the boost in positive reviews that other products buying fake reviews do, but they behave similarly otherwise, allowing us to use these products as a control group. Comparing outcomes across products, we find that rating manipulation causes a significant increase in sales.

Lastly, to the question of whether rating manipulation is efficient or it harms consumers. To do so, we study reviews and ratings posted after the fake review purchases end. If the products continue to receive high ratings from consumers, it suggests that fake reviews are more like advertising and are mainly bought by high-quality products, potentially solving the cold-start problem. If, by contrast, ratings fall and they receive many one-star ratings, it suggests that consumers felt they were

deceived into buying products whose true quality was lower than they expected at the time of purchase and, therefore, they overpaid or missed out on a higher quality alternative. While there is an inherent limitation in using ratings to infer welfare, we nevertheless find that the evidence primarily supports the consumer harm view. The share of reviews that are one-star increases by 70% after fake review purchases, relative to before. This pattern is especially true for new products and those with few reviews. Text analysis shows that these one-star reviews are distinctive and place a greater focus on product quality, further confirming that consumers were deceived.

Prior studies of fake reviews include Mayzlin et al. (2014), who argue that in the hotel industry, independent hotels with single-unit owners have a higher net gain from manipulating reviews. They then compare the distribution of reviews for these hotels on Expedia and TripAdvisor and find evidence consistent with review manipulation. Luca and Zervas (2016) use Yelp's review filtering algorithm as a proxy for fake reviews and find that these reviews are more common on pages for firms with low ratings, independent restaurants, and restaurants with more close competitors. Using lab experiments, Ananthakrishnan et al. (2020) show that a policy of flagging fake reviews but leaving them posted can increase consumer trust in a platform.

It contribute to this literature by documenting the actual market where fake reviews are purchased and the sellers participating in this market. This data gives us a direct look at rating manipulation, rather than merely inferring its existence. Our data on firm outcomes before and after rating manipulation allow us to understand the short- and long-term effectiveness of rating manipulation and assess whether and when consumers are harmed by them.

This research also contributes to the broader academic study of online reviews and reputation. By now, it is well understood that online reviews affect firm outcomes and improve the functioning of online markets (see Tadelis (2016) for a review). There is also a growing body of research showing that firms take actions to respond to online reviews, including by leaving responses directly on review sites (Proserpio and Zervas, 2016) and changing their advertising strategy (Hollenbeck et al., 2019). A difficult tension has always existed in the literature on online reviews, coming from the fact that the reviews and ratings being studied may be manipulated by sellers. By documenting the types of sellers purchasing fake reviews and the size and timing of their effects on

ratings and reviews, we provide guidance to future researchers on how to determine whether review manipulation is likely in their setting.

1.2 System works as follows: -

- Admin will approve providers and users to the system.
- Admin will delete the review which is fake.
- User once access the system, user can view product and can post review about the product.
- System will track the IP address of the user.

If the system observes fake review coming from same IP address many times this IP address will be tracked by the system and admin remove this review from the system.

CHAPTER 2
LITERATURE SURVEY

[2.1]. Fake Product Detection Using Block chain Technology in IEE International Conference on Block chain Technology

(Tejaswini Tambe, Sonali Chitalkar (2021))

Blockchain technology is used to identification of real products and detects fake products. Blockchain technology is the distributed, decentralized, and digital ledger that stores transactional information in the form of blocks in many databases which is connected with the chains. Blockchain technology is secure technology therefore any block cannot be changed or hacked. By using Blockchain technology, customers or users do not need to rely on third-party users for confirmation of product safety. In this project, with emerging trends in mobile and wireless technology, Quick Response (QR) codes provide a robust technique to fight the practice. Counterfeit products are detected using a QR code scanner, where a QR code of the product is linked to a Blockchain. So this system may be used to store product details and generated unique code of that product as blocks in the database.

[2.1.1] Merits

The system and the data are highly resistant to technical failures and malicious attacks

[2.1.2] Demerits

Once data has been added to the block chain it is very difficult to modify it.

[2.2] Fake News Detection in IEEE International Conference on Machine Learning

(Rohan Vats(2020))

With the current usage of social media platforms, consumers are creating and sharing more information than ever before, some of which are misleading with no relevance to reality. classification of a text article as misinformation or disinformation is a challenging task. Even an expert in a particular domain has to explore multiple aspects before giving a verdict on the truthfulness of an article. In this work, we propose to use machine learning ensemble approach for automated classification of news articles. Our study explores different textual properties that can be used to

distinguish fake contents from real. By using those properties, we train a combination of different machine learning algorithms using various ensemble methods and evaluate their performance on 4 real world datasets.

[2.2.1] Merits

It makes no assumptions about distributions of classes in feature space

[2.2.2] Demerits

It constructs linear boundaries.

[2.3] Fake Review Detection from a Product Review in IEEE International Conference on Iterative Computation Framework

(Eka Dyar Wahyuni(2016))

The rapid growth of the Internet influenced many of our daily activities. One of the very rapid growth area is ecommerce. Generally, e-commerce provide facility for customers to write reviews related with its service. The existence of these reviews can be used as a source of information. For examples, companies can use it to make design decisions of their products or services, while potential customers can use it to decide either to buy or to use a product. Unfortunately, the importance of the review is misused by certain parties who tried to create fake reviews, both aimed at raising the popularity or to discredit the product. This research aims to detect fake reviews for a product by using the text and rating property from a review. In short, the proposed system (ICF++) will measure the honesty value of a review, the trustiness value of the reviewers and the reliability value of a product.

[2.3.1] Merits

The proposed system (ICF++) will measure the honesty value of a review, the trustiness value of reviewers and the reliability value of a product

[2.3.2] Demerits

Complexity is high

[2.4] Fake Product Review Monitoring And Removal For Genuine Online Product Reviews in IEEE International Conference on Opinion Mining

(Eduard Daoude(2020))

To find out fake review in the website this “Fake Product Review Monitoring and Removal for Genuine Online Product Reviews Using Opinion Mining” system is introduced. This system will find out fake reviews made by posting fake comments about a product by identifying the IP address along with review posting patterns.

User will login to the system using his user id and password and will view various products and will give review about the product.

[2.4.1] Merits

User can post their own review about the product.

[2.4.2] Demerits

If the social media optimization team uses different IP address to send the review, system will fail to track the fake review.

[2.5]. Improving Fake product Detection Using AI- Technology in IEEE International Conference on Artificial intelligent

(Hung Nguyen (2020))

In this paper, we research the possibility to reduce counterfeit products using machine learning-based technology.

Image and text recognition and classification based on machine learning have the potential to be a key technology in the fight against counterfeiting. The automatic image and text recognition and the classification of product information enable end customers to detect counterfeits precisely and quickly by checking them against trained models. The goal of this paper is to create an easy to use applications in which the end-user identifies the counterfeit product and contribute to the fight against product piracy.

[2.5.1] Merits

The main focus is on which implementations have a positive impact on anti-counterfeiting of products

[**2.5.2] Demerits**

The amount of needed data to combat on products is huge.

[2.6]. Fake Review Detection in IEEE International Conference on Machine Learning

(**Dr. Animesh Mukherjee(2016))**

As writing fake reviews comes with money gain, there has been a huge increase in misleading opinion on particular product reviews on their websites. Misleading review is an dangerous review. Giving positive reviews to target the customers that attract customers and gain increase in sales. There as negative review of a product could cause lesser demand of that product which may reduce its sales. These misleading reviews are dangerous to a product reputation. Here by making use of Machine Learning Algorithm. Such as SVM, which is a Supervised Learning algorithm.

We have predicted the review .i.e. a review is fake or not.

[2.6.1] Merits

It makes no assumptions about reviews

[2.6.2] Demerits

Computation time is vast

[2.7]. Fake Product Detection with Sentiment Analysis in IEEE International Conference on Sentiment Analysis

(S.V.Ram(2019))

Opinion mining has become very important with the increase of E-commerce websites and gives clear bifurcation to customers about the product reviews and service reviews. Sentiment analysis helps computer to extract emotions from customer's reviews further helping users in decision making process while shopping.

Naive Bayes, a machine learning algorithm will be used for sentiment analysis and fake review detection along with other methods. In this paper we propose a system which improves users shopping experience by recognizing emotions behind the reviews and detecting fake or false reviews posted by opponent with wrong intentions

[2.7.1] Merits

Remove duplicate characters and typos since data cleaning is vital to get the best results

[2.7.2] Demerits

Complexity is high

CHAPTER 3
SYSTEM ANALYSIS & SOFTWARE REQUIREMENT SPECIFICATION

System requirement is the process of gathering and interpreting facts, diagnosing the problems and using the information to recommended improvements on the system. System requirement is a problem-solving activity that requires intensive communication system user and system developer. In system analysis the system is studied to the fundamental detail and analyzed. The system analyst plays the role of an interrogator and dills deep into the working of the present system. The system is viewed as a whole and the inputs to the system are identified. The outputs from the organization are traced through various phases of the processing of inputs.

A detailed study of these processes must be made by the various techniques like interviews, questionnaires etc. The data collected by these sources must be scrutinized to arrive to a conclusion. The conclusion is an understanding of how the system functions. The system is called existing system. The existing system is subjected to close study and the problem areas are identified. The designer now functions as a problem solver and tries to sort out the difficulties. The solutions are given as proposals, which is the proposed system. The proposal is then compared to the existing system. The proposal is presented to the user for an endorsement. The proposal is viewed on user request and suitable changes are made. This loop then ends as soon as the user is satisfied with the proposal.

3.1 FEASIBLITY STUDY

Feasibility study is done in my software development as a part of preliminary investigation. Specific method used by the analysis for collecting data about requirements and fact-finding techniques. These include record review, observations, interview and questionnaires. When the request is made, the first system activity, the preliminary investigation begins. This activity has 3 steps among them feasibility study is important. Feasibility study is an important outcome of the preliminary investigation and is the determination that the system request is feasible. And my software **Forged Review Monitoring for Genuine Online Products** satisfies the different types of the feasibility studies. They are listed below: The study done in three phases

1. Operational feasibility
2. Technical feasibility
3. Economical feasibility

3.1.1 Operational Feasibility

Proposed systems are beneficial only if they can be turned into information systems. That is it will meet the organizations operating requirements and also checks that whether the system will work when it is developed and installed.

The software Forged Review Monitoring for Genuine Online Products using Opinion Mining software supports the operational feasibility to a great extends. The performance of this software is more accurate, more user friendly, effective, error free.

3.1.2 Technical Feasibility

This is related to the technicality of the project. This evaluation determines whether the technology needed for the proposed system is available or not. It deals with hardware as well as software requirements. That is, type of hardware, software and the methods required for running the systems are analyzed. This involves financial consideration to accommodate technical enhancement. If the budget is a serious constraint, then the project is judged not feasible.

The software Forged Review Monitoring for Genuine Online Products software supports the technical feasibility to a great extends. That is, this software can be operated with the minimum technical support. It uses PHP as front end, MYSQL as database at windows platform and Mozilla Firefox and Google Chrome as browser. And also it provides accuracy, reliability, ease of access and data security.

3.1.3 Economical Feasibility

Economic analysis is the most frequently used for evaluating the effectiveness of a proposed system. More commonly known as cost/benefit analysis: the procedure is to determine the benefits and saving that are expected from a proposed system and compare them with cost. If benefits outweigh cost, a decision is taken to design and implement the system. Otherwise, further justification or alternative in the proposed system will have to be made if it is to have a chance of being approved. This is an ongoing effort that improves accuracy at each phase of the system life cycle.

Hence the engineer will not find any difficulty at the installation time and after installation user also never find difficulty i.e. hang, slow speed or slow response time.

One project is compulsory for each student this project is either dummy or lives. If I am

developing a live project then it gives a lot of confidence. It is better for me and for company because, I am developing a system without any money. So everything is in favor now, I can say the cost of this software is I think negligible. Hence the economical feasibility is very good.

3.2 SOFTWARE ENGINEERING AND ENVIRONMENT

Software Engineering and Environmentis the part of the project which gives the details about the hardware and software requirements of our project. It also details the features of the programming language used. This is the set of activities that lead to the production of requirements definition and requirement specification. In requirement engineering first of all feasibility study, in this study we try to find out the need and requirements of the customer. They are satisfied with our product and also happy with our proposed system. We include the personnel assignments, costs, project schedule, and target date. This helps us to go ahead with our project.

3.2.1 Hardware Requirements

Processor	:	Intel core i3 processor
RAM	:	2GB
Monitor	:	Any Android Monitor
Hard Disk Drive	:	500 GB
Keyboard	:	110 Logitech multimedia keyboards
Mouse	:	PS/2 Logitech Scroll Mouse
Cell Phone	:	Any Android phones

3.2.2 Software Specification

Operating System	:	WINDOWS 7 and above
Front End	:	PHP
Back End	:	MySQL Server

3.3 SOFTWARE REQUIREMENTS

The system should be compatible enough to hold the general traffic. It should not get hang or show some other problems arising out due to large no of concurrent users. The system should be fast enough to meet the users. An uninterrupted transaction must be performed.

Security

The system must be fully accessible to only authentic user such us doctors. It should require a valid user name and password for the entry which is early approved by the administrator.

Reliability

The application should be highly reliable and it should generate all information that are required for the alumni as well as admin.

Availability

Any information about system should be quickly available from any computer to the authorized user.

Maintainability

The application should be maintainable in such a manner that if any new requirement occurs then it should be easily implemented in the system.

Portability

The application should be portable on any windows-based system. It should not be machine specific.

3.3.1 Overview of PHP:

PHP is a popular general-purpose scripting language that is especially suited to web development. It was originally created by Danish-Canadian programmer Rasmus Lerdorf in 1994; the PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive initialism PHP: Hypertext Preprocessor.

PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of a HTTP response. Various web template systems, web content management systems, and web frameworks exist which can be employed to orchestrate

or facilitate the generation of that response. Additionally, PHP can be used for many programming tasks outside of the web context, such as standalone graphical applications and robotic drone control. Arbitrary PHP code can also be interpreted and executed via command-line interface (CLI).

The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers on almost every operating system and platform, free of charge.

The PHP language evolved without a written formal specification or standard until 2014, with the original implementation acting as the de facto standard which other implementations aimed to follow. Since 2014, work has gone on to create a formal PHP specification.

3.3.2 HTML (Hyper Text Markup Language)

It is a language used for the specification of structural markup. HTML give the web authors the means to publish online documents with headings, texts, tables, lists, photos etc. HTML is used in our program to create forms in the server side for entering, updating and viewing the server applications in a user friendly environment.

3.4 DATA FLOWDIAGRAM

Data Flow Diagram (DFD) is an important tool used by system analyst. DFD provide an overview of what data a system would process, What transformation of data are done, what files are used and where the results flow. The graphical representation of the system makes it a good communication tool between the user and the analyst.

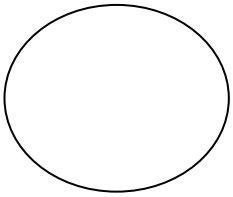
Analysis model help us to understand the relationship between different components in the design. Analysis model shows the user clearly how a system will function. This is the first technical representation of the system.

The analysis modeling must achieve three primary objectives

- To establish a basis for creation of software design
- To describe what the user requires
- To define set of requirements that can be validated once the software us build

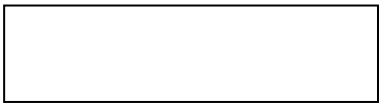
A data flow diagram is a graphical technique that depicts information flow and transforms that are applied as data move from input to output. The DFD is used to represent increasing information flow and functional details. A level 0 DFD also called fundamental system model represents the entire software elements as single bubble with input and output indicated by incoming and outgoing arrow respectively.

Components of Data Flow Diagram



Function

File/Database



Input/Output

Flow

Context Level

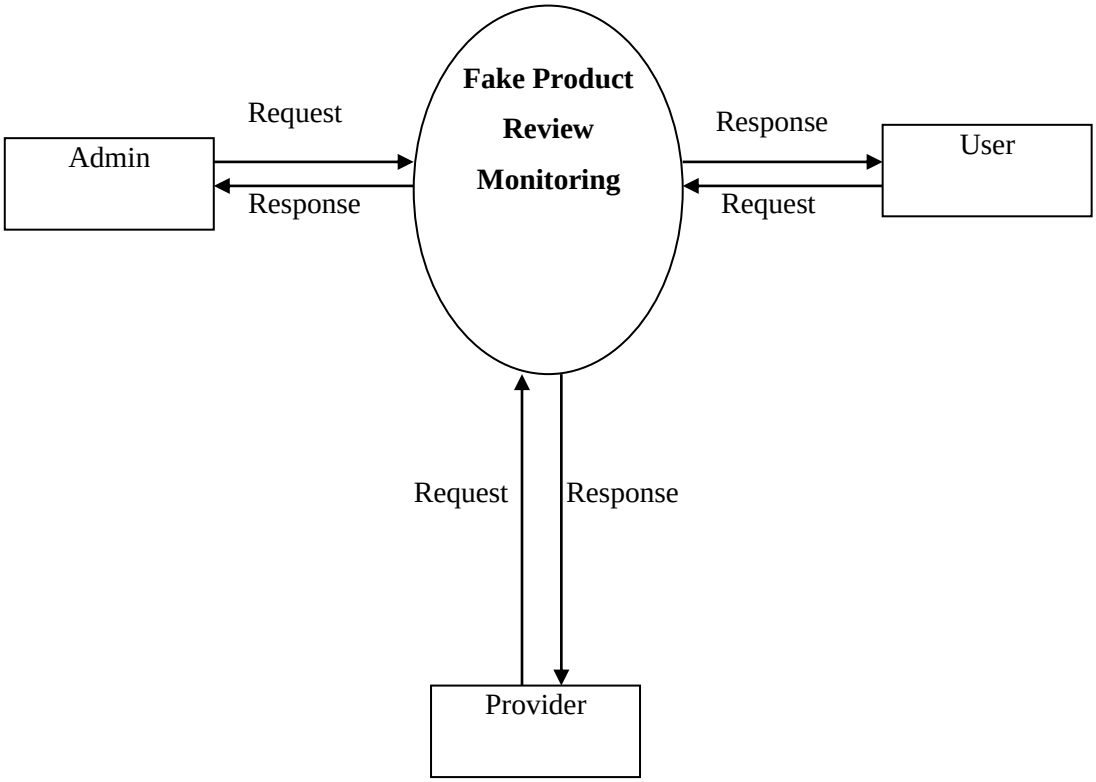


Fig 3.1 Context level Diagram

Level 1

Admin

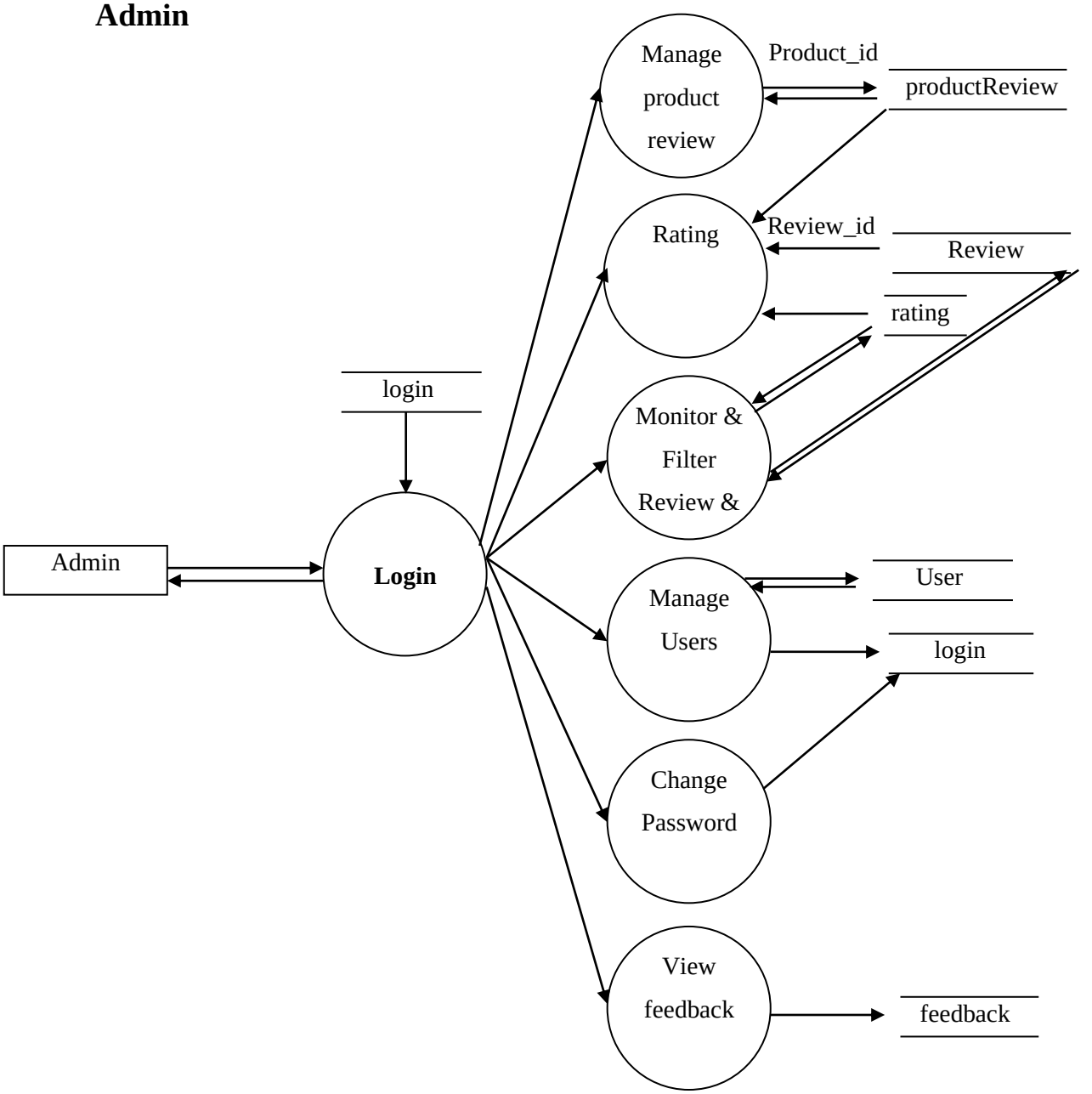


Fig 3.2 Admin level1

Level 1

User

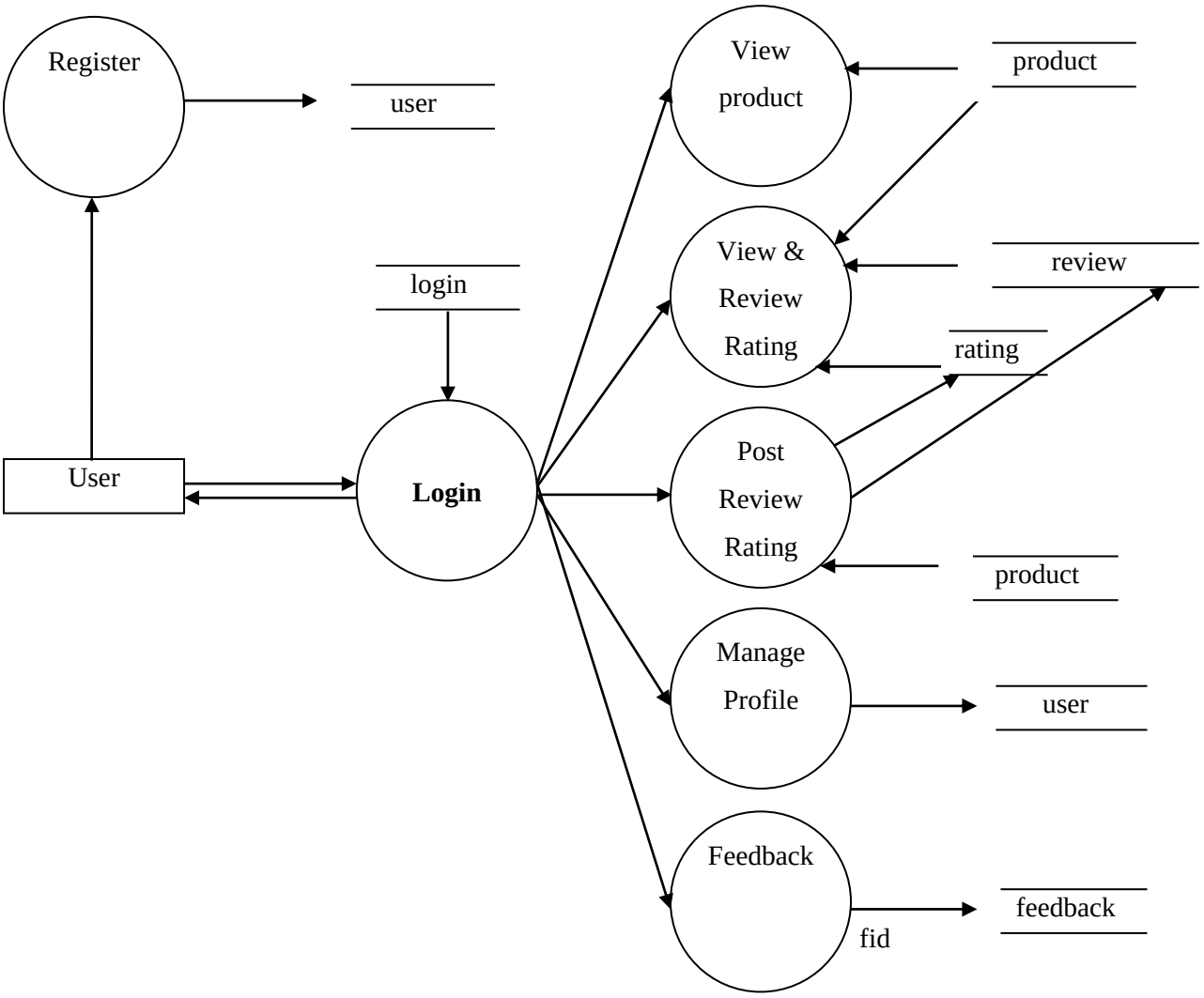


Fig 3.3 User level1

Level 1

Provider

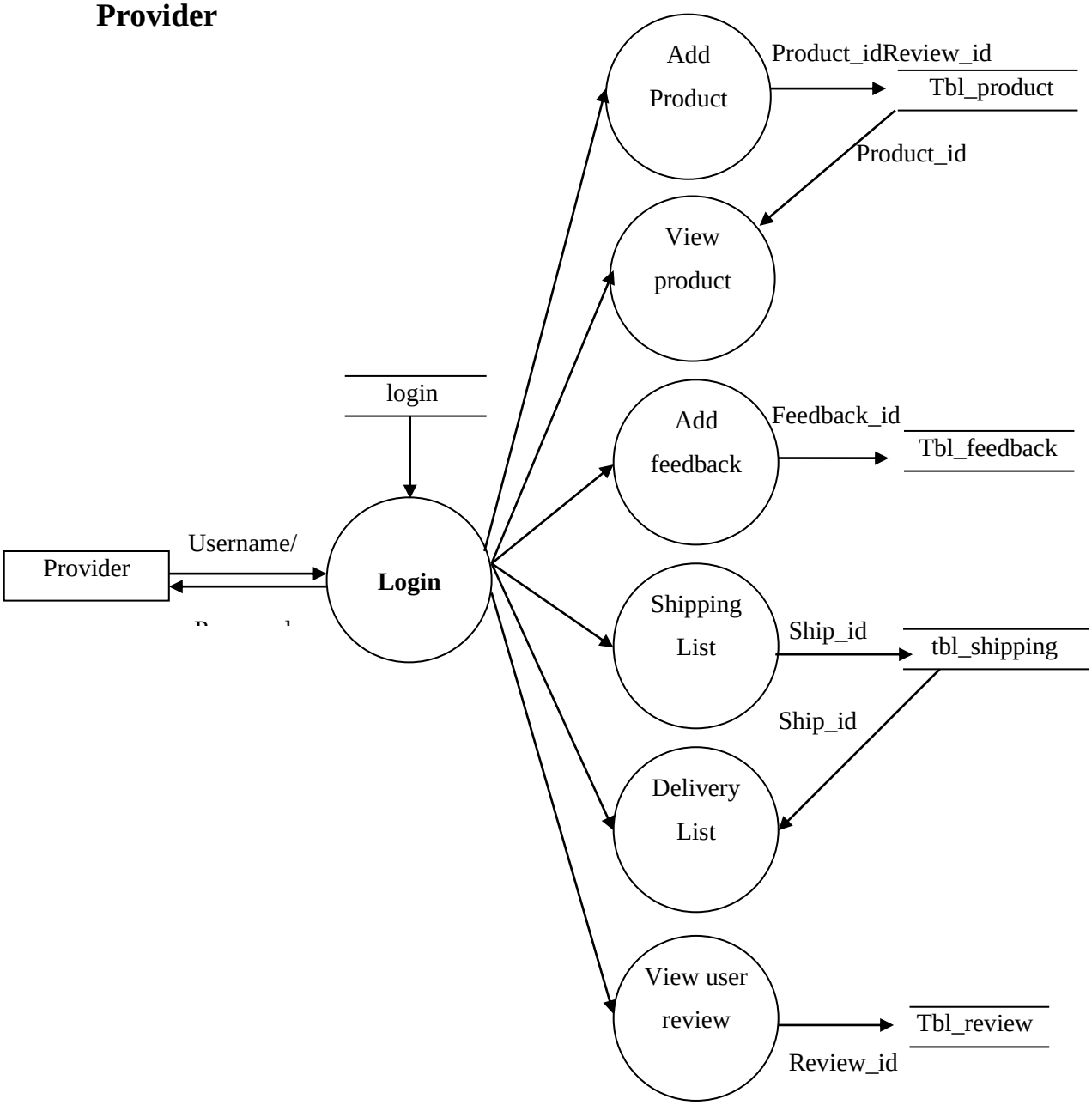
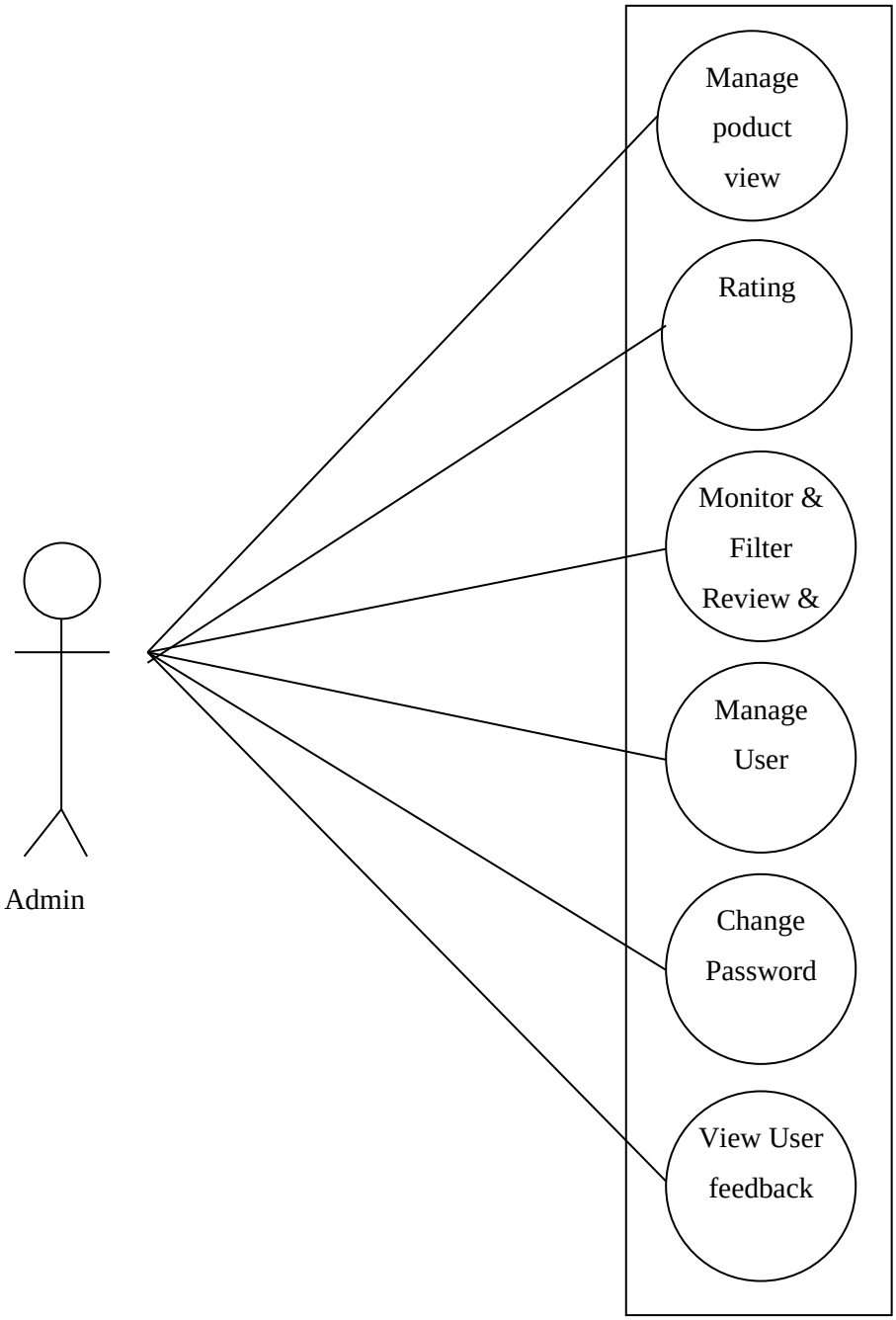


Fig 3.4 provider level1

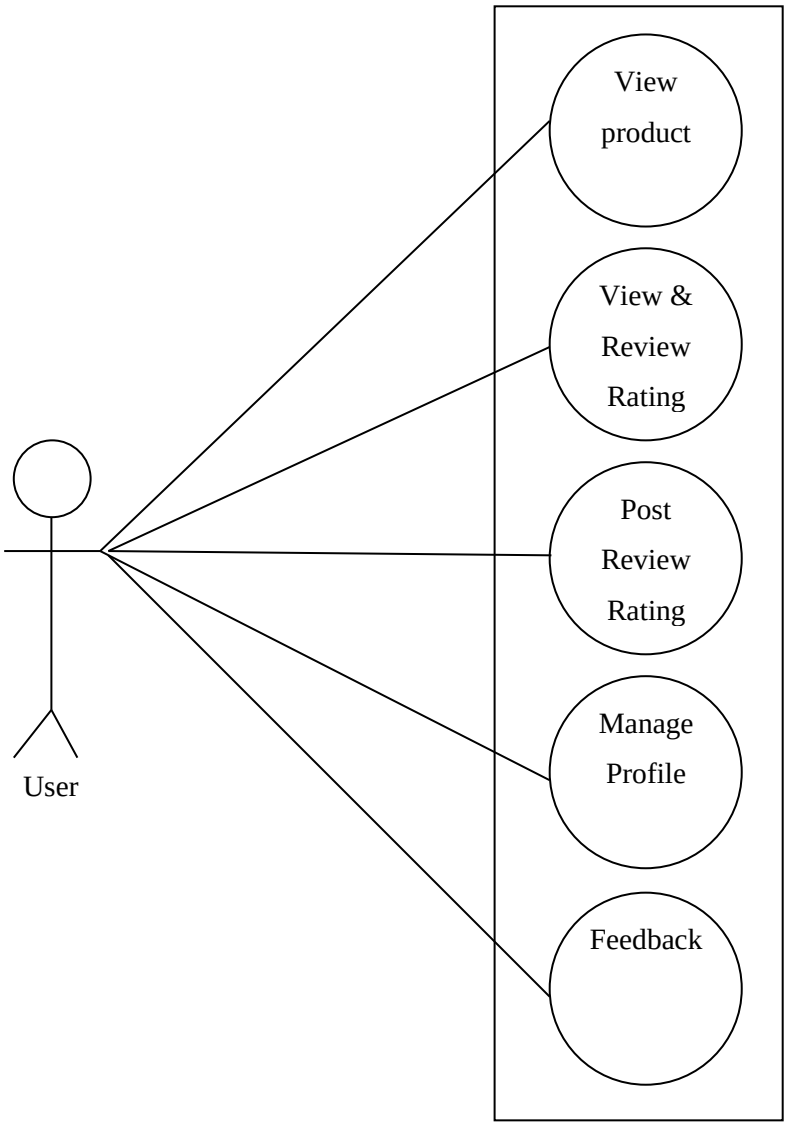
Use Case Diagram

Admin



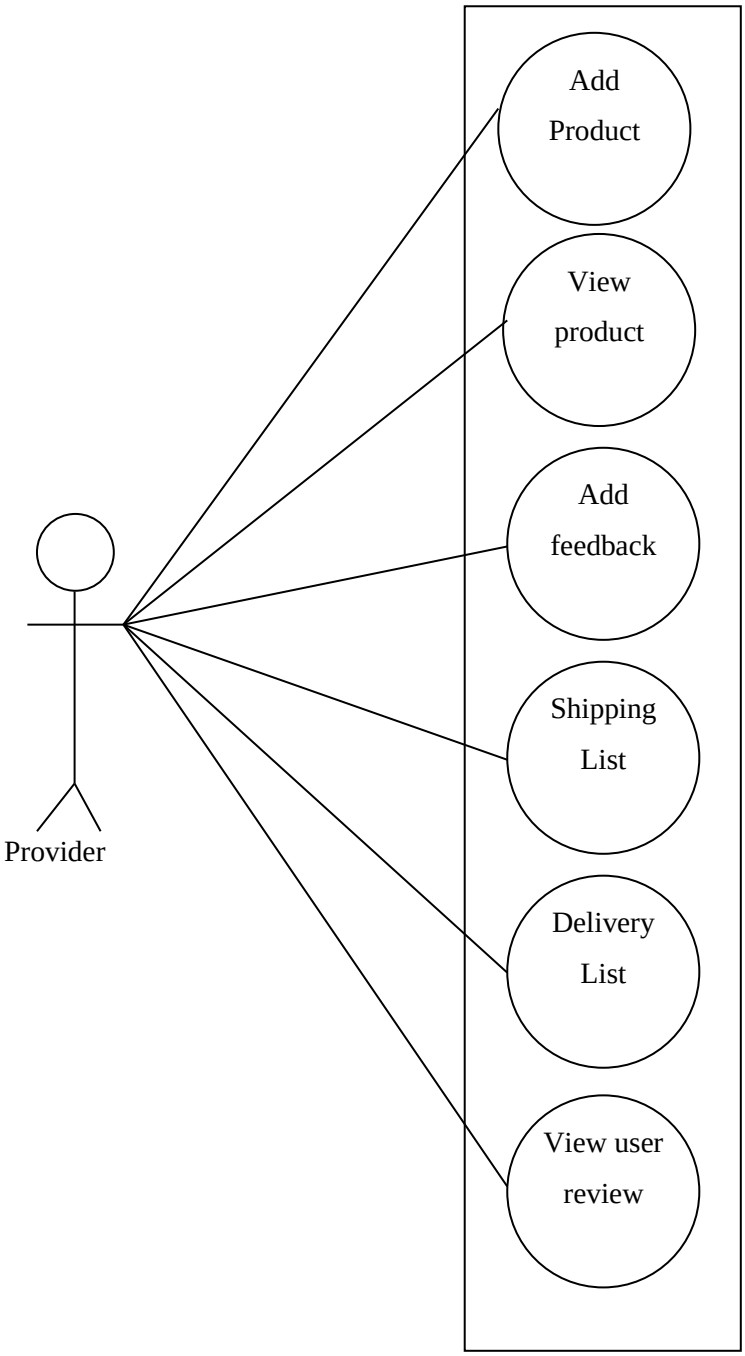
3.5 UML Diagram

User Level



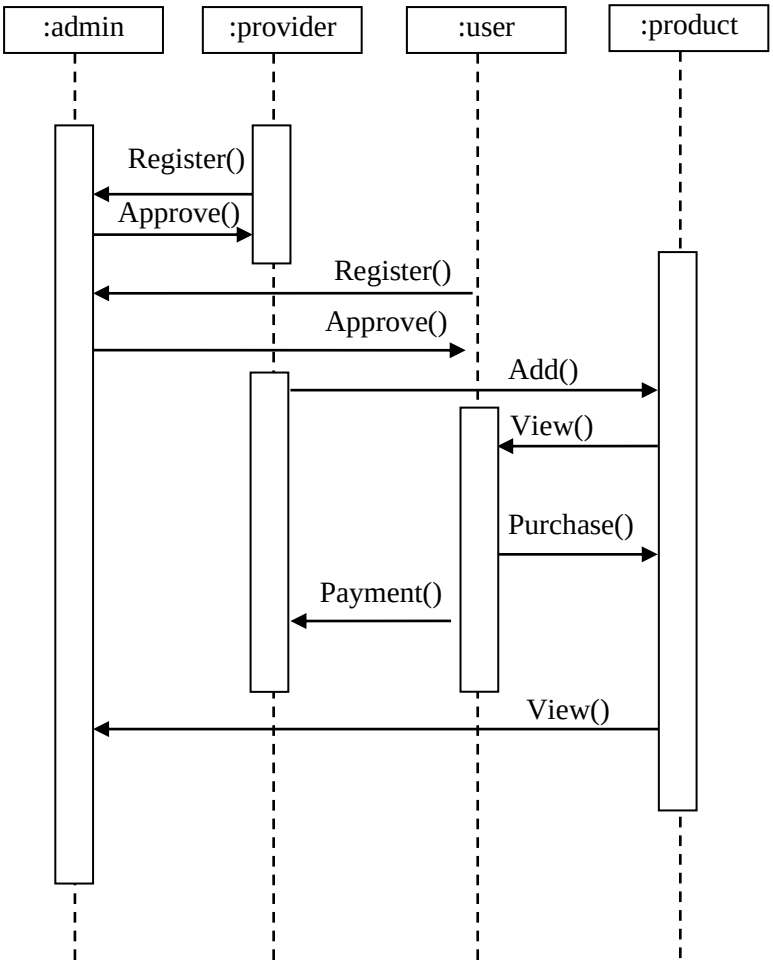
3.5 User Level

Provider Level



3.6 provider level 2

SEQUENCE DIAGRAM



3.7 sequence diagram

CHAPTER 4
SYSTEM DESIGN

4.1 MODULES DESCRIPTION

4..1.1Module 1

Admin Login: Admin login to the system using his admin ID and password.

- Approve user and provider:
- Admin will approve providers and users to the system.
- Delete Review:
- Admin will remove the review which tracked by the system as fake.

4.1.2 Module 2

User Login: User will login to the system using his user ID and password.

- View product:
- User will view product.
- Post Review:
- User can post review about the product.
- Purchase and payment:
- User can make purchase and make payment.

4.1..3 Module 3

Provider

This user is other end user who can login to the system using his user id and password.

- Add product
- Add feedback

4.2 DATA BASE DESIGN

Database Management System allows data to be protected and organized separately from other resources. Database is an integrated collection of data. This is the difference between logical and physical data.

Database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and effectively. The general objective is to make information

access easy, quick, inexpensive and flexible for users. The database approach to system design places greater emphasis on the integration, integrity and independence of data.

The database design directly affects the performance of the software application. The database is normalized so as to avoid redundant data. Normalization reduces the wastage of valuable memory space. The database for this project has been created with at most care so as to follow the principles of normalization. The achievements from such a normalized database helped to

- Control redundancy
- Data independency
- Ease of learning and use
- More information at low cost
- Accuracy and integrity, recovery and failure

The aim of database design is to create a group of relation schemas that symbolize the real-world situation that is being modelled. Normalization is the main concept of database that identifies relational schemas based upon their primary or candidate keys and the functional dependencies that exist among their attributes. Normalization is the process of decomposing tables with duplication or anomalies to produce smaller, well-structured relations. A fully normalized table should

- Avoid update, insert and delete anomalies
- Prevent unnecessary duplication and inconsistency of data
- Describe structure of relational tables
- Prevent information loss

The first 3 normal forms are as follows:

First Normal Form (1NF): A relation in first normal form only if it does not have any data aggregates or repeating groups.

Second Normal Form (2NF): Each non-key attribute is fully dependent functionality on the total candidate key and a relation is in 2NF if and only if it is in 1NF.

Third Normal Form (3NF): No non candidate keys must be functionally dependent on another non candidate key and a relation is in 3NF if and only if it is in 2NF.

Fourth Normal Form (4NF): Exist if and only if, for everyone of its non-trivial multi-valued dependencies X->Y is a super key.

Fifth Normal Form (5NF): Exist if an only if every non-trivial join dependency in it is implied by the candidate keys.

TABLE DESIGN

Table Name: tbl_cart

Field Name	Data Type	Constraints	Description
cart_id	int(11)	Primary Key	cart_id
cart_user_id	int(11)	Foreign Key	cart_user_id
cart_product_id	int(20)	Not Null	cart_product_id
cart_qty	varchar(11)	Not Null	cart_qty
cart_date	timestamp	Not Null	cart_date
cart_status	int(11)	Not Null	cart_status
cart_price	varchar(200)	Not Null	cart_price

Table Name: tbl_feedback

Field Name	Data Type	Constraints	Description
feed_id	int(11)	Primary Key	Feedback id
feedback	Text	Not Null	Feedback Details
Provider_id	varchar(20)	Foreign Key	Provider id
status	varchar(10)	Not Null	Status

Table Name: tbl_login

Field Name	Data Type	Constraints	Description
login_id	int(11)	Primary Key	Login id
username	varchar(40)	Not Null	username
password	varchar(30)	Not Null	password
role	int(11)	Not Null	role

Table Name: tbl_order

Field Name	Data Type	Constraints	Description
order_id	int(11)	Primary Key	Order id
order_user_id	int(11)	Foreign Key	Order user id
order_status	varchar(20)	Not Null	Order status
order_pay_method	varchar(15)	Not Null	Order pay method
order_amt_total	varchar(20)	Not Null	Order amount total

Table Name: tbl_spam

Field Name	Data Type	Constraints	Description
spam_id	int(11)	Primary Key	Spam id
spam_ip_address	varchar(25)	Not Null	Spam ip address
spam_review_id	int(11)	Foreign Key	Spam review id
spam_status	varchar(20)	Not Null	Spam status

Table Name: tbl_orderdetail

Field Name	Data Type	Constraints	Description
order_dtail_id	int(11)	Primary Key	Order details id
order_id	int(11)	Foreign Key	Order id
o_cart_id	int(11)	Foreign Key	Order cart id
o_product_id	int(11)	Foreign Key	Order product id
o_quantity	varchar(11)	Not Null	Order quantity
order_status	varchar(20)	Not Null	Order status
o_single_total	varchar(20)	Not Null	Order single total
o_provider_id	int(11)	Foreign Key	Order provider id

Table Name: tbl_payment

Field Name	Data Type	Constraints	Description
payment_id	int(11)	Primary Key	Payment id
pay_user_id	int(11)	Foreign Key	Payment user id
pay_order_id	int(11)	Foreign Key	payment order id
acc_name	varchar(50)	Not Null	account name
card_no	varchar(30)	Not Null	card no
exp_month	int(15)	Not Null	expiry month
exp_year	int(15)	Not Null	expiry year
pay_date	timestamp	Not Null	pay date

Table Name: tbl_product

Field Name	Data Type	Constraints	Description
Product_id	int(11)	Primary Key	Product id
Provider_id	varchar(40)	Foreign Key	Provider id
Product_name	varchar(100)	Not Null	Product name
Price	varchar(30)	Not Null	Price
Features	Text	Not Null	Features
Details	Text	Not Null	Details
Released_on	varchar(20)	Not Null	Released on
Status	varchar(15)	Not Null	Status
Avilablity	varchar(30)	Not Null	Availability
stock	varchar(30)	Not Null	stock
product_image	varchar(500)	Not Null	product image
product_category	varchar(25)	Not Null	product category

Table Name: tbl_provider

Field Name	Data Type	Constraints	Description
provider id	int(5)	Primary Key	provider id
Log id	int(5)	Foreign Key	Log id
Ownername	varchar(20)	Not Null	Owner name
Ownerphone no	varchar(12)	Not Null	Owner phone no
Company name	varchar(20)	Not Null	Company name
Company address	varchar(40)	Not Null	Company address
Company mail id	varchar(40)	Not Null	Company mail id
Company contact no	varchar(15)	Not Null	Company contact no
Company logo	varchar(500)	Not Null	Company logo
Status	varchar(10)	Not Null	status

Table Name: tbl review

Field Name	Data Type	Constraints	Description
review id	int(11)	Primary Key	Review id
review user id	int(11)	Foreign Key	Review user id
review product id	int(11)	Foreign Key	Review product id
review msg	text	Not Null	Review Message
date	varchar(100)	Not Null	Date
date after	varchar(100)	Not Null	Date after
ip address	varchar(150)	Not Null	Ip address
review status	varchar(20)	Not Null	Review status

Table Name: tbl shipping address

Field Name	Data Type	Constraints	Description
ship id	int(11)	Primary Key	Ship id
ship order id	int(11)	Foreign Key	Ship order id
ship user id	int(11)	Foreign Key	Ship user id
ship address	text	Not Null	Ship address
ship landmark	varchar(40)	Not Null	Ship land mark
ship street	varchar(40)	Not Null	Ship street

Table Name: tbl user reg

Field Name	Data Type	Constraints	Description
user reg id	int(11)	Primary Key	User Registration Id
user name	varchar(30)	Not Null	User name
user log id	int(11)	Foreign Key	User login id
user email	varchar(40)	Not Null	User email Id
user phone	varchar(15)	Not Null	User phone Number
user status	varchar(10)	Not Null	User status

CHAPTER 5
SYSTEM IMPLEMENTATION

5.1 IMPLEMENTATION

Implementation phase is the phase, which involves the process of converting a new system design into an operational one. It is the key stage in achieving a successful new system. Implementation is the stage if the project, where the theoretical design is turned into a working system. At this stage the main workload, the greatest up heal and the major impact on existing practices shift to user department. If the implementation stage is not planned and controllers carefully, it can cause chaos.

The implementation stage is a system project in its own right. It involves careful planning, investigation of the current system and its constraints on the implementation, design methods to achieve the changeover procedures, and evaluation of change over methods.

The implementation plan consists of the following steps

- Testing the developed system within the sample data
- Detection and correction of errors
- Making necessary changes in the system
- Training and involvement of user personnel
- Installation of software utilities

The implementation phase is less creative than system design. A system project may be dropped at any time prior to the implementation, although it becomes more difficult when it goes to the design phase. The final report to the implementation phase includes procedural charts record layout and a workable plan for implementing the candidate system. Implementation is used to the process of converting a new or revised system design into am operational one. Conversion is one aspect of implementation. Several procedures are unique to the implementation phase.

5.2 SYSTEM MAINTENANCE

Maintenance is the most costly process in the development of software. It is necessary to eliminate the errors in the system during its working life and to tune the system to tune the system to any variation in its working environment. The key software maintenance issues are both managerial and technical. The key management

issues are: alignment with customer priorities, staffing which organization does maintenance, estimating costs. Key technical issues are: limited understanding, impact analysis, testing, and maintainability measurement.

Best and worst practices in software maintenance because maintenance of aging legacy software is very labor intensive it is quite important to explore the best and most cost effective methods available for dealing with the millions of applications

There are three different types of software maintenance:

Corrective Maintenance

This is concerned with fixing reported errors in the software. Coding errors are relatively cheap to correct; design errors are more expensive as they may involve the rewriting of several program components.

Adaptive Maintenance

Changing the software to some new environment such as a different platform or to execute in a different operating system, the software functionality does not radically change.

Perfective Maintenance

This involves implementing new functional or non-functional system requirements. These are generated by software customers as their organization or business changes

CHAPTER 6
SYSTEM TESTING

System testing is the key technique to ensure the successful operation of the system been developed in all context. It is very much important to see if the proposed system works properly on the intended delivery platforms and they meet the needs of your client or end user. System testing is a type of software testing that is performed on a complete integrated system to evaluate the compliance of the system with the corresponding requirements. In system testing, integration testing passed components are taken as input. The goal of integration testing to detect any irregularity between the units that are integrated together. System testing detects defects within both the integrated units and the whole system. The result of system testing is tested. System testing is carried out on the whole system in the context of either system requirement specifications or in the context of both. System testing tests the design and behavior of the system and also expectation of the customer

Testing cannot show the absence of defects; it can only show the defects at present. Testing is done during program execution with the objective of finding runtime as well as logical errors. The good test is the one that has high probability of finding an error.

6.1. Levels of Testing

- Unit testing.
- Integration testing.
- Acceptance testing.

6.1.1 Unit Testing

Unit testing focuses efforts on the smallest unit of software design. This is known as module testing. The modules are tested separately. The test is carried out during programming stage itself. In this step, each module is found to be working satisfactory as regards to the expected output from the module.

6.1.2 Integration Testing

Data can be lost across an interface. One module can have an adverse effect on another, sub functions, when combined, may not be linked in desired manner in major functions. Integration testing is a systematic approach for constructing the program

structure, while at the same time conducting test to uncover errors associated within the interface. The objective is to take unit tested modules and builds program structure. All the modules are combined and tested as a whole.

6.1.3 Acceptance Testing

User acceptance of a system is the key factor for the success of any system. The system under consideration is tested for the user acceptance by constantly keeping in touch with the prospective system users at the time of developing and making changes whenever required.

- Types of Acceptance testing
  - User acceptance testing:

    User acceptance testing is used to determine whether the product is working for the user correctly. Specific requirements which are quite often used by the customers are primarily picked for the testing purpose. This is also termed as End-user Testing.
  - Business Acceptance Testing:

    It is used to determine whether the product meets the business goals and purposes or not. It mainly focuses on business profits which are quite challenging task due to changing marketing conditions and new technologies so the current implementation may have to be changed which results in extra budgets.
  - Contract Acceptance Testing:

    It is a contract that specifies that once the product goes live, within a predetermined period, the acceptance test must be performed and it should pass all the acceptance use cases. Here is a contract termed a service level agreement, which includes the terms where the payment will be made only if the product services are on-line with all the requirements, which means the contract is fulfilled. Sometimes the contract happens before the product goes live.
  - Regulation Acceptance Testing:

    It is used to determine whether the product violates the rules and regulations. This may be unintentional but impact negatively on business. If any rules and regulations are to be violated for any country, then that country or the specific region then the product will not be released in that

country or region. If the product is released even though there is a violation, then only the vendors of the product will be responsible.

- Operational Acceptance Testing

  It is used to determine the operational readiness of the product before it is released to production

- Alpha testing:

  It is used to determine the product in the development testing environment by a specialized testers team usually called Alpha testers.

- Beta Testing:

  It is used to access the product by exposing it to the real end-users, usually called beta testers in their environment. Feedback is collected from the users and the defects are fixed. Also, this helps in enhancing the product to give a rich user experience

Use of Acceptance Testing

This testing helps the project team to know the further requirements from the users directly as it involves the users for testing. Automated test execution. It brings confidence and satisfaction to the clients as they are directly involved in the testing process. It is easier for the user to describe their requirements. It covers only black box testing and hence the entire functionality of the product will be tested.

Test case analysis

Test cases are the key to the process because they identify and communicate the conditions that will be implemented in test and are necessary to verify successful and acceptable implementation of the product requirement. They are all about making sure that the product fulfils the requirements of the system.

Sl. No	Test Case	Test Procedure	Precondition	Expected Result	Passed/ Failed (Yes/No)
1	Login Page	To check whether the control from the login screen goes to the main menu.	Enter a valid user name and password on the login screen	The control should go to the home page	yes
2	User Registration	To check whether the control goes to the user registration screen when the user select the registration from home page	Select registration from the home page	The control should go to registration page	Yes
3	Booking	There is a option in the users home screen for booking or purchase Items.	Select booking page from the users home page	The control should go to booking page	Yes
4	Make payments	After booking a particular item the user can make payment.	Select payment option from user page	The control should go to payment page	Yes
5	Cancel booking	Due to any other reasons the user can cancel the booking and then the amount can be refunded	Select cancellation option from the user home page	The control should go to cancellation page	Yes

6	Review	Here the users can register their review about the product	Select review option from the user home page	The control should go to add review page	Yes
7	Provider registration	The persons who wish to provide there plots for parking plot ,then they can register here as the provider	Select the provider registration option from the home page	The control should go to provider registration page	Yes
8	View bookings and view cancellations	Here the user can view booked item and can cancel booking	Select booking and view cancellation option in the user page	The control should go to the corresponding pages	Yes
9	Approval of provider	Admin can only have the permission to approve the providers	Select view provider details from the homepage	The control should go to the registered providers	Yes
10	View product	Admin can check the current product	Select the view product from admin page	The control should go to the list product	Yes
11	View payment details	Admin can check the payment details Of user	Select the view payment	The control should go to the view payment	Yes
13	View feedback	The feedbacks about the system from the provider	Select feedback details from the homepage	The control should go to the list of feedbacks	Yes

14	Approval of user	Admin can only have the permission to approve the user	Select approve user from admin home page	The control should go to the registered user approval	Yes

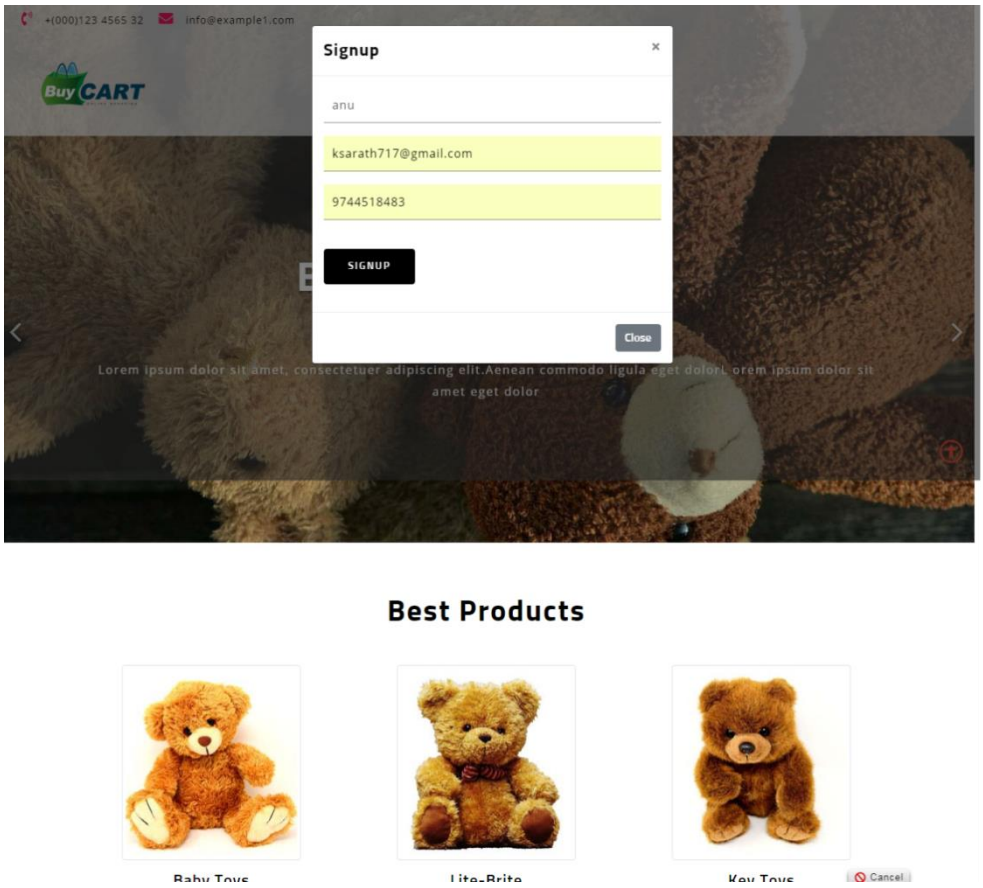
Table 6.2 Test case analysis

CHAPTER 7

USER GUIDE

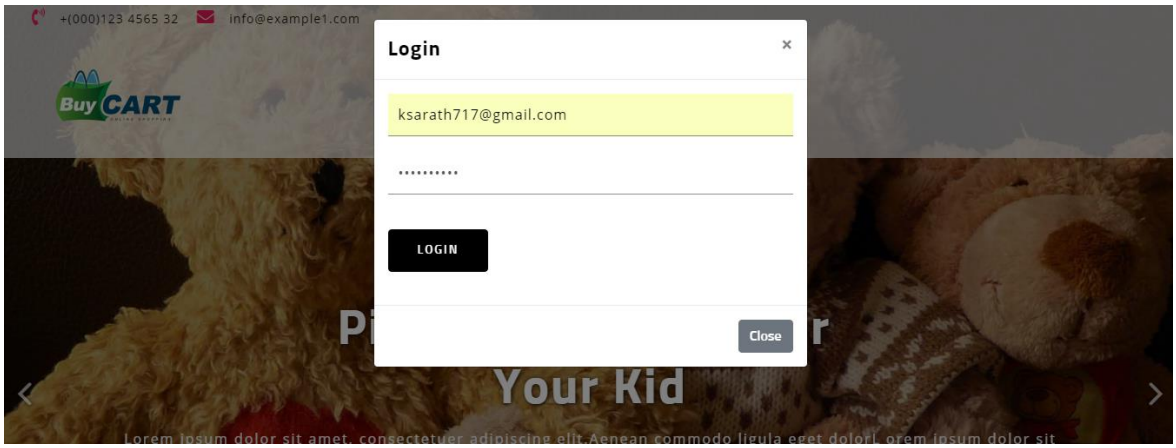
ADMIN PANEL

User Panel → Registration



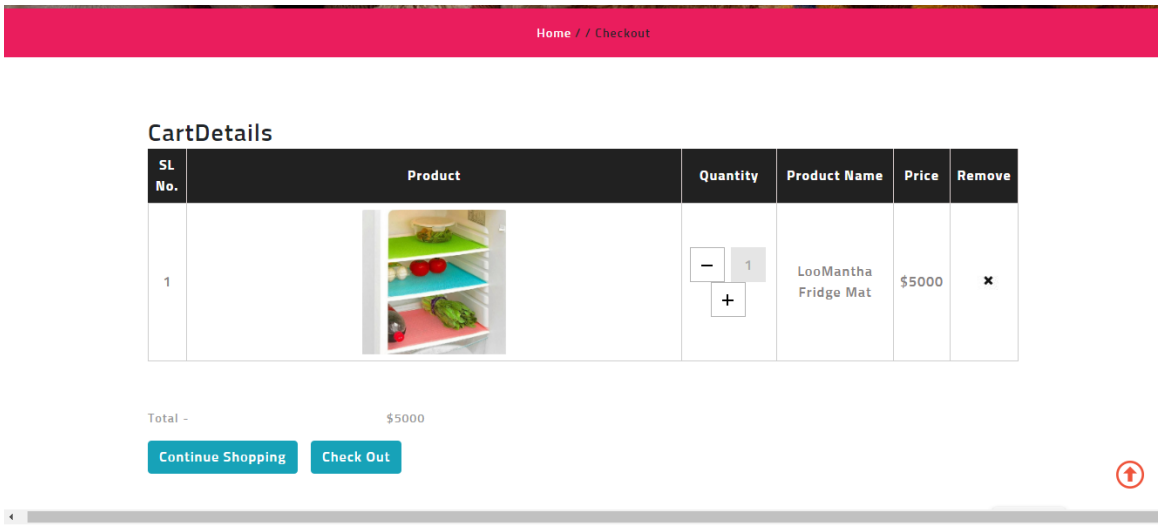
7.1 Admin login screen

2)User Panel→login form



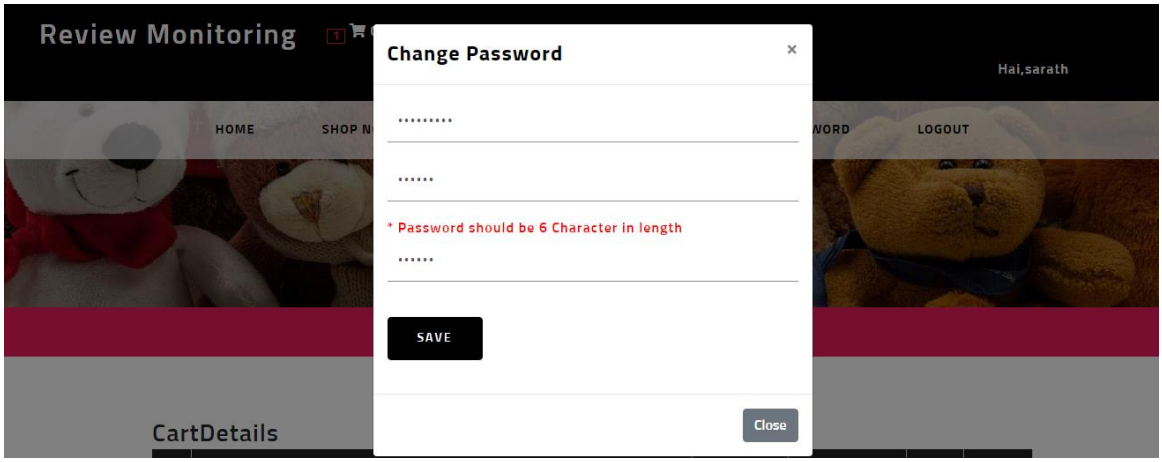
7.2 user login screen

3)user panel→ cart list



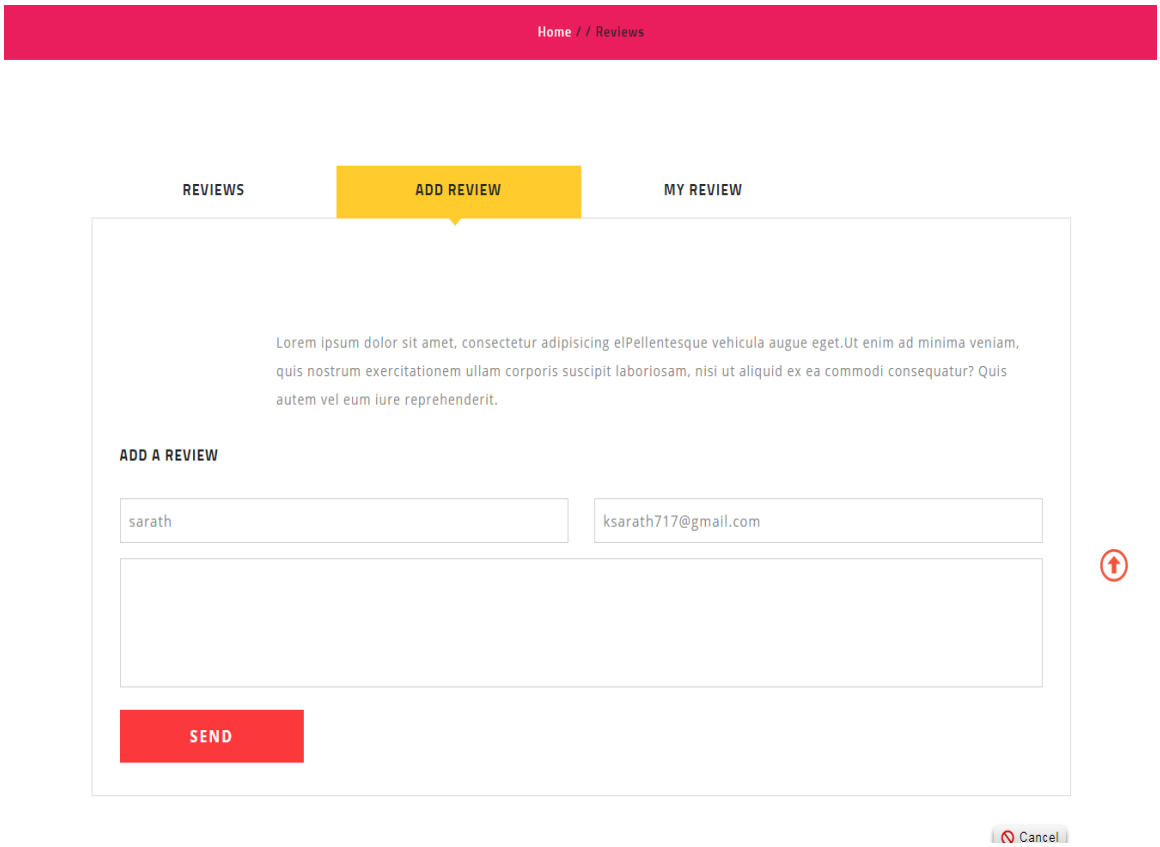
7.3 user cart login screen

4)User panel→Change password



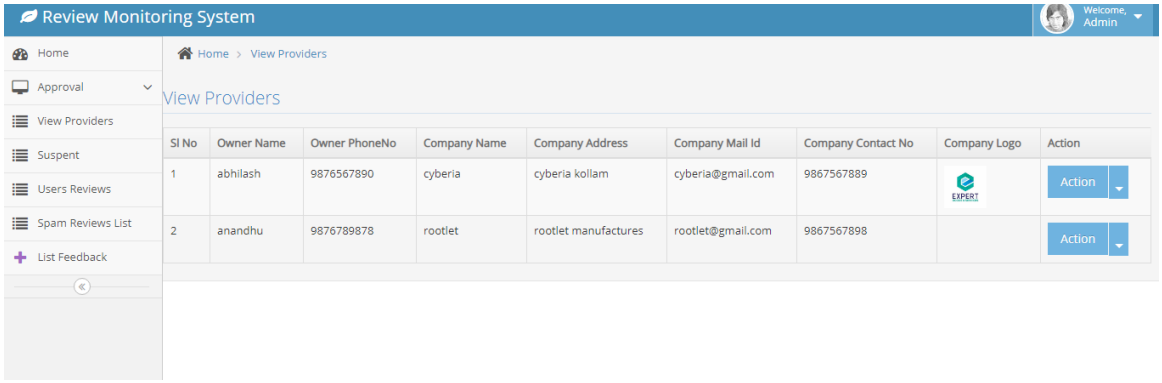
7.4 user panel form

5)User panel→ Review add form



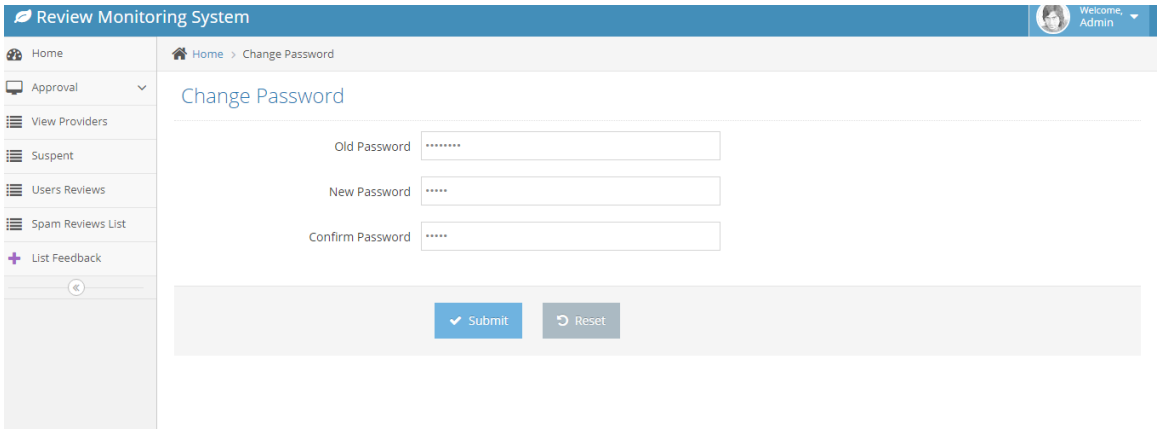
7.5 user panel review add form

6)ADMIN PANEL-→ LIST PROVIDERS



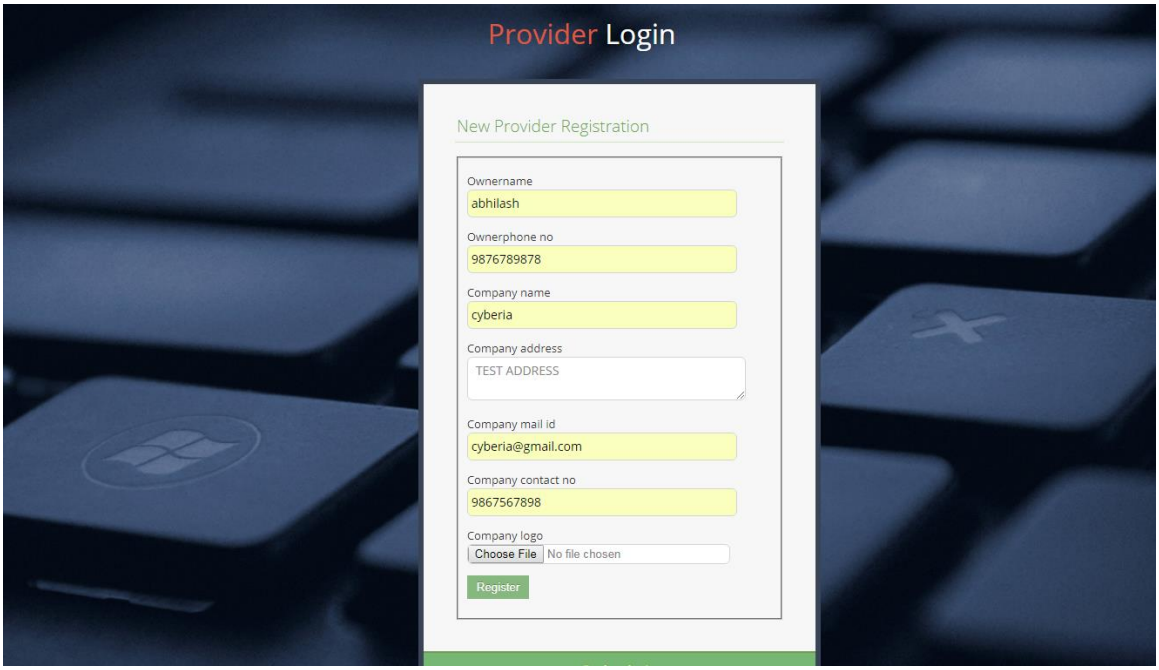
7.6 Admin panel change password

7)ADMIN PANEL→CHANGE PASSWORD



7.7 Admin panel screen

8)PROVIDER PANEL-→ PROVIDER REGISTRATION



7.8 provider registration screen

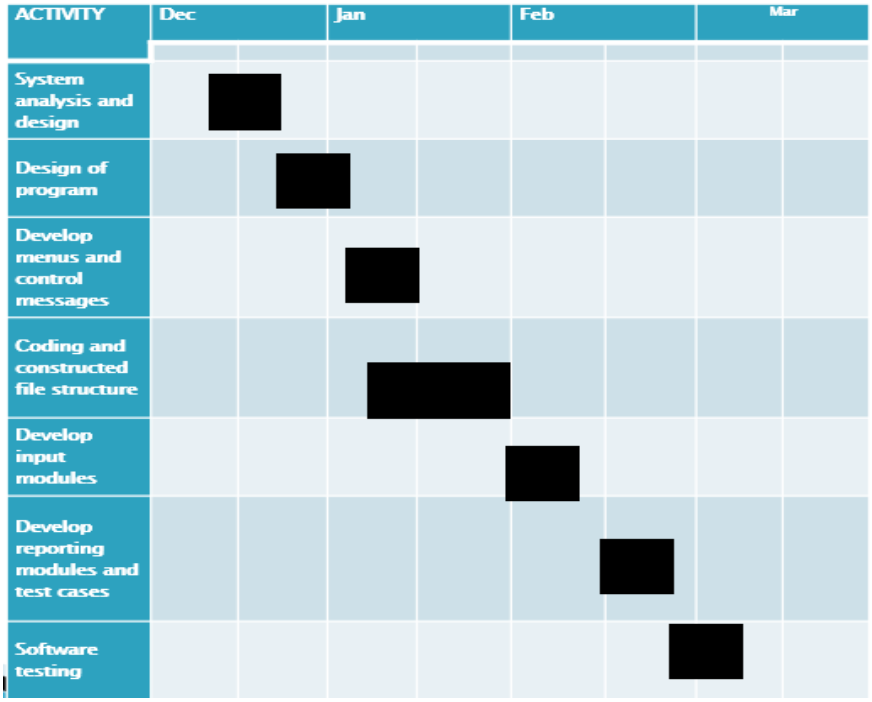
CHAPTER 8

RESULT ANALYSIS

Commentator Centric Approach-This method is predicated upon the behaviour of analysts. This methodology considers data about clients and all surveys that are composed with the aid of them. Highlights utilized proper now account age, profile image, URL duration, variety of composed audits through one commentator, maximum severe rating every day and so on. Item Centric Approach-This technique for the most component facilities around the object related information. Right now, rank of object, value of object and so on are taken into consideration as highlights. Following are the results of our project;

- Admin will approve provider and user to the system.
- User need to enter their email id and OTP no to enter the system
- User once access the system; user can view product and can post review about the product.
- For posting reviews, the user's id will be verified.
- And admin will also block the email id of the user if reviews are spammed.
- Admin will delete the review which is fake.

8.1 WORK PLAN



8.2 EXISTING SYSTEM

When performing any type of internet shopping, many of the users will spend their quality time into reading other user reviews if they are available. A survey performed by Yelp.com has shown that:

- More than 80% of users and shoppers do check and rely on reviews of the people.
- 50% rely on ratings of the online product they want to buy.
- 30% of the users compare the product's reviews with others product's reviews to get a reliable and trustworthy thing.

Clearly consumers value the feedback given by other users as do the companies that sell such products. Blogs, websites, discussion boards etc. are a repository of customer suggestions which are valuable and important sources of textual data. Therefore, today's individuals and older ones extensively rely on reviews available online. It means that people make their decisions of whether to purchase the products or not by analyzing and reflecting the existing opinions on those products. The fact that is if the potential customer or users gets a genuine overall impression of a product by considering the present affect for that product, it is highly probable that he will actually purchase the product. Normally if the percentage of positive and effective opinions is considerable, it is likely that the overall impression will be highly positive. Likewise, if the overall impression is not proper, it is doubtful that they don't buy the product. Now the customers can write any opinion, this can motivates the individuals, and organizations to give undeserving spam opinions to promote or not to credit some target products, services, organizations, individuals, and even ideas without disclosing their true intentions. These spammed opinion information is called opinion spam.

8.2.1 Disadvantages

- If the social media optimization team uses different IP address to send the review, system will fail to track the fake review

8.3 PROPOSED SYSTEM

As most of the people require review about a product before spending their money on the product. So people come across various reviews in the website but these reviews are genuine or fake is not identified by the user. In some review websites some good reviews are added by the product company people itself in order to make product

famous this people belong to Social Media Optimization team. They give good reviews for many different products manufactured by their own firm. User will not be able to find out whether the review is genuine or fake. To find out fake review in the website this **"Forged Review Monitoring for Genuine Online Products"** system is introduced. This system will find out fake reviews made by the social media optimization team by identifying the IP address. User will login to the system using his user id and password and will view various products and will give review about the product. And the user will get genuine reviews about product. And while reviewing he needs to enter the email id from which he is reviewing and it would be verified. If he writes a fake review then his id will be blocked bot allowing him to share his opinions again.

8.3.2 Advantages

- User gets genuine reviews about the product.
- User can post their own review about the product.
- User can spend money on valuable products.

System works as follows:-

- Admin will approve provider and user to the system.
- User need to enter their email id and OTP no to enter the system
- User once access the system, user can view product and can post review about the product.
- For posting reviews, the user's id will be verified.
- And admin will also block the email id of the user if reviews are spammed.
- Admin will delete the review which is fake.

CHAPTER 9
CONCLUSION

The project was successfully completed within the time span allotted every effort has been made to present the system in more user friendly manner. The new system has overcome most of the limitations of the existing system and works according to the design specification given. The developed systems dispense the problem and meet the needs of by providing reliable and comprehensive information. All the requirements projected by the user have been met by the system. The newly developed system consumes less processing time and all the details are updated and processed immediately. Since the screen provides online help messages and is very user-friendly, any user will get familiarized with its usage. The implementation phase is less creative than system design. A system project may be dropped at any time prior to the implementation, although it becomes more difficult when it goes to the design phase. The implementation stage is a system project in its own right. It involves careful planning, investigation of the current system and its constraints on the implementation, design methods to achieve the changeover procedures, and evaluation of change over methods

9.1 FUTURE SCOPE

Future Enhancement means adding, modifying or developing the code to support the changes in the specification. It is the process of adding new capabilities such as report, new interface without other systems and new features such as better screen or report layout. Every module in the system is being developed carefully such that the future enhancements do not affect the basic performance of the system. In future we can add any links or services to the System very easily. Moreover, due to limited time allotted for the project, there are features, which I couldn't implement. Thus the system offers the scope of future enhancement. As this software is reliable to use, any modification in accordance with the necessity of the user can be done for the future use. Any additional feature can be implemented very easily. So what we call this software also a user friendly. On the other hand, if the reviews are manipulated or not true then this can mislead user.

This boosts us to develop a system which detect fake reviews for a product by using the text and rating property from a review. The honesty value and measure of a fake review will be measured by utilizing the data mining techniques. An algorithm could be used to track customer reviews, through mining topics and sentiment orientation from online customer reviews and will also blocked the fake reviews. They are various ways to detect Spam Reviews in order to the Opinion mining to be more accurate and useful have been studied. A detailed discussion about the existing techniques, to find out the whether the review is spam or not is presented. Other Techniques are incorporated like IP Address Tracking and Ontology to detect Spam Reviews in order to get more accurate results from Opinion mining. After detecting the spam reviews from the existing Dataset, a new Dataset is created which doesn't contain spam reviews and then opinion mining is performed on the new Spam Filtered Dataset. At last a new algorithm is proposed that detects spam reviews more precisely and performs opinion mining using spam filtered data. We are proposing solution for avoiding fake product review by implementing a monitoring system to find out fake review posted by the user. it will be detect by the system and will listed to admin provision, admin can cross check the detection and can take actions like remove review, block user ,etc. Our system use AES algorithm for users account security and also filtering technology used to file products as name / price wise. In future we can add many complicates security algorithms to secure our system.

REFERENCES

[1]D. A. James, “A system for unrestricted topic r etrieval from radio news broadcasts,” inProc. IEEEInt.Conf.Acoustics,Speech,andSignalProcessing,pp.279–282,1994.

[2]B. Logan, J.-M. Van Thong, and P. J. Moreno, “Approaches to reduce the effects of OOVqueries on indexed spoken audio,” IEEE Trans. Multimedia, vol. 7, no. 5, pp. 899–906,Oct.2005.

[3]K.Sakthidasan@Sankaran, S.Bhuvaneshwari and Dr.V.Nagarajan“A new edgepreserved technique using iterative median filter” in IEEE International Conference onCommunicationandSignal Processing(ICCSP2014),pp:1750–1754,2014.

[4]J. G. Wilpon and L. R. Rabiner, “A modified K-mea ns clustering algorithm for use inisolated work recognition,” IEEE Trans. Acoust., Speech, Signal Process., vol. ASSP-33,no.3,pp.587–594,1985.

[5]K.Sakthidasan @ Sankaran, G.Ammu and Dr.V.Nagarajan “Non local image restorationusing iterative method” in IEEE International Conference on Communication and Signal Processing(ICCSP2014),pp:1740-1744,2014.

[6]C.-H.Wu and Y.-J. Chen, “Multi-keyword spotting of telephone speech using a fuzzy search algorithm and keyword-driven two-level CBSM,” Speech Commun., vol. 33, pp.197–212,2001.

[7]B. Chen, H.-M.Wang, and L.-S. Lee, “Discriminating capabilities of syllable-based features and approaches of utilizing them for voice retrieval of speech information in Mandarin Chinese,” IEEE Trans. Speech Audio Process., vol. 10, no. 5, pp. 303–314, Jul.2002.

[8]A Survey on Fake Review Detection using Learning Techniques, IEEE paper.

[9]A Method for the Detection of Fake Reviews Based on Temporal Features of Reviews and Comments, IEEE Paper.

[10] Intelligent Interface for Fake Product Review Monitoring and Removal, IEEE Paper. Opinion Mining based Fake Product review Monitoring and Removal System, IEEE Paper.

[11] A Framework for Fake Review Detection: Issues and Challenges, IEEE Paper.

[12] Fake Review Detection from a Product Review, IEEE Paper.

APPENDIX

SOURCE CODE

View reviews

```
<?php
include_once 'header1.php';
if($_SESSION['role']=='3')
{
$id=$_SESSION['login'];
$querys="SELECT * FROM tbl_user_reg where user_log_id='$id'";
$results = mysql_query($querys);
if(isset($_GET['v_id'])){
     $v_id=$_GET['v_id'];
}

if(isset($_REQUEST['reviews']))
   {
              //$this->load->helper('cookie');
     date_default_timezone_set("Asia/Kolkata");
   $datetime = date('Y-m-d H:i:s');
     $after =date("Y-m-d H:i:s", strtotime('+15 minutes'));
  // @$ipadrs = getHostByName(php_uname('n'));//PHP < 5.3.0
   @$ipadrs = getHostByName(getHostName());//PHP >= 5.3.0
 //$ipadrs = $this->input->ip_address();
              $login=$_SESSION['login'];
              $msg=$_POST['Message'];
              $Product_id=$_POST['Product_id'];

     $select_order=mysql_query("SELECT * FROM tbl_order INNER
JOIN tbl_orderdetail ON tbl_order.        order_id=tbl_orderdetail.order_id
where       order_user_id='$login' and o_product_id='$Product_id'");
     if($fetch_order=mysql_fetch_array($select_order))
```

```
{
        $select_review=mysql_query("SELECT * FROM tbl_review
where ip_address='$ipadrs' and review_user_id='$id' and
review_product_id='$Product_id' order by review_iddesc");


        if($fetch_review=mysql_fetch_array($select_review))
        {
                $checkss=$datetime;
                if($fetch_review['date']<=$checkss&&
$fetch_review['date_after']>=$checkss)
                {
                        $query_review = mysql_query("INSERT INTO
tbl_review(review_user_id,
    review_product_id,review_msg,date,date_after,ip_address,review_statu
s) VALUES ('$login','$Product_id','$msg','$datetime','$after','$ipadrs',1)");
                }

                else
                {
                        $query_review=mysql_query("INSERT INTO
tbl_review(review_user_id,
    review_product_id,review_msg,date,date_after,ip_address,review_statu
s) VALUES ('$login','$Product_id','$msg','$datetime','$after','$ipadrs',0)");
                }
        }
        else
        {
                $query_review=mysql_query("INSERT INTO
tbl_review(review_user_id,
    review_product_id,review_msg,date,date_after,ip_address,review_statu
s) VALUES ('$login','$Product_id','$msg','$datetime','$after','$ipadrs',0)");
        }
```

```
    }
    else
    {
    $query_review=mysql_query("INSERT INTO
tbl_review(review_user_id,
    review_product_id,review_msg,date,date_after,ip_address,review_statu
s)  VALUES  ('$login','$Product_id','$msg','$datetime','$after','$ipadrs',2)");

    }
            if($query_review>0)
            {
                    echo ("<script language='JavaScript'>
window.location.href='quickshop.php?s_id=$Product_id';
window.alert('Thankyou For Review.')
</script>");
            }
            else
            {
                    echo ("<script language='JavaScript'>
window.location.href='view_review.php?v_id=$Product_id';
window.alert('Something went wrong, try again later...')
</script>");
            }
    }

 ?>
```

Change password

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{
if(isset($_REQUEST['save']))
{
```

```
$pswd=$_REQUEST['t1'];
$npswd=$_REQUEST['t2'];
$cpswd=$_REQUEST['t3'];
$user=$_SESSION['user'];
$nm=mysql_query("select * from tbl_login where username='$user' and password='$pswd'");
if($r=mysql_fetch_row($nm))
{
        mysql_query("update tbl_login set password='$cpswd' where username='$user'");
echo '<script language="javascript">';
                echo 'alert("Successfully Change Password");location.href="changepassword.php"';
echo '</script>';
        }
                else
                {
                        echo '<script language="javascript">';
                        echo 'alert("Something went wrong, try again later...");location.href="changepassword.php"';
echo '</script>';
                }
}
?>
```

List feedback

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{
$query = "SELECT * FROM tbl_feedback INNER JOIN tbl_provider ON
```

```
tbl_feedback.Provider_id=tbl_provider.Log_id";
$result = mysql_query($query);
?>
```

Logout

```
<?php
session_start();
session_destroy();
header('Location: index.php');
exit;
    ?>
```

Product view

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{
    if(isset($_GET['id'])){
    $p_id=$_GET['id'];
$query1="SELECT * FROM tbl_product where Provider_id='$p_id'";
$result1 = mysql_query($query1);
    }

?>
```

Provider approvel

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{
```

```
if(isset($_REQUEST['approve']))
   {
            $a = $_POST['a_id'];
$b = $_POST['pass_id'];
$msg='Your Registration is successfully completed'.'<br>'.
'Your username is'." " .$a. '<br>'.
'Password is'." ".$b;
$subject='Review Monitoring System Provider Registration';

require('../PHPMailer/PHPMailerAutoload.php');
$mail = new PHPMailer;
$mail->SMTPDebug = 0;
//$mail->isMail();
$mail->isSMTP();                                    // Set mailer to use SMTP
$mail->Host = 'smtp.gmail.com';                     // Specify main and backup
SMTP servers
$mail->SMTPAuth = true;                             // Enable SMTP authentication
$mail->Username = 'revenuec2018@gmail.com';         // SMTP username
$mail->Password = 'revenue@2018'; // SMTP password
$mail->SMTPSecure = 'tls';                          // Enable TLS encryption, `ssl`
also accepted
$mail->Port = 587;                                  // TCP port to connect to

$mail->setFrom('revenuec2018@gmail.com');
$mail->addReplyTo('revenuec2018@gmail.com');
$mail->addAddress($a);   // Add a recipient
//$mail->addCC('cc@example.com');
//$mail->addBCC('bcc@example.com');
$mail->isHTML(true);  // Set email format to HTML
$mail->Subject = $subject;
$mail->Body    = $msg;
```

```
if($mail->send()){

$prov = $_POST['prov_id'];
$logtt = $_POST['log_id'];
$query1 = mysql_query("UPDATE `tbl_provider` SET status='available' WHERE provider_id='$prov'");
$query = "Update tbl_login SET role='2' WHERE login_id='$logtt'";
$res = mysql_query($query);
                    if($res>0)
            {
echo '<script language="javascript">';
                        echo 'alert("Successfully Approve Provider");location.href="providers_approval.php"';
echo '</script>';
            }
                    else
                    {
                        echo '<script language="javascript">';
                        echo 'alert("Something went wrong, try again later...");location.href="providers_approval.php"';
echo '</script>';
                    }
    }

else{
echo '<script language="javascript">';
                        echo 'alert("Mail Not Sent, try again later...");location.href="providers_approval.php"';
echo '</script>';
}
    }

?>
```

User approve

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{



if(isset($_REQUEST['approve']))
   {
            $a = $_POST['a_id'];
$b = $_POST['pass_id'];
$msg='Your Registration is successfully completed'.'<br>'.
'Your username is'." " .$a. '<br>'.
'Password is'." ".$b;
$subject='Review Monitoring System User Registration';

require('../PHPMailer/PHPMailerAutoload.php');
$mail = new PHPMailer;
$mail->SMTPDebug = 0;
//$mail->isMail();
$mail->isSMTP();                                    // Set mailer to use SMTP
$mail->Host = 'smtp.gmail.com';                     // Specify main and backup
SMTP servers
$mail->SMTPAuth = true;                             // Enable SMTP authentication
$mail->Username = 'revenuec2018@gmail.com';         // SMTP username
$mail->Password = 'revenue@2018'; // SMTP password
$mail->SMTPSecure = 'tls';                          // Enable TLS encryption, `ssl`
also accepted
$mail->Port = 587;                                  // TCP port to connect to

$mail->setFrom('revenuec2018@gmail.com');
```

```
$mail->addReplyTo('revenuec2018@gmail.com');
$mail->addAddress($a);   // Add a recipient
//$mail->addCC('cc@example.com');
//$mail->addBCC('bcc@example.com');
$mail->isHTML(true);  // Set email format to HTML
$mail->Subject = $subject;
$mail->Body    = $msg;
if($mail->send()){

$user_reg_id = $_POST['prov_id'];
$logtt = $_POST['log_id'];
$query1 = mysql_query("UPDATE `tbl_user_reg` SET status='available' WHERE user_reg_id='$user_reg_id'");
$query = "Update tbl_login SET role='3' WHERE login_id='$logtt'";
$res = mysql_query($query);
                    if($res>0)
            {
                    echo '<script language="javascript">';
                            echo 'alert("Successfully Approve User");location.href="users_approve.php"';
echo '</script>';
            }
                    else
                    {
                            echo '<script language="javascript">';
                            echo 'alert("Something went wrong, try again later...");location.href="users_approve.php"';
echo '</script>';
                    }
    }

else{
echo '<script language="javascript">';
```

```
                    echo 'alert("Mail Not Sent, try again later...");location.href="users_approve.php"';
echo '</script>';
}
    }

?>
```

User reviews

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{

if(isset($_REQUEST['spam']))
  {
        $a = $_POST['r_id'];
$b = $_POST['ip_id'];
$queryss = mysql_query("UPDATE `tbl_review` SET review_status='3' WHERE review_id='$a'");
$query = "INSERT INTO tbl_spam(spam_ip_address,spam_review_id,spam_status) VALUES ('$b','$a',1)";
$res = mysql_query($query);
            if($res>0)
        {
            echo '<script language="javascript">';
                echo 'alert("Successfully Spam Message");location.href="users_reviews.php"';
echo '</script>';
        }
<?php
include_once 'header.php';
```

```
if($_SESSION['role']=='1')
{
if(isset($_REQUEST['save']))
{
    $pswd=$_REQUEST['t1'];
    $npswd=$_REQUEST['t2'];
    $cpswd=$_REQUEST['t3'];
    $user=$_SESSION['user'];
    $nm=mysql_query("select * from tbl_login where username='$user' and password='$pswd'");
    if($r=mysql_fetch_row($nm))
    {
        mysql_query("update tbl_login set password='$cpswd' where username='$user'");
    echo '<script language="javascript">';
                    echo 'alert("Successfully Change Password");location.href="changepassword.php"';
echo '</script>';
        }
            else
            {
                echo '<script language="javascript">';
                echo 'alert("Something went wrong, try again later...");location.href="changepassword.php"';
echo '</script>';
            }
}
?>
```

List feedback

```
<?php
```

```
include_once 'header.php';
if($_SESSION['role']=='1')
{
$query = "SELECT * FROM tbl_feedback INNER JOIN tbl_provider ON
tbl_feedback.Provider_id=tbl_provider.Log_id";
$result = mysql_query($query);
?>
```

Logout

```
<?php
session_start();
session_destroy();
header('Location: index.php');
exit;
    ?>
```

Product view

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{
    if(isset($_GET['id'])){
    $p_id=$_GET['id'];
$query1="SELECT * FROM tbl_product where Provider_id='$p_id'";
$result1 = mysql_query($query1);
    }

?>
```

Provider approvel

```
<?php
```

```
include_once 'header.php';
if($_SESSION['role']=='1')
{


if(isset($_REQUEST['approve']))
   {
            $a = $_POST['a_id'];
$b = $_POST['pass_id'];
$msg='Your Registration is successfully completed'.'<br>'.
'Your username is'." " .$a. '<br>'.
'Password is'." ".$b;
$subject='Review Monitoring System Provider Registration';

require('../PHPMailer/PHPMailerAutoload.php');
$mail = new PHPMailer;
$mail->SMTPDebug = 0;
//$mail->isMail();
$mail->isSMTP();                                    // Set mailer to use SMTP
$mail->Host = 'smtp.gmail.com';                     // Specify main and backup
SMTP servers
$mail->SMTPAuth = true;                             // Enable SMTP authentication
$mail->Username = 'revenuec2018@gmail.com';         // SMTP username
$mail->Password = 'revenue@2018'; // SMTP password
$mail->SMTPSecure = 'tls';                          // Enable TLS encryption, `ssl`
also accepted
$mail->Port = 587;                                  // TCP port to connect to

$mail->setFrom('revenuec2018@gmail.com');
$mail->addReplyTo('revenuec2018@gmail.com');
$mail->addAddress($a);   // Add a recipient
//$mail->addCC('cc@example.com');
//$mail->addBCC('bcc@example.com');
```

```
$mail->isHTML(true);  // Set email format to HTML
$mail->Subject = $subject;
$mail->Body    = $msg;
if($mail->send()){

$prov = $_POST['prov_id'];
$logtt = $_POST['log_id'];
$query1 = mysql_query("UPDATE `tbl_provider` SET status='available' WHERE provider_id='$prov'");
$query = "Update tbl_login SET role='2' WHERE login_id='$logtt'";
$res = mysql_query($query);
                    if($res>0)
            {
                    echo '<script language="javascript">';
                            echo 'alert("Successfully Approve Provider");location.href="providers_approval.php"';
echo '</script>';
            }
                    else
                    {
                            echo '<script language="javascript">';
                            echo 'alert("Something went wrong, try again later...");location.href="providers_approval.php"';
echo '</script>';
                    }
    }

else{
echo '<script language="javascript">';
                            echo 'alert("Mail Not Sent, try again later...");location.href="providers_approval.php"';
echo '</script>';
}
```

```
    }

?>
```

User approve

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{



if(isset($_REQUEST['approve']))
   {
            $a = $_POST['a_id'];
$b = $_POST['pass_id'];
$msg='Your Registration is successfully completed'.'<br>'.
'Your username is'." " .$a. '<br>'.
'Password is'." ".$b;
$subject='Review Monitoring System User Registration';

require('../PHPMailer/PHPMailerAutoload.php');
$mail = new PHPMailer;
$mail->SMTPDebug = 0;
//$mail->isMail();
$mail->isSMTP();                                    // Set mailer to use SMTP
$mail->Host = 'smtp.gmail.com';                     // Specify main and backup
SMTP servers
$mail->SMTPAuth = true;                             // Enable SMTP authentication
$mail->Username = 'revenuec2018@gmail.com';         // SMTP username
$mail->Password = 'revenue@2018'; // SMTP password
$mail->SMTPSecure = 'tls';                          // Enable TLS encryption, `ssl`
also accepted
```

```
$mail->Port = 587;                    // TCP port to connect to

$mail->setFrom('revenuec2018@gmail.com');
$mail->addReplyTo('revenuec2018@gmail.com');
$mail->addAddress($a);   // Add a recipient
//$mail->addCC('cc@example.com');
//$mail->addBCC('bcc@example.com');
$mail->isHTML(true);  // Set email format to HTML
$mail->Subject = $subject;
$mail->Body    = $msg;
if($mail->send()){

$user_reg_id = $_POST['prov_id'];
$logtt = $_POST['log_id'];
$query1 = mysql_query("UPDATE `tbl_user_reg` SET status='available' WHERE user_reg_id='$user_reg_id'");
$query = "Update tbl_login SET role='3' WHERE login_id='$logtt'";
$res = mysql_query($query);
                    if($res>0)
            {
                    echo '<script language="javascript">';
                            echo 'alert("Successfully Approve User");location.href="users_approve.php"';
echo '</script>';
            }
                    else
                    {
                            echo '<script language="javascript">';
                            echo 'alert("Something went wrong, try again later...");location.href="users_approve.php"';
echo '</script>';
                    }
    }
```

```
else{
echo '<script language="javascript">';
                    echo 'alert("Mail Not Sent, try again later...");location.href="users_approve.php"';
echo '</script>';
}
    }

?>
```

User reviews

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{

if(isset($_REQUEST['spam']))
  {
        $a = $_POST['r_id'];
$b = $_POST['ip_id'];
$queryss = mysql_query("UPDATE `tbl_review` SET review_status='3' WHERE review_id='$a'");
$query = "INSERT INTO tbl_spam(spam_ip_address,spam_review_id,spam_status) VALUES ('$b','$a',1)";
$res = mysql_query($query);
            if($res>0)
        {
            echo '<script language="javascript">';
 if(isset($_REQUEST['reviews']))
   {
```

```
            //$this->load->helper('cookie');
     date_default_timezone_set("Asia/Kolkata");
    $datetime = date('Y-m-d H:i:s');
     $after =date("Y-m-d H:i:s", strtotime('+15 minutes'));
   // @$ipadrs = getHostByName(php_uname('n'));//PHP < 5.3.0
    @$ipadrs = getHostByName(getHostName());//PHP >= 5.3.0
  //$ipadrs = $this->input->ip_address();
            $login=$_SESSION['login'];
            $msg=$_POST['Message'];
            $Product_id=$_POST['Product_id'];
    if($fetch_order=mysql_fetch_array($select_order))
    {
            $select_review=mysql_query("SELECT * FROM tbl_review
where ip_address='$ipadrs' and review_user_id='$id' and
review_product_id='$Product_id' order by review_iddesc");


            if($fetch_review=mysql_fetch_array($select_review))
            {
                    $checkss=$datetime;
                    if($fetch_review['date']<=$checkss&&
$fetch_review['date_after']>=$checkss)
                    {

echo                    'alert("Successfully                    Spam
Message");location.href="users_reviews.php"';
echo '</script>';
            }
    ?>
```

```
{
        $select_review=mysql_query("SELECT * FROM tbl_review
where ip_address='$ipadrs' and review_user_id='$id' and
review_product_id='$Product_id' order by review_iddesc");


        if($fetch_review=mysql_fetch_array($select_review))
        {
                $checkss=$datetime;
                if($fetch_review['date']<=$checkss&&
$fetch_review['date_after']>=$checkss)
                {
                        $query_review = mysql_query("INSERT INTO
tbl_review(review_user_id,
    review_product_id,review_msg,date,date_after,ip_address,review_statu
s) VALUES ('$login','$Product_id','$msg','$datetime','$after','$ipadrs',1)");
                }

                else
                {
                        $query_review=mysql_query("INSERT INTO
tbl_review(review_user_id,
    review_product_id,review_msg,date,date_after,ip_address,review_statu
s) VALUES ('$login','$Product_id','$msg','$datetime','$after','$ipadrs',0)");
                }
        }
        else
        {
                $query_review=mysql_query("INSERT INTO
tbl_review(review_user_id,
    review_product_id,review_msg,date,date_after,ip_address,review_statu
s) VALUES ('$login','$Product_id','$msg','$datetime','$after','$ipadrs',0)");
        }
```

```
    }
    else
    {
    $query_review=mysql_query("INSERT INTO
tbl_review(review_user_id,
    review_product_id,review_msg,date,date_after,ip_address,review_statu
s)  VALUES  ('$login','$Product_id','$msg','$datetime','$after','$ipadrs',2)");

    }
            if($query_review>0)
            {
                    echo ("<script language='JavaScript'>
window.location.href='quickshop.php?s_id=$Product_id';
window.alert('Thankyou For Review.')
</script>");
            }
            else
            {
                    echo ("<script language='JavaScript'>
window.location.href='view_review.php?v_id=$Product_id';
window.alert('Something went wrong, try again later...')
</script>");
            }
    }

 ?>
```

Change password

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{
if(isset($_REQUEST['save']))
{
```

```
$pswd=$_REQUEST['t1'];
$npswd=$_REQUEST['t2'];
$cpswd=$_REQUEST['t3'];
$user=$_SESSION['user'];
$nm=mysql_query("select * from tbl_login where username='$user' and password='$pswd'");
if($r=mysql_fetch_row($nm))
{
	mysql_query("update tbl_login set password='$cpswd' where username='$user'");
echo '<script language="javascript">';
			echo 'alert("Successfully Change Password");location.href="changepassword.php"';
echo '</script>';
	}
		else
		{
			echo '<script language="javascript">';
			echo 'alert("Something went wrong, try again later...");location.href="changepassword.php"';
echo '</script>';
		}
}
?>
```

List feedback

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{
$query = "SELECT * FROM tbl_feedback INNER JOIN tbl_provider ON
```

```
tbl_feedback.Provider_id=tbl_provider.Log_id";
$result = mysql_query($query);
?>
```

Logout

```
<?php
session_start();
session_destroy();
header('Location: index.php');
exit;
    ?>
```

Product view

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{
    if(isset($_GET['id'])){
    $p_id=$_GET['id'];
$query1="SELECT * FROM tbl_product where Provider_id='$p_id'";
$result1 = mysql_query($query1);
    }

?>
```

Provider approvel

```
<?php
include_once 'header.php';
if($_SESSION['role']=='1')
{
```

```
if(isset($_REQUEST['approve']))
   {
            $a = $_POST['a_id'];
$b = $_POST['pass_id'];
$msg='Your Registration is successfully completed'.'<br>'.
'Your username is'." " .$a. '<br>'.
'Password is'." ".$b;
$subject='Review Monitoring System Provider Registration';

require('../PHPMailer/PHPMailerAutoload.php');
$mail = new PHPMailer;
$mail->SMTPDebug = 0;
//$mail->isMail();
$mail->isSMTP();                                    // Set mailer to use SMTP
$mail->Host = 'smtp.gmail.com';                     // Specify main and backup
SMTP servers
$mail->SMTPAuth = true;                             // Enable SMTP authentication
$mail->Username = 'revenuec2018@gmail.com';         // SMTP username
$mail->Password = 'revenue@2018'; // SMTP password
$mail->SMTPSecure = 'tls';                          // Enable TLS encryption, `ssl`
also accepted
$mail->Port = 587;                                  // TCP port to connect to

$mail->setFrom('revenuec2018@gmail.com');
$mail->addReplyTo('revenuec2018@gmail.com');
$mail->addAddress($a);   // Add a recipient
//$mail->addCC('cc@example.com');
//$mail->addBCC('bcc@example.com');
$mail->isHTML(true);  // Set email format to HTML
$mail->Subject = $subject;
$mail->Body    = $msg;
```

```
if($mail->send()){

$prov = $_POST['prov_id'];
$logtt = $_POST['log_id'];
$query1 = mysql_query("UPDATE `tbl_provider` SET status='available' WHERE provider_id='$prov'");
$query = "Update tbl_login SET role='2' WHERE login_id='$logtt'";
$res = mysql_query($query);
                    if($res>0)
            {
echo '<script language="javascript">';
                        echo 'alert("Successfully Approve Provider");location.href="providers_approval.php"';
echo '</script>';
            }
                    else
                    {
                        echo '<script language="javascript">';
                        echo 'alert("Something went wrong, try again later...");location.href="providers_approval.php"';
echo '</script>';
                    }
    }

else{
echo '<script language="javascript">';
                        echo 'alert("Mail Not Sent, try again later...");location.href="providers_approval.php"';
echo '</script>';
}
    }

?>
```