**MobileMart.com**

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**1. INTRODUCTION**

The MobileMart is the part of the sample application that provides customers with online shopping through a Web browser, a customer can browse the catalog, place items to purchase into a virtual shopping cart, create and sign in to a user account, and purchase the shopping cart contents by placing an order with a credit card. By integrating information and improving processes, MobileMart will help improve enterprise-wide decision support and operational efficiency. Improved efficiency translates into:

• More resources to support the enterprise .

• Improved customer service

• Web-based and more user friendly interfaces to buyers .

An extremely powerful marketing tool, mobilemart’s ability to suggestively sell alternate and complementary products; e.g. if a customer selects the "standard" version of a product, you can recommend that they also consider the "pro" version or if your customer chooses any specific model, you can suggest that they also consider accessories also. Simply specify related product skiils and optional text in a product’s definition in your Merchant Administrator, and PDG Shopping Cart will up-sell or recommend related products to your customers automatically.

**EXISTING SYSTEM**

* In the current system all work are done manually.
* Wastage of time to find out how many order are placed.
* In manual system generating reports for particular types of data based on some condition is time consuming task.
* Searching facility is not provided in a System.
* Time & Money is not saving in a System.

**2. AIM AND OBJECTIVES**

* In the new system customer can purchase mobile online.
* Save time and money by online shopping.
* Customer can see the latest mobile.
* Give the Discount Offer For Customer.
* Member Ship of Customer.

**Features:**

* Provide different type of searching facilities.
* Provide shipping method.

* Provide upcoming mobile news detail.
* Generate different types of reports.
* Customer can manage profile.
* Online SMS and Email Send to the Customer.

**3. PROJECT CATEGORY:**

The **MobileMart** is a web based application which provides various functionality to the User for executing all transaction in smooth User Friendly and Effective, it also provide search the product comparison of two product and many more facility to the User. The undergoing project falls under Internet technologies **RDBMS (Relational Database Management System)** category. Since the project is mainly responsible for creation of the website with the online database at back-end RDBMS.

**JAVA**

This Project is coupled with material on how to use the various tool subsets available in JAVA. JAVA is one of the most widely used development tools on the market today. Java is high level, robust and secured language.

**MVC Architecture**

It provides a clear separation of application responsibilities. • A central servlet, known as the Controller, receives all requests for the application from JSP. • The Controller works with the Model to prepare any data needed by the View and forwards the data back to the JSP. • The business and presentation logic are separated from each other, which help to reuse the logic.

**MYSQL**

MySQL is backend application used for project development. A database is a separate application that stores a collection of data.

Each database has one or more distinct APIs for creating, accessing, managing, searching and replicating the data it holds. MySQL is the most popular Open Source Relational SQL database management system. MySQL is one of the best RDBMS being used for developing web-based software applications.

**NetBeans**

NetBeans is coded in Java and runs on most operating systems with a Java Virtual Machine (JVM), including Solaris, Mac OS, and Linux. It is also the best platform for java to run program. NetBeans IDE lets you quickly and easily develop Java desktop, mobile, and web applications, as well as HTML5 applications with HTML, JavaScript, and CSS.

**4.SOFTWARE REQUIREMENT SPECIFICATION**

**INTRODUCTION**

The software requirement is the essential part of the software development. It is specify the requirement for the software development. It also determined the quality of the software depend upon it requirement and design according to it. Thus The SRS should be consistent, correct, unambiguous & complete.

Software requirement specification of my project (MobileMart) is following:-

* The system helps in buying of goods, products and services online by choosing the listed products from website (E-Commerce site)..
* Save time and money by online shopping.
* Give the Discount Offer For Customer.
* Providing product support or customer service.

The basic SRS contains following topics:-

1. **Introduction :**

* Purpose.
* Scope Definition and abbreviation.
* References.
* Overview.

1. **Overall Description :**

* Product perspective.
* Product function.
* User characteristics.
* Constraint.

1. **Specific Requirement :**

* External interfaces.
* Functional requirement.
* Performance requirement.
* Logical database requirement.
* Addition attributes.

1. **Support Information :**

* Table of the content.
* Appendixes.

**ANALYSIS**

**Existing MobileMart:-**

The system helps in buying of goods, products and services online by choosing the listed products from website (E-Commerce site).

**Product Perspective :**

The proposed system is a solution carry out buying/ selling products (mobiles) online. The system allows the user to buy/sell products online across internet connection globally.

**Feasibility Study**

Feasibility study means whether the given project is feasible for the given customer or not. My project is feasible to small and medium type customers. It will not costly too much. Its technical requirements are also feasible to install and implement. I have developed my project on java as front end and MySQL Server as back end which is easily available. And its cost is only few thousand. Its hardware requirement is also very minimum. It can be run on 1 GB RAM and 128 GB hard disk (without operating system).

I am trying to develop the interface of the project. In such a way that any type of client, who have basic knowledge of computer can easily operate.

I have also scheduled the different phases of SDLC in such a way that it can be completed in 4-5 months.

The key consideration in Feasibility study is:

* **Economic Feasibility**
* **Technical Feasibility**
* **Operational Feasibility**

1. **ECONOMICAL FEASIBILITY**

It looks at the financial aspects of the project. It determines whether the management has enough resources and budget to invest in the proposed system and the estimated time for the recovery of cost incurred. It also determines whether it is worthwhile to invest the money in the proposed project. Economic feasibility is determines by the means of cost benefit analysis. The proposed system is economically feasible because the cost involved in purchasing the hardware and the software are within approachable. The personal cost like salaries of employees hired are also nominal, because working in this system need not required a highly qualified professional. The operating-environment costs are marginal. The less time involved also helped in its economical feasibility. It was observed that the organization has already using computers for other purpose, so that there is no additional cost to be incurred for adding this system to its computers.

The backend required for storing other details is also the same database that is SQL. The computers in the organization are highly sophisticated and don’t needs extra components to load the software. Hence the organization can implement the new system without any additional expenditure.

1. **TECHNICAL FEASIBILITY**

It is a measure of the practically of a specific technical solution and the availability of technical resources and expertise

* The proposed system uses Java as front-end and MySQL Server as back-end tool.
* MySQL server is a popular tool used to design and develop database objects such as table views, indexes.
* The above tools are readily available, easy to work with and widely used for developing commercial application.

1. **OPERATIONAL FEASIBILITY**
   * + The system will be used if it is developed well then be resistance for users that undetermined
     + No major training and new skills are required as it is based on DBMS model.
     + It will help in the time saving and fast processing and dispersal of user request and applications.
     + Improved information, better management and collection of the reports.
     + User support.

**FUNCTIONAL SPECIFICATION**

**Modules Description**

* **User Management:**
  + In this module new customer can register in our web site.
  + Already register Customer can login in our web site.
  + Customer can update own profile.
* **Mobile Management:**
  + Admin can manage mobile and easily add, update, delete the product.
  + Customer can select the product and view product.
* **Order Management:**
  + Admin can manage the all order and view and confirm the all order.
  + Customer can give the order.
* **Shopping Cart :**
  + Customer can view their selected mobile.
  + And they can update or delete their products.
* **Payment:**
  + Customer can pay their price through PayPal and cash on delivery.
* **Feedback:**
  + Customer can give feedback.

* **Report Generate:**
  + Generate different types of reports.

**User with Specific Role**

**1) Admin:**

* **Login:**
* Admin can Login in our website.
* **Manage Mobile and mobile category:**
* Admin can Manage all type mobile and mobile category.
* **Manage Customer:**
* Admin can manage customer and his/her Order.
* **Manage Payment Detail:**
* Admin can manage payment detail PayPal.
* **Generate Report:**
* Admin can generate the Different types of report.

**2) Customer:**

* **Registration :**
* New customer can registration in our web site.
* **View product and product category :**
* Customer can view the product and product category in our web site.
* **Search product :**
* Customer can search the various mobile.
* **Login :**
* Already Registered Customer can login in our web site.
* **Add to Cart :**
* Customer can select multiple mobile through cart & they can update or delete their products.
* **Buy product :**
* Customer can purchase the mobile.
* **Feedback:**
* Customer can give the feedback.

**3) Visitors:**

* **Search product :**
* Customer can search the various mobile.
* **View mobile category :**
* Customer can view the mobile and mobile category in our website.

**5. TOOLS AND PLATFORM**

**Software Requirement**

* **Operating system** : Windows Server 2008/2012, Windows 7/8/10
* **Technologies** : JSP, Servlet
* **Database** : MySql Server
* **Platform** : NetBeans IDE
* **Documentation** : MS-Word

**Hardware Requirement**

* **Processor**  : Intel(R) Core i3-4010U CPU 1.70GHz
* **RAM** : 1GB or above
* **Hard Disk** : 128 GB
* **Monitor** : 14 “SVGA
* **Printer** : Laser Printer
* **Mouse** : Normal
* **Keyboard** : Normal

**6. PLANNING & SCHEDULING**

Scheduling is the process used for the project planning. It is a time management tool; consist of list of time for the particular tasks. The reason is to measure the progress of a project. It is used to configure that how much time this project will takes to complete. It divides processes that included into the system in very timely manner. Each process has its own time for completion.

**PERT CHART:** Program evaluation and review technique is a scheduling method originally designed to plan a project by maintaining of its time & cost. In this system PERT chart is used for time & cost management.

16-22 days

0-15days

23-31 days

32-44 days

45-50 days

51-59 days

60-66 days

**7. DFD (Data flow diagram)**

The data flow diagram is pictorial representation of the flow of data in a system. It identifies data flow stores and function and sources. Data flow diagram show the flow of data and flow of logics involved.

DFD show the passage of data through the system. It focuses on the processes that transfer incoming data flow into outgoing data flow. DFD show the passage of data through the system. It focuses on the processes that transfer incoming data flow into outgoing data flow.

Source or Destination of Data

Data Flow

Process

|  |  |
| --- | --- |
|  | Data Store  or |

**Context Level DFD**

Browser Products. Add Products to Carts.

Check Order Status Online Place Orders & Make Payments.

Get Query Response Make Query

CUSTOMER

ADMIN

Get Queries.

Check Orders & Check Payments.

Add & update products, category.

Delivery updates & Query Response

**‘1’ Level DFD**

VISITOR

MEMBER

Order Track

CUSTOMER

ADMIN

Place Orders & Make Payments.

Get Queries.

Check Orders & Check Payments.

Add & update products, category.

Delivery updates & Query Response

Make Query

Check Order Status Online.

Get Query Response

Get Query Response

Get Payment Reports

Get Orders Reports

Get Delivery Reports

Create Account

Update Profile

Add product to cart

**‘2’ Level DFD of (ADMIN):**

MEMBER

(External Entity)

QUERY

DELIVERY

ORDER DETAIL

(External Entity)

CATEGORY

ADMIN USER

USER

I F LOGIN TRUE THEN ENTER

TO ADMIN SECTION

Process Login

Add update, delete Product

Product Category

Enter Username & Password

Place Orders to Delivery & Update Delivery Status

Get Query & Update Query Response

Update Member Payment Receiving

Get Member Details

Check Orders & Order Details

Check Orders & Order Details

MEMBER\_PAYMENT

(External Entity)

**‘2’ level DFD of (CUSTOMER)**

MEMBER\_PAYMENT

customer section

PRODUCT

(External Entity)

Browse Products & Add to Cart and Place Cart to Order (Check Out)

CATEGORY

(External Entity)

To Order

QUERY

DELIVERY

(External Entity)

ORDER DETAIL

(Derived Entity)

ORDER

(Derived Entity)

MEMBER USER

I F LOGIN TRUE THEN ENTER TO MEMBER SECTION

Process Login

Enter Username & Password

Check Orders & Order Details

Get Delivery Status

Make Query & Get Response

Get Payment Details

Get or Update Profile

**‘2’level DFD of (VISITOR)**

Browse Category & Add to Cart and Place Cart to Order (Check Out)

CATEGORY

(External Entity)

PRODUCT

(External Entity)

VISITOR USER

ENTER TO VISITOR SECTION

Browse Products & Add to Cart and Place Cart to Order (Check Out)

**‘2’level DFD of (ORDER TRACK)**

Order Details

QUERY

DELIVERY

(External Entity)

ORDER DETAIL

(Derived Entity)

ORDER

(Derived Entity)

CUSTOMER (VISITOR OR MEMBER)

ENTER ORDER\_ID

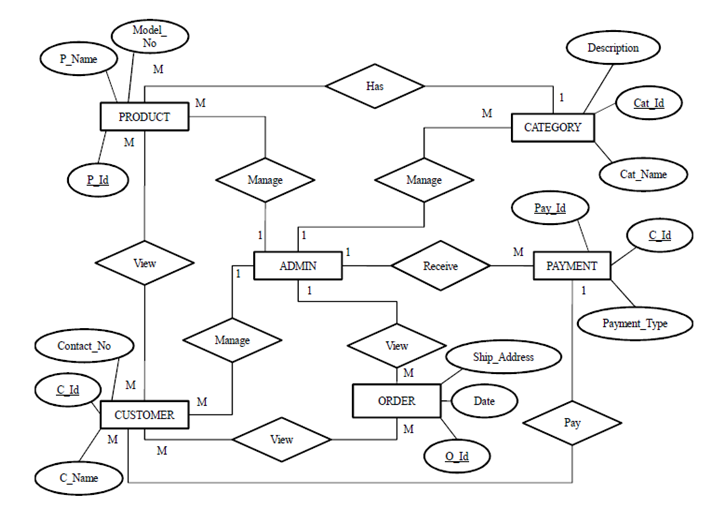
FOR ENTERING TO THIS MODULE

Check Orders & Order Details

Get Delivery Status

Make Query & Get Response

**8. ER–Diagram**

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**9. Data Base Design (Data Structure)**

1. **User:-**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Name | Char(60) | Not null |
| User Id | **Varchar(50)** | **Primary key** |
| Password | Varchar(50) | Not null |
| Confirm Password | Varchar(50) | Not null |
| Email Id | Varchar(35) | Not null |
| Mobile no. | Numeric | Not null |
| Address | Char(160) | Not null |
| Country | Char(20) | Not null |

**2. Product:-**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Brand’s Name | Char(60) | Foreign key |
| Product type | Char(35) | Not null |
| Product model no | Varchar(30) | Not null |
| OS name | Varchar(30) | Not null |
| Product Id | **Varchar(30)** | **Primary key** |
| Product price | Numeric | Not null |
| Specification | Char(150) | Not null |

1. **Order:-**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Order\_Id | **Varchar(35)** | **Primary key** |
| Order date | Varchar(30) | Not null |
| Order item | Char(100) | Not null |
| Order quantity | Numeric | Not null |
| Order price | Numeric | Not null |
| Mode of payment | Char | Not null |
| Cus\_addresss | Varchar(100) | Not null |

1. **payment:-**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| Employee ID | **Varchar(30)** | **Primary key** |
| Emp. Name | Char(50) | Not null |
| Date of joining | Varchar(20) |  |
| Designation | Char(15) | Not null |
| Address | Varchar(100) | Not null |
| Mobile no. | Numeric | Not null |

1. **Feedback:-**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| User name | Char(60) | Not null |
| Comment | Varchar(1000) | Not null |
| User ID | **Varchar(50)** | **Primary key** |

1. **Admin:-**

|  |  |  |
| --- | --- | --- |
| Field | Data type | Description |
| User ID | **Varchar(50)** | **Primary key** |
| Password | Varchar(50) | Not null |

**10.Modules Description**

There are Modules in this project and their description as follow:

1. **User:-**

* In this module new customer can register in our web site.
* The Information is Username, password, email-id, phone number etc.
* Already registered Customer can login in our web site.
* Customer can update their own profile.

1. **Product Search:-**

* Search is a way to try to find something by looking or otherwise seeking carefully and thoroughly.
* With the help of search option, our efforts will automatically reduce

1. **Admin:-**

* A person who has authority to manages all the contents/things.
* In this module, the admin will manage all the data from the web site or customer’s Order.
* Admin is person who has to handle confidential information also.

1. **Filter:-**

* Filtration is a process, by which we can separate the things according to our need.
* Here we can use filter feature for like brands, operating system, & according to the price of mobile & tablets.

1. **Categories:-**

There are two categories. Following are:-

**1. Mobiles: -** A mobile phone is a portable telephone that can make and receive calls over a radio frequency link while the user is moving within a telephone service area.

**2. Tablets: -** A tablet computer, commonly shortened to tablet, is a portable PC, typically with a mobile operating system and LCD touch screen display processing circuitry, and a rechargeable battery in a single thin, flat package.

1. **Order:-**

It consists of two types:-

1. **Add to Cart: -** Add to cart is a way to create a temporary list of items by adding them to our cart, which will keep track of the items until we leave our website.
2. **Purchase: -** After adding the items or mobile’s into cart, customer can purchase them by giving address & some other details.
3. **Payment:-**

* The action or process of paying someone for the any work/assets.
* A payment is the transfer of an item of value from one party (such as a person or company) to another in exchange for the provision of goods, services or both, or to fulfill a legal obligation.
* In this payment module, this module contains information & rights about the payment modes & payment options.

1. **Feedback:-**

* Feedback module is totally designed for the customer’s or we can say it is only of the user to describe their view & comments about the any particular product/web site, assets etc.
* With the help of feedback, any company or firm is able to improve their products & all the things.

1. **Contact us:-**

* On the web, a company can’t be communicating with customers and partners face to face. The home page of the website is like a new suit that attracts attention. It generates a client’s interest in that business, but for them to make a decision on whether or not to deal with the company; they need to know more about the company. That’s what the “Contact us” page is for, to give them detailed and engaging.
* The about us module is always contains the information or we can say a little scenario of the company or website & their work.
* This section contain the data about – who we(company or website) are, what our website is all about, and what makes our unique from others.

**11. Testing Approaches to be Used**

Testing is performed to find bugs and error in the system. For each project, testing is done at every stage. It checks the system functionality. Testing is carried out at different levels and at various intervals.

**WHITE-BOX TESTING:**

White box testing focuses to exercise all logical decisions on their true and false sides, execute all loops at their boundaries and within their operational bounds and exercise internal data structures to ensure their validity. Different set cases of date, the worst data sets, were executed to all the related loops and logical functionality.

**BLACK-BOX TESTING:**

Black box testing focuses on the functional requirements of the software. This testing enables the software engineers to derive sets of input condition that will fully exercise all functional requirements for a program. Various inputs are tested for the desire output. The module was related by the user to meet his requirements and was satisfied.

**UNIT TESTING:**

Unit testing is a software development process in which the smallest testable parts of an application, called unit, are individually and independently scrutinized for proper operation. Unit testing mode is a component of extreme programming (xp), a pragmatic method of software development that takes a meticulous approach to building a product by means of continual testing revision.

**SYSTEM TESTING:**

System testing of software or hardware is testing conduct on a complete, integrated system to evaluate the system’s compliance with its specified requirements. System testing falls within the scope of black box testing, and as such should require no knowledge of the inner design of the code or logic.

System testing is performed in the entire system in the context of a functional requirement specification and /or a system requirement specification. System testing includes the load testing and stress testing. Once the load testing and stress testing is completed successfully, the next level of ALPHA testing or BETA testing will go ahead

**INTEGRATION TESTING:**

Integration testing is the phase of software testing in which individual software module are combined and tested as a group. It follow unit testing and precedes system testing.

Integration testing takes as their input modules that have been unit tested in large aggregate, applies test defined in an integration test plan to those aggregates, and delivers as its output the integrated system ready for system testing.

There are two types in Integration testing.

1. Bottom up
2. Top down

**Bottom-up testing:** An approach to integration testing where the lowest level components are tested first, then used to facilitate the testing of higher level components. The process is repeated until the component at the top of the hierarchy is tested. The main advantage is to find the bugs

Top down: the top down is the procedure where the top integrated modules are tested and the branch of the module is testing steps by step till end of the related module. In top down it is easy to find the missing branch link.

**12. Future Scope**

**FUTURE SCOPE OF APPLICATION:**

This application can be easily implement under various situation. We can add new feature as and when we require. Reusability is possible as and when require in this application. We can add new feature that is:

* + - May be including Page Themes User Friendly.
    - May be Including Page Animation to be Added.
    - May be making this Website Attractive and Fill Up the User Requirements.

**SOFTWARE SCOPE:**

* **Extensibility:** This software is extendable in ways its original developer may not expect. The following principles enhance extensibility like hide data structure, avoid case statements on object type and distinguish public and private operations.
* **Reusability:** Reusability is possible as and when require in this application. We can update its next version. Reusability software reduces design, coding and testing cost amortizing effort over several designs. Reducing the amount of code also simplifies up both types of reusability: sharing of newly that the code is correct. We follow up both types of reuse of previously written code on new projects.
* **Understand ability:** A method is understandable if some other than the creator of the method can understand the code (as well as the creator after a time lapse). We use the method, which are small and coherent help to accomplