

INTRODUCTION

1. INTRODUCTION

1.1. GENERAL INTRODUCTION

Computer is an electronic device that accepts digital information and processes it in a predefined function. According to a set or sequence of instructions provided to it and produces the desired binary outputs. It is made up of input devices, storage, arithmetic and logic circuits and a control unit.

We are living in an information age dependent upon digital information. Digital information is electronic information, the result of computer processing. Every type of job relies upon getting information, using it, managing it, and relaying information to others. Computer enables the efficient processing and storage of information.

Computers work through an interaction of hardware and software. Hardware refers to part of a computer that you can see and touch, including the case and everything inside it. The ability to analyze business problems and to manage the development of a complex computer based system in an environment where information resources are proliferating are the challenges that accompany the opportunities of the future.

The main advantages of computer over manual processing are:

- Accuracy
- Storage
- Speed of Response
- Diligence
- Versatility
- Data Collection and Communication

Shoppers and traders are quickly changing the mode of operation from the present way. The shopping can be done in a pretty fast and easier manner than the usual operation.

The system is fully menu driven. This application program is efficient, user-friendly, and error free provides a suitable and creative implementation of the system.

1.2. SOFTWARE INTRODUCTION

Online mobile shopping system is a site that handles mobile and their corresponding details about purchase, sales etc. It makes the job of the staffs easy and efficient. A particular mobile can be easily searched by specifying a gender through Mobile shop. This project includes modules namely purchasing and sales management. This project also displays details of customer, supplier, date of purchase, purchasing quantity etc.

1.3. SYNOPSIS

Online Mobile Shopping is a purchasing site which is easily accessible and convenient for all people even with little computer knowledge. This site will be implemented on tech mobiles Kottayam and they will manage this software. This site will be managed by an admin who has unlimited access and rights to modify, edit, insert or delete the values of fields. A user can access the site in a limited yet elegant way. He can view the list and categories of Mobiles of his interest.

The site will have a database connection and the admin can only access this. The 'Mobile Shop Management System' project deals with the online buying of mobiles and the accessories by the customers. The customers who

have logged into their account can buy the mobiles and accessories, others can only view the products that are for sale. The Mobile Shop Management System allows the customer to purchase the mobile and accessories of chance with ease through online mode. This will help in saving the energy, fuel, time needed to do the shopping by going to the shops. When it comes to the purchase, people will very possessively of its features, quality, price and many more things. So this website will provide a choice to the customer to select among various mobiles that are available with great ease.

The information of the customers doing the online mobile shopping must be maintained in a well organized way. There should be a proper description of the product that are to be sold. The price of the product should also be mentioned along with the product. The item purchased by the customer must be delivered on time. The order notifications will be send to the customers. There should be a proper specification of the payment option that needs to be given to the customers to pay for the particular order.

FEATURES OF THE PROJECT:

- Easy to use
- Fast Delivery
- Time Saving
- Efficient Performance
- Secure Payment

This online site will be an advantage to tech mobiles because by implementing this they can increase their selling apart from regular customers visiting the shop.

SOFTWARE SPECIFICATION

Frontend: PHP

Backend: MySQL

Client on PC: Any operating system

SYSTEM STUDY

2. SYSTEM STUDY

2.1. SYSTEM STUDY

System study is in detailed analysis of various operations and their relationship within and outside the system. It is the first step in developing and managing systems.

○ Fact Finding Techniques:

The specific methods analysts use for collecting data about requirements are called fact-finding techniques. These include the interview, questionnaire, record inspection and observation.

○ Observation:

Observation allows analysts to gain information they can't obtain by any other fact-finding method. Through observation, analysts can obtain first hand information about how activities are carried out. This method is most useful when analysts need to actually observe. How documents are handled, how processes are carried out and whether specified steps actually followed.

○ Interview:

Analysts use interviews to collect information from individuals or from groups. The respondents are generally current users of the existing system or potential users of the proposed system. In some instances, the respondents may be managers or employees who provide data for the proposed system or who will be affected by it.

It is important to remember that respondents and analysts converse during an interview, the respondents and analysts with opportunities for gathering information from respondents who have been chosen for their

knowledge of the system under study. This method is frequently the best source of study.

2.2. EXISTING SYSTEM

The existing system is fully manual. The details about devices name, price, quantity etc are stored by recording them in different files. Thus delays are inevitable. Manual processing may also lead to human error. Updating document details also requires a lot of time and effort, which could lead to errors or omissions.

DISADVANTAGES OF EXISTING SYSTEM

- Difficult to handle the large information.
- Cost consumption is high.
- It is highly time consuming.
- It gives greater workload to each staff.
- The system is manual one so error may be high.
- It is very difficult to maintain and up-date information.
- There may be chances for losing the records.
- Accuracy is missing.

2.3. PROPOSED SYSTEM

Due to the above mentioned disadvantages in the existing system it has been proposed for new system, which will overcome these difficulties. So the new system is developed with the help of PHP and SQL Server. Even though the end user of the system are well qualified, various help message are to be given both quick references and in help file.

The proposed system is computerized and has been developed using advance language therefore it gives more facilities than present system. It provides quick access to any data. In this system user have to enter the data only once and then it get linked with all files. This reduces the workload of user and it is also a time saving process.

ADVANTAGES

- High speed and accuracy.
- Provide high security.
- Good user interface.
- Easy edit, delete and search functionality.
- Listing of items.

Objective of the proposed system

The objective of the project is to convert the existing system into modules such as device details and sales management. It simplifies the whole operation and makes searching and editing faster. It reduces the workload on employees. The system is portable and flexible for further enhancement and it provides a user-friendly environment.

SYSTEM ANALYSIS

3. SYSTEM ANALYSIS

INTRODUCTION

The first step in developing the system is analyzing the problem. Before developing a system the problem should be well defined. Identifying the need for a new information system and launching an investigation and a feasible study must be done to check whether the software is visible for the organization. This unit we have done this study.

Lack of security is another problem of the existing system. That may lead to serious problems. It will affect the business career. In the existing system, there is no facility for the user to see the view his past purchases. The existing system is not reliable because of human errors. Calculations and maintenance needs a lot of time that produce queuing.

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3.1. Feasibility Study

All projects are feasible given unlimited and resource and infinite time. Unfortunately, the development of computer-based system is more likely to be plagued by scarcity of resources and difficult delivery dates. The main objective of feasible study is to test the technical, social and economical feasibility of developing a computer system. This is done by investigating the existing system in the area under investigation or generally ideas about a new system. The proposed system was evaluated from a technical view point first. Being technically feasible, its impact on the organization was assessed. After the

proposed system was found to be social and technically acceptable, it was tested for economic feasibility.

Technical Feasibility

There are a number of technical issues, which are generally raised during the feasibility stage of the investigation. A study of function, performance and constraints that may affect the ability to achieve an acceptable system. The considerations that are normally associated technical feasibility include.

- Development Risk
- Resource Availability
- Technology

It involves ensuring that the system responds to user queries and is efficient, reliable, accurate and easy to use. After the conducting the technical analysis we found that our project fulfills all the technical pre-requisites environments, if necessary are also adaptable according to the project.

Economic Feasibility

Economic feasibility is an important task of system analysis. A system that be developed and that will be used if installed must still be profitable for the organization. Financial benefits must equal or exceed the costs. The analysis raises financial and economic questions during the preliminary investigation to estimate the following.

1. The Cost to conduct a full system investigation.
2. The cost of hardware and software for the class of application of the project being considered.

3. The benefits in the form of reduced costs or fewer costly errors.
4. The cost if nothing changes.

To be judged feasible, a proposal for the specific project must pass these tests; otherwise, it is not considered as a feasible project.

- I. There will be revenue in terms of more user subscription.
- II. There will be cost reduction in terms of maintaining huge amount of paper records, stationary, humans.

Behavioural Feasibility

It centers on the reaction of the users, since the system is not so complicated it is easily understandable by anyone. User training is also very easy. The user also does not need to have any concept of the software used for developing the system.

Operational Feasibility

Proposed projects are beneficial only if they can be turned into information systems that will the operating requirements of the organization. This test of feasibility asks if the system will work when it is developed and installed. **MOBILE SHOP MANAGEMENT SYSTEM** satisfies all the operational conditions.

The system does not require enormous amount of money to be developed. This can be done economically if planned judiciously, so it is economically feasible. The cost of project depends upon the number of man hours required. It is mainly related to human organizations and political aspects. The points to be considered are:

- What changes will be brought with the system?
- What organization structures are distributed?
- What new skills will be required? Do the existing staff members have these skills? If not, can they be trained in due course of time?

The system is operationally feasible as it very easy for the End users to operate it. It only needs basic information about Windows platform.

3.2. Requirement Specification

The first step in selection understands user's requirements within the framework of the organization's objectives and the environment in which the system being installed.

Consideration is given to user's recourses and as well as to finances. In selecting software, the user must decide whether to develop it in house hire a service company or contract programmer to create it. The choice is logically made after the user has clearly defined the requirements expected of the software.

SYSTEM REQUIREMENTS

Server Side Requirements

Server type : WAMP

Server space : 500 MB

Client Side Requirement

- Any device with an internet connectivity.
- Any Browser like MS edge, Google Chrome, Mozilla Firefox.

3.3. INTRODUCTION TO FRONTEND AND BACKEND

1. PHP: HYPERTEXT PREPROCESSOR

PHP is a server-side scripting language designed for web development but also used as a general purposed programming language. As of January 2013,

PHP was installed on more than 240 million websites (39% of those sampled) and 2.1 million web servers. Originally created by Rasmus Lerdorf in 1994, the reference implementation of PHP is now produced by The PHP Group. While PHP originally stood for Personal Home Page, it now stands for PHP: Hypertext Pre-processor, a recursive acronym.

PHP code can be simply mixed with HTML code, or it can be used in combination with various templating engines and web frameworks. PHP code is usually processed by a PHP interpreter, which is usually implemented as a web server's native module or a Common Gateway Interface (CGI) executable. After the PHP code is interpreted and executed, the web server sends resulting output to its client, usually in form of a part of the generated web page – for example, PHP code can generate a web page's HTML code, an image, or some other data. PHP has also evolved to include a command-line interface (CLI) capability and can be used in standalone graphical applications.

PHP 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.

2. MySQL

MySQL is the world's most popular open source database software, with over 100 million copies of its software downloaded or distributed throughout its history. With its superior speed, reliability, and ease of use, MySQL has become the preferred choice for Web, Web 2.0, SaaS, ISV, Telecom companies and forward-thinking corporate IT Managers because it eliminates the major problems associated with downtime, maintenance and administration for modern, online applications.

Many of the world's largest and fastest-growing organizations use MySQL to save time and money powering their high-volume Web sites, critical

business systems, and packaged software — including industry leaders such as Yahoo!, Alcatel-Lucent, Google, Nokia, YouTube, Wikipedia.

MySQL was originally founded and developed in Sweden by two Swedes and a Finn: David Axmark, Allan Larsson and Michael "Monty" Widenius, who had worked together since the 1980's. MySQL, the most popular Open Source SQL database management system, is developed, distributed, and supported by Oracle Corporation. MySQL is a database management system. A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MySQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

MySQL databases are relational. A relational database stores data in separate tables rather than putting all the data in one big storeroom. The database structures are organized into physical files optimized for speed. The logical model, with objects such as databases, tables, views, rows, and columns, offers a flexible programming environment. You set up rules governing the relationships between different data fields, such as one-to-one, one-to-many, unique, required or optional, and pointers between different tables. The database enforces these rules, so that with a well designed database, your application never sees inconsistent, duplicate, orphan, out-of-date, or missing data.

The SQL part of MySQL stands for Structured Query Language. SQL is the most common standardized language used to access databases. Depending on your programming environment, you might enter SQL directly (for example, to generate reports), embed SQL statements into code written in another language, or use a language-specific API that hides the SQL syntax. SQL is defined by the ANSI/ISO SQL Standard.

The SQL standard has been evolving since 1986 and several versions exist.

The MySQL Database Server is very fast, reliable, scalable, and easy to use. If that is what you are looking for, you should give it a try. MySQL Server can run comfortably on a desktop or laptop, alongside your other applications, web servers, and so on, requiring little or no attention.

MySQL can also scale up to clusters of machines, networked together. MySQL Server was originally developed to handle large databases much faster than existing solutions and has been successfully used in highly demanding production environments for several years. Although under constant development, MySQL Server today offers a rich and useful set of functions. Its connectivity, speed, and security make MySQL Server highly suited for accessing databases on the Internet. MySQL Server works in client/server or embedded systems.

3. WAMP Server

WAMP server is a Windows web development environment. It allows you to create web applications with Apache2, PHP and a MySQL database. Alongside, PhpMyAdmin allows you to manage easily your databases.

WampServer refers to a software stack for the Microsoft Windows operating system, created by Romain Bourdon and consisting of the Apache web server, Open SSL for SSL support, MySQL database and PHP programming language. WampServer is a Web development platform on Windows that allows you to create dynamic Web applications with Apache2, PHP and MySQL. WampServer automatically installs everything you need to intuitively develop Web applications. You will be able to tune your server without even touching its setting files. Best of all, WampServer is available for

free (under GPML license) in both 32 and 64 bit versions. WampServer is not compatible with Windows XP, SP3, or Windows Server 2003.

SQL CONSTRAINTS

You can place constraints to limit the type of data that can go into a table. Such constraints can be specified when the table is first created via the CREATE TABLE statement, or after the table is already created via the ALTER TABLE statement.

Common types of constraints include the following:

- **NOT NULL Constraint:** Ensures that a column cannot have NULL value.
- **DEFAULT Constraint:** Provides a default value for a column when none is specified.
- **UNIQUE Constraint:** Ensures that all values in a column are different.
- **CHECK Constraint:** Makes sure that all values in a column satisfy certain criteria.
- **PRIMARY KEY Constraint:** Used to uniquely identify a row in the table.
- **FOREIGN KEY Constraint:** Used to ensure referential integrity of the data.

SYSTEM DESIGN

4. SYSTEM DESIGN

System design involves the detailed design of the system selected in the system study phase.

4.1. Input Design

Input design is the process of converting user-oriented inputs to computer-based format. The input to the system can be defined as the information that is provided to the system that is used for processing by the system to obtain meaningful information, which helps in decision-making. Input design is the most expensive phase of the project and may cause some major problems if not designed with care. The quality of system is determined from the quality of system outputs which in turn is determined from input.

Input design features can ensure the reliability of the system and also determines how efficiently the user can interact with the system. A good input screen is clear and free from irrelevant information. Entered data has to be checked for their accuracy and detection of errors. All the data entry screens should be of interactive nature that user can directly input data according to prompt messages. The input design determines whether the user can interact directly with the computer.

All the input screens used here have script validations for null checking and data types whereas required. All the programs inserting data to the table checks the length of the values in addition to the data type verification. They also prompt the entry of values in mandatory fields.

The goal of designing input data is to make it free from logical errors. The input data is also used for easy calculation of necessary functions. Different

forms are used for data screens in order to input data into the system. The screen formats have options like add, delete, edit and update with buttons, which is used for easy input and retrieving information. All the fields are validated. If the user enters invalid data, appropriate messages are displayed.

Input specifications describe the manner in which data enter the system for processing. The design of the input should have:

Effectiveness

Accuracy

Ease to use

Consistency

Simplicity

Attractiveness

4.2. Output Design

One of the most important features of the system for users is the output it produces. Output design should improve the system relationship with the user it produces and helps in decision making. Considering the future use of the output required and depending on the nature, they are displayed on the monitor for immediate need or obtaining the hardcopy.

The objective of output design is to define the control and formats of all printed, documented, reports and screens that will be produced by the system. Computer output is the most important and direct source of information to the user. For many end users output is the main reason for developing the system and the basis on which they will evaluate the usefulness of the application.

Output generally refers to the results that are generated by the system. The output of the system is designed so as to include a number of reports. Reports reflect the output design.

Objective of output design are design output to serve the intended purpose, design output to fit the user, deliver the appropriate quantity of output, assures that output is where it is needed, provide output on time, choose the right output method.

The CRT displays can include a title, column heading, detailed data totals; they must be described in detailed for programmers. In the case of CRT displays layout design the area is limited by the size of the screen as the amount of data that can displayed in the record.

The report contains:

Purchase details

Sales details

Payment details

4.3. Database Design

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and effectively. The objective of the database is to make information access easy, quick, inexpensive and flexible for the user.

The most important aspect of building an application is the design of tables or the database scheme. The data stored in the tables must be organized in some manner, which is meaningful. The overall objective in the process of table design has been to treat data as an organizational resource and as an

integrated whole. The organization of data in a database aims to achieve three major objectives, which are given below.

Data Integration

Data Abstraction

Data Independence

Several degree of normalization have to be applied during the process of table design. The major aim of the process normalization is to reduce data redundancy and prevent losing data integrity. Redundancy refers to unwanted and unnecessary repetition of data. Data integrity has to be converted at all levels. Poor normalization can access problem related to storage and retrieval of data. During the process of normalization, dependencies can be identified which cause serious problem during deletion and updating. Normalizing also helps in simplifying the structure of tables.

The theme behind a database is to handle information as an integrated whole thus making access to information easy, quick, inexpensive and flexible for users. The entire package depends on how the data are maintained in the system. Each table has been designed with a perfect vision.

NORMALIZATION

Normalization is the process of efficiently organizing data in a database. There are two goals of the normalization process: eliminating redundant data (for example, storing the same data in more than one table) and ensuring data dependencies make sense (only storing related data in a (table)). Both of these are worthy goals as they reduce the amount of space a database consumes and ensure that data is logically stored.

Benefits:

1. Eliminate data redundancy
2. Improve performance
3. Query optimization
4. Faster update due to less number of columns in one table
5. Index improvement

The Normal Forms

The database community has developed a series of guidelines for ensuring that databases are normalized. These are referred to as normal forms and are numbered from one (the lowest form of normalization, referred to as first normal form or 1NF) through five (fifth normal form or 5NF). In practical applications, you'll often see 1NF, 2NF, and 3NF along with the occasional 4NF.

First normal form (1NF) sets the very basic rules for an organized database:

- Eliminate duplicative columns from the same table.
- Create separate tables for each group of related data and identify each row with a unique column or set of columns (the primary key).

Second normal form (2NF) further addresses the concept of removing duplicative data:

- Meet all the requirements of the first normal form.
- Remove subsets of data that apply to multiple rows of a table and place them in separate tables.

- Create relationships between these new tables and their predecessors through the use of foreign keys.

Third normal form (3NF) goes one large step further:

- Meet all the requirements of the second normal form.
- Remove columns that are not dependent upon the primary key.

The Boyce-Codd Normal Form also referred to as the "third and half (3.5) normal form", adds one more requirement:

- Meet all the requirements of the third normal form
- Every determinant must be a candidate key.

Fourth Normal Form (4NF)

Finally, fourth normal form (4NF) has one additional requirement:

- Meet all the requirements of the third normal form.
- A relation is in 4NF if it has no multi-valued dependencies.

Remember, these normalization guidelines are cumulative. For a database to be in 2NF, it must first fulfill all the criteria of a 1NF database.

RULES OF NORMALIZATION

Rule 1: There should be a one-to-one relationship between the instances of an entity and the rows of the table

Rule 2: A field should have the same meaning in each row of the table.

Rule 3: Each table should represent at most one entity.

Rule 4: Multiple instances of an entity should be represented by multiple rows in a table.

Rule 5: Joins should be based only on primary and foreign-key equality.

Rule 6: Make sure keys are linked correctly.

4.4. TABLES

1. Table name: REGISTER

Description: used to store the login details

Primary Key: User_id

FIELD NAME	DATA TYPE	DESCRIPTION
User_id	INT(4)	Defined the user id
Username	Varchar(20)	Specifies the username of the user
Email	Varchar(40)	Specifies the email of the user
Password	Varchar(20)	Specifies the password of the user
Address	Varchar(30)	Specifies the address of the user
Phone	Numeric(10)	Specifies the phone number of the user

2. Table name: **PRODUCT**

Description: used to storing the product details.

Primary Key : Pro_id

FIELD NAME	DATA TYPE	DESCRIPTION
Pro_id	INT(4)	Defined the product id
Model_name	Varchar(25)	Specifies the product name
Price	Numeric(6)	Specifies the price of the product
Color	Varchar(10)	Specifies the colour of the product
Memory	Varchar(10)	Specifies the ROM of the product
Display	Varchar(30)	Specifies the display of the product
Chip	Varchar(30)	Specifies the processor of the product
Front_camera	Varchar(20)	Specifies the front_camera of the product
Camera	Varchar(20)	Specifies the camera of the product
Image	Varchar(20)	Specifies the image of the product

3. Table name: CUSTOMER

Description: user for storing user details

Primary Key: Cus_id

Foreign Key : User_id

FIELD NAME	DATA TYPE	DESCRIPTION
User_id	INT(4)	Defined the user id
Cus_id	INT(4)	Define the customer id
Uname	Varchar(20)	Specifies the name of the user
Address	Varchar(30)	Specifies the address of the user
Phone	Numeric(10)	Specifies the phone number of the user
City	Varchar(20)	Specifies the city of the user
Pincode	Numeric(6)	Specifies the pincode of the user
Locality	Varchar(15)	Specifies the locality of the user
State	Varchar(15)	Specifies the state of the user
Landmark	Varchar(20)	Specifies the landmark of the user
Alt_phn	Numeric(10)	Specifies the alternate number of the user

4. Table name :STOCK

Description : used to store stock details

Foreign Key: Pro_id

FIELD NAME	DATA TYPE	DESCRIPTION
Pro_id	INT(4)	Specifies the product id
Quantity	INT(4)	Specifies the quantity of the product

5. Table name : ORDER

Description : used for storing order details

Primary Key : Or_id

Foreign Key : Pr_id

FIELD NAME	DATA TYPE	DESCRIPTION
Or_id	Numeric	Defined the order id
Pro_id	Numeric	Specifies the product id
Cus_id	Numeric	Specifies the customer id
Date_of_order	Datetime	Specifies the order date
Price	Numeric	Specifies the price of the product

4.5. Data Flow Diagram

A data flow diagram is a network that describes the flow of data throughout a system, data stores, and the processes that change, or transform, data flows. The DFD network is a formal, logical abstract of a system that may have many possible physical configurations.

A graphical representation is used to describe and analyze the movement of data through a system manual or automated including the processes, storing of data and delays in system. Data flow diagrams are central tool and the basis from which other components are developed.

The transformation of data, from input to output through process may be described logically and independently of the physical components associated with the system. They are termed logical data flow diagrams, showing the actual implementation and the movement of data between people, departments and workstations. DFD is one of the most important modeling tools used in system design. DFD shows the flow of data through different process in system.

The purpose of the design is to create architecture for the evolving implementation and established common tactical policies that must be used by desperate elements of the system. We begin the system process as soon as we have some reasonably completed model of the behavior of the system. It is important to avoid premature designs, where in develop designs before analysis reaches closer. It is important to avoid delayed designing where in the organization crashes while trying to complete and unachievable in the organization crashes while trying to complete and unachievable analysis model.

Throughout my project, the context flow diagram, and flowcharts have been extensively used to achieve the successful design of the system

DFD are made up of a number of symbols, which represents system components. Data flow modeling methods uses 4 kinds of symbols, which are

used to represent four kinds of system components. These are:

Process

Process shows in the work of the system. Each process has one or more data inputs and produces one or more data outputs. Process are represented by rounded rectangles in DFD. Each process has unique name and number appears inside the rectangle that represents the process in a data flow diagram.

Data Store

A data store is a repository of data. Processes can enter data into store or retrieve the data from data store. Each data has a unique name.

Data flows

Data flows show the passage of data in the system and are represented by lines joining system components. An arrow indicates the direction of flow and the line is labeled by name of the data flow.

External Entity

External entities are outside the system but they either supply input data into the system or use other system output. They are entities on which the designer has control. They may be an organization customer or other with which the system interacts. It supply data into the system called source.

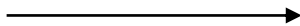
External entities that use the system data are sometimes called sinks. These are represented by rectangles in DFD.

The basic data flow symbols are :

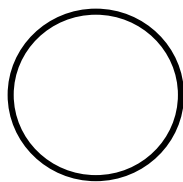
Rectangle: represents a data source or destination.



Arrow: represents a flow of data, that is, a data stream.



Circle: represents a process that transforms incoming data into outgoing data.



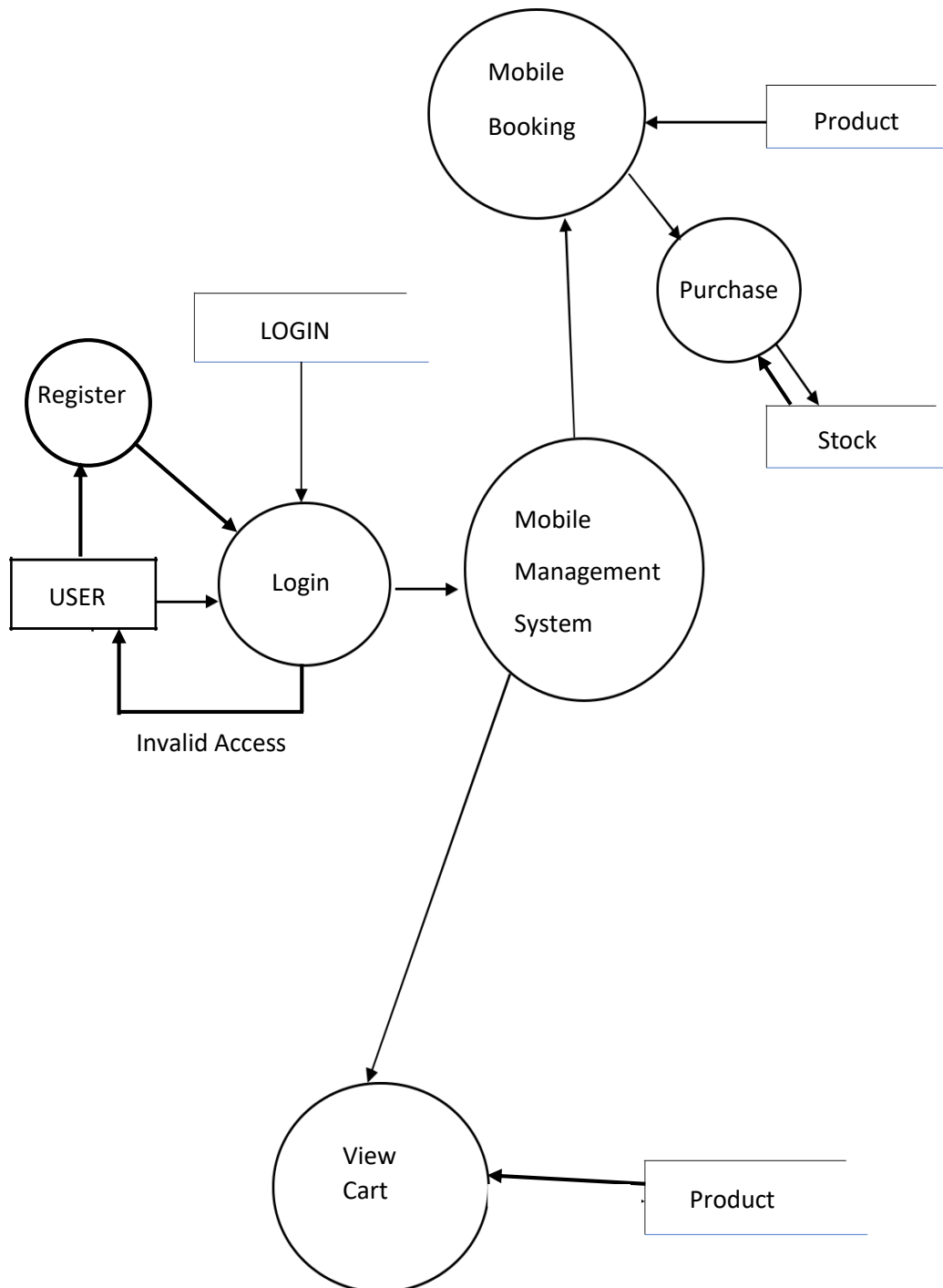
Open rectangle: represents a data store.

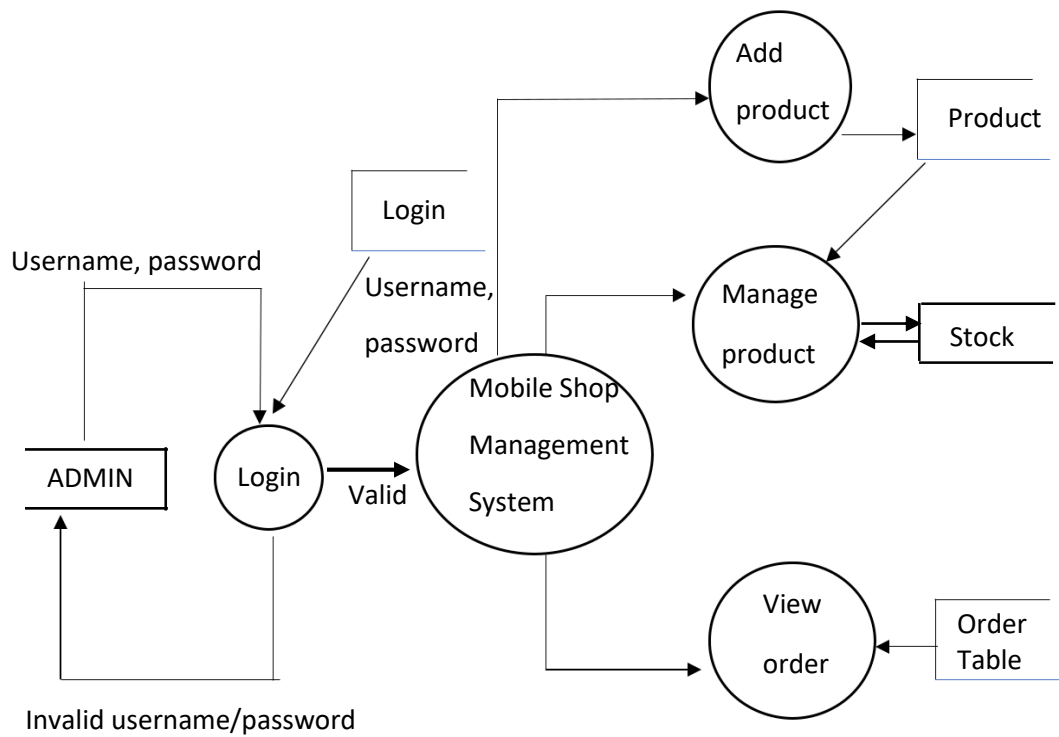


Four steps are commonly used to construct a DFD.

1. Four steps are commonly used to construct a DFD. All names should be unique. This makes it easier to refer to items in the DFD.
2. Remember that a DFD is not a flow chart. Arrows in a flow chart represent the order of events; arrows in DFD represent following data. A DFD does not imply any order of events.
3. Suppress logical decisions. If we ever have the urge to draw a diamond shaped box in a DFD, suppress that urge! A diamond-shaped box is used in flow charts to represent decision points with multiple exit paths of which only one is taken. This implies an ordering of events, which makes no sense in a DFD.
4. Do not become bogged down with details. Defer error conditions and error handling until the end of the analysis.

LEVEL 0 DFD

LEVEL 1 DFD FOR USER

LEVEL 1 DFD FOR ADMIN

SYSTEM TESTING

5. SYSTEM TESTING

5.1. Testing Procedures

The purpose of system testing is to identify and correct errors in the candidate system. Testing is an important element of the software quality assurance and represents the ultimate review of specification, design and coding. The increasing visibility of the software as a system element and the costs associated with a software failure are motivated forces for well planned, through testing.

Software testing is a critical element of the software development cycle. The testing is essential for ensuring the Quality of the software developed and represents the ultimate view of specification, design and code generation. Software testing is designed as the process by which one detects the defects in the software. Testing is a set activity that can be planned and conducted systematically. Testing begins at the module level and work towards the integration of entire computers based system. During testing the system is used experimentally to ensure that the software does not fail, i.e., it will run according to the specification and in the way the user expects. Preparation of test data plays a vital role in the system testing. Different set of test data are generated and the system under study is tested using that data.

A good test case is one that has a high probability of finding an as-yet undiscovered errors. A successful test is one such uncovers or finds such errors. If testing is conducted successfully; it will uncover errors in the software. It also demonstrates that software functions are being performed according to specification and also behavioral and performance requirements are satisfied. For this, test plans have to be prepared. The implementation of a computer system requires that test data has to be prepared and that the book stall management system as well as its elements is being tested in a planned and

efficient manner. Nothing is complete without testing, as it vital success of the system

5.2. Testing Methodologies

The candidate system is subject to verify of test to determine the response time and security. Different testing methodologies are applied before the system is tested for user acceptance.

UNIT TESTING

In unit testing the analyst tests the programs making up a system. Unit testing gives stress on the modules independently of one another, to find errors. This helps the tester in detecting errors in coding and logic that are contained within that module alone. The errors resulting from the interaction between modules are initially avoided. Unit testing can be performed from the bottom up, starting with smallest and lowest-level modules and proceeding one at a time. For each module in bottom-up testing a short program is used to execute the module and provides the needed data, so that the module is asked to perform the way it will when embedded within the larger system.

Unit testing deals with testing a unit as a whole. This would test the interaction of many functions but confine the test within one unit. The exact scope of a unit is left to interpretation. Supporting test code, sometimes called scaffolding, may be necessary to support an individual test. This type of testing is driven by the architecture and implementation teams. This focus is also called black-box testing because only the details of the interface are visible to the test. Limits that are global to a unit are tested here.

In software testing, one particular test may need some supporting software. This software establishes an environment around the test. Only when

this environment is established can a correct evaluation of the test take place. The scaffolding software may establish state and values for data structures as well as providing dummy external functions for the test. Different scaffolding software may be needed from one test to another test. Scaffolding software rarely is considered part of the system. Sometimes the scaffolding software becomes larger than the system software being tested. Usually the scaffolding software is not of the same quality as the system software and frequently is quite fragile. A small change in the test may lead to much larger changes in the scaffolding.

I have tested each view or module of the application individually. As the modules were built up testing was carried out simultaneously, tracking out each and every kind of input and checking the corresponding output until module is working correctly.

In cart details it has been tested that when a user removes a product from the cart, the total price is updated accordingly. When a product has been added to cart it has been made sure that if the item already exists in the shopping cart then the quantity is increased by one else a new item is created in the shopping cart.

INTEGRATION TESTING

This testing level can be simply defined as integrating and then testing. i.e., here, many unit tested modules are combined into subsystems, which are then tested. Integration testing aims at whether the modules can be integrated properly. Hence, the emphasis is on testing interfaces between modules. This testing activity can be considered testing the design.

Integration testing takes as its input modules that have been unit tested, groups them in larger aggregates, applies tests defined in an integration test plan to those aggregates, and delivers as its output the integrated system

ready for system testing. The purpose of integration testing is to verify functional, performance and reliability requirements placed on major design items.

In this project i have done integration testing in a bottom up fashion i.e. in this project I have started construction and testing with atomic modules. After unit testing the modules are integrated one by one and then tested the system for problems arising from component interaction.

SYSTEM TESTING

The important and essential part of the system development phase, after designing and developing the software is system testing. Theoretically, a newly designed system should have all the parts or sub- systems are in working order, but in reality, each sub-system works independently. This is the time to gather all the subsystem into one pool and test the whole system to determine

whether it meets the user requirements. The purpose of system testing is to consider all the likely variations to which it will be subjected and then push the system to its limits.

VALIDATION TESTING

Validation can be defined that it succeeds when the software functions in a manner that can be reasonably expected by the customer. Software validation is achieved through a series of black box tests that demonstrate conformity with requirements. An important element of the validation process is a configuration review. The intent of the review is to ensure that all the elements of the software life cycle. It is virtually impossible for software developer to foresee how the customer will use the program.

When custom software is built for one customer a series of acceptance tests are conducted to enable the customer to validate all requirements. Conducted by the end user rather than the system developer, an acceptance tests

can range from an informal 'test drive' to a planned systematically executed series of tests. In fact acceptance testing can be conducted over a period of weeks or months, thereby uncovering cumulative errors that might degrade the system overtime.

I have used a number of test cases for which different inputs were used to check whether desired output is produced or not.

1. Addition of a new product to the cart should create a new row in the shopping cart.
2. Addition of an existing product to the cart has to update the quantity of the product.
3. Any changes to the items in the cart have to update the summary correctly.

SYSTEM IMPLEMENTATION AND MAINTENANCE

6. SYSTEM IMPLEMENTATION

An import aspect of system analyst's job is to make sure that the new design is implemented to established standard. Implementation is used here to mean the process of converting a new or a reversed system design into operational one.

There are three types of implementation,

- Implementation of a computer system to replace a manual system.
The problems encountered are converting files, training users, creating accurate and verifying print outs for integrity.
- Implementation of a new computer system to replace the existing one.
- Implementation of modified application to replace an existing or, using the same computer. This type of conversion is relatively easy to handle

Conversion

Conversion means changing from one system to another. The objective is to put the system into operation while holding costs, risks and personal irritation to a minimum. It involves

- Creating computer compatible files.
- Training the operating staff.
- Installing terminals and hardware.

User Training

The analyst must have clear idea about the user's capacity and requirement. A well designed system may fail because of the way are operated and used. So the user must be trained before using the new system and the quality of the training must be high

SYSTEM MAINTENANCE

System Security and Backup

The implementation phase is the rollout of the production version of the system to the client community. This involves tasks like backing up the existing system, data conversions producing user documentation.

Security

Security is an essential part of the increased scale of computerization and the development of the system like sensitive area....

Back up

Backups for hardware, the data and the system are inevitable factor to be considered. Data backup represents insurance against actual loss of data due to equipment malfunction. Program failure or accident. Hence data can be providing on hard disk or on floppy disk.

Documenting the System

After the jobs of testing were completed the whole system as well documented in clear, Understandable and simple language. This was to ensure that if any updating has to be performed in the future the users would not face any difficulties in performing tasks. An acceptance was made to attain

maximum perfection in documentation the software in a simple, precise and self-explanatory manner.

The documentations deal with the system development with maximum clarity. Each and every process is explained in details. The various tables used by the system with their fields are provided. Different types of programs denoting various activities of the system are included. The testing methods adopted also from a part of the document. The output generated by the system constitutes another part.

FUTURE SCOPE OF THE PROJECT

7. FUTURE SCOPE OF THE PROJECT

Future expansions of the project depend upon automatically generating reports for purchase and sales, online purchasing facility for customers. Shops could implement the **MOBILE SHOP MANAGEMENT SYSTEM**, as it is simple and user friendly. Making enhancements is all about perfective maintenance. It means adding, modifying or redeveloping the code to support changes in the specifications. It is necessary to keep up with changing user needs and the operational environment. More money and time is spent on perfective maintenance than on corrective or adaptive maintenance together. The main advantage of the proposed system is that we can easily access and maintain the customer information and it helps in saving the time and also reduces the cost and manual effort.

We can also integrate online payment using credit cards, debit cards, net banking and using UPI id, additional features that allows users to review the product, rate the product, report complaints and feedback forms can be implemented, we can also include relevant advertisements in the website which will make the system more economical, there can also be room for real time customer support in the form of queries about the product and delivery services.

CONCLUSION

8. CONCLUSION

It is believed that almost all system objectives have being met. A trial run of the system has been made and is giving good results. The procedure for processing is simple and regular in order.

The system has been developed keeping in view of the limitations of the existing manual system and attempt has been made to overcome the limitations. It would render faster and better services to the user. System has got the feature of easy generation of various reports of which new system will almost definitely be preferred over the existing system. However modification can be made depending on the changing environment.

For maximum utilization of the system, users should make sure that all the data entries should be complete. This project work is not without drawbacks even though 'it is unique in its nature.

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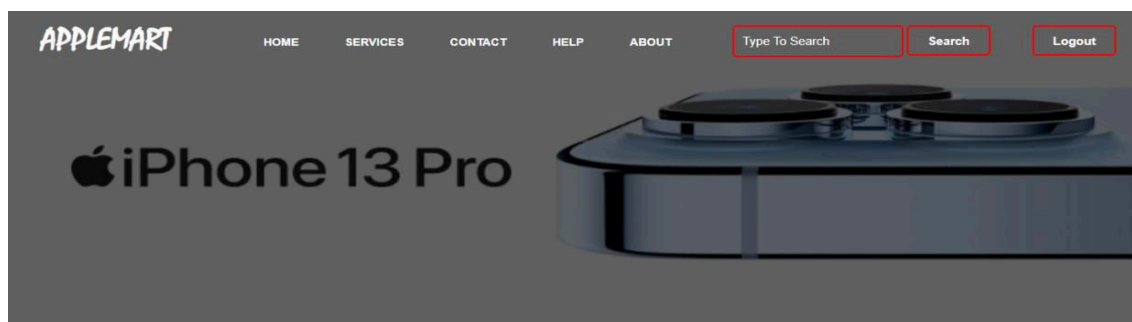
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SCREENSHOTS

HOME

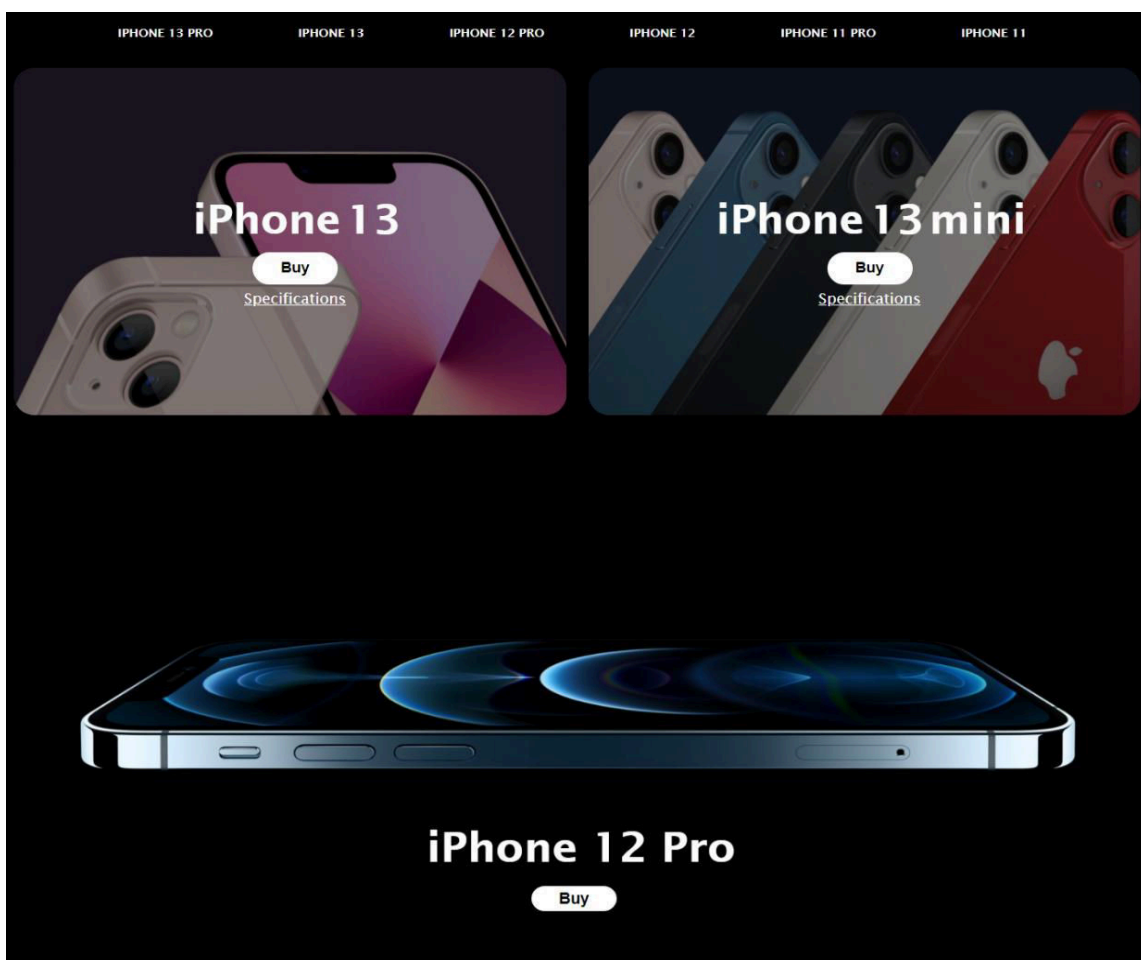


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686580

Thalanadu

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Erattupetta

Kerala

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☒ Home (All day delivery)

☐ Work (Delivery between 10 AM - 5 PM)

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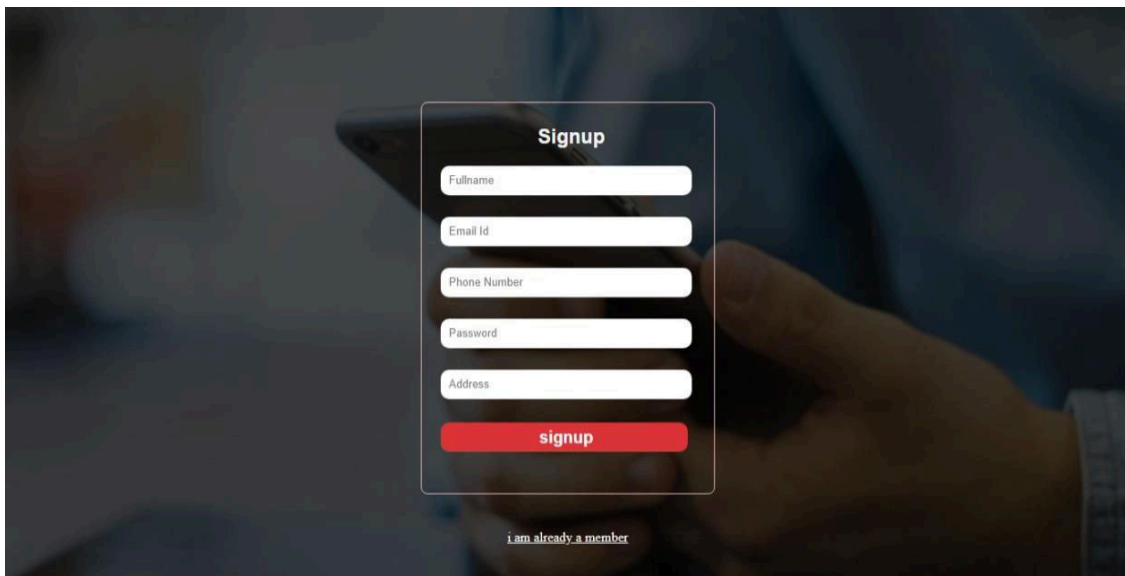
Price	129900
Delivery Charge	FREE
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User Registration

A user registration form titled "Signup" is displayed over a background image of a person holding a smartphone. The form contains five input fields: "Fullname", "Email Id", "Phone Number", "Password", and "Address". Below these fields is a red "signup" button. At the bottom of the form, there is a link that says "i am already a member".

Signup

Fullname

Email Id

Phone Number

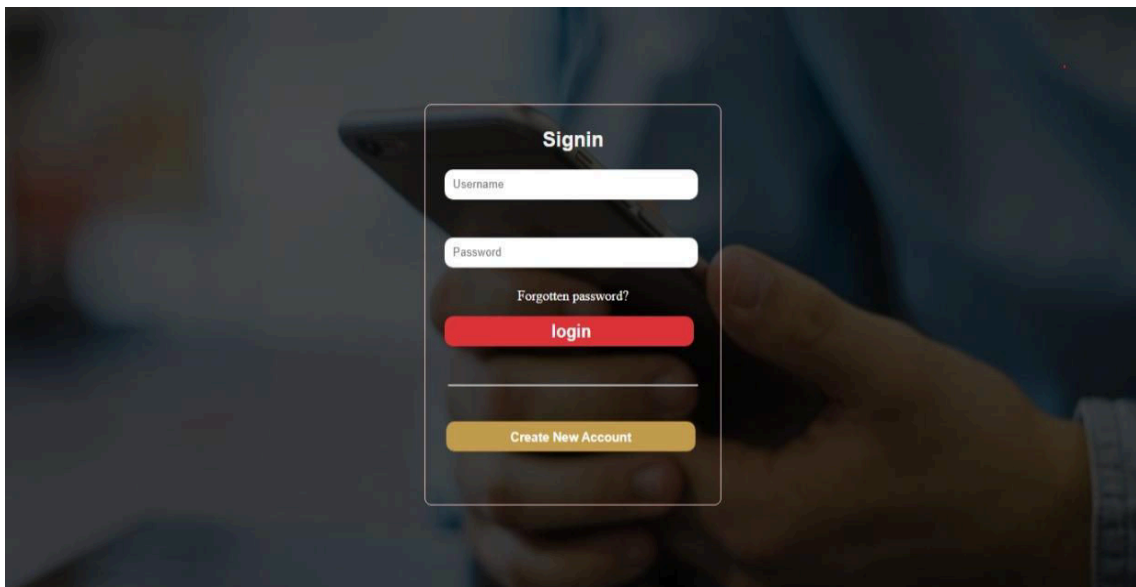
Password

Address

signup

[i am already a member](#)

User Login



Confirmation message

[Home](#)[Sign out](#)

Thank You
Anandhu M S

Address:Meleveettil Thalanadu **Phn:**706762009 **Pincode:**686580

Locality:Thalanadu **City:**Erattupetta **Landmark:** **State:**kerala

Type:home **Alt_phn:**

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Product Adding

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Model Name	Price
Colour	Display
Chip	Memory
Camera	Front Camera

Image: No file chosen

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Product Manage

Model name	Price	Colour	Display	Chip	Memory	Camera	Front_camera	Image		
iphone 12 Pro	109900	Silver	6.1 inch Super Retina XDR	A14 Bionic Chip with Next Generation Neural Engine Processor	128	12MP + 12MP + 12MP	12MP	6207983bb45ce.jpeg	Edit	Delete
Iphone 12 Pro Max	149900	Gold	6.7 inch Super Retina XDR with All Screen OLED Display	A14 Bionic Chip with Next Generation Neural Engine Processor	128	12MP + 12MP + 12MP	12MP	620798e1ba51a.jpeg	Edit	Delete
Iphone 12 mini	41199	Black	5.4 inch Super Retina XDR with All screen OLED	A14 Bionic Chip with Next Generation Neural Engine Processor	64	12MP + 12MP	12MP	62079963daca8.jpeg	Edit	Delete
iphone 13	74900	Blue	6.1 inch Super Retina XDR	A15 Bionic Chip Processor	128	12MP + 12MP	12MP	620799de2f347.jpeg	Edit	Delete
Iphone 13 pro	129900	Sierra Blue	6.1 inch Super Retina XDR	A15 Bionic Chip Processor	256	12MP + 12MP + 12MP	12MP	62079a61409c2.jpeg	Edit	Delete
Iphone 13 Pro Max	159900	Graphite	6.1 inch Super Retina XDR	A15 Bionic Chip Processor	256	12MP + 12MP + 12MP	12MP	62079add1fb2f.jpeg	Edit	Delete
Iphone 13 Mini	69900	Blue	5.4 inch Super Retina XDR	A15 Bionic Chip Processor	128	12MP + 12MP	12MP	62079b43999af.jpeg	Edit	Delete
Iphone 13 Pro	100000	Red	6.1 inch Super Retina XDR	A15 Bionic Chip	64	12MP + 12MP	12MP	6207eb60051a9.jpeg	Edit	Delete
Iphone 11 pro	131900	Gold	6.5 inch Super Retina XDR	A13 Bionic Chip	128	12MP + 12MP + 12MP	12MP	620a78807ac78.jpeg	Edit	Delete

Cart

Order View

Delivery ID	User ID	Name	Address	City	Locality	Landmark	Pincode	State	Phone_Num	Alt_phn	Delivery_point	
23	0	anandhu	Meleveettil	Erattupetta	Thalanadu		686580	kerala	706762009	0	home	Delete
24	7	Anandhu M S	Meleveettil Thalanadu	Erattupetta	Thalanadu		686580	kerala	706762009	0	home	Delete
25	7	Anandhu M S	Meleveettil Thalanadu	Erattupetta	Thalanadu		686580	kerala	706762009	0	home	Delete
26	7	Anandhu M S	Meleveettil Thalanadu	Erattupetta	Thalanadu		686580	kerala	706762009	0	home	Delete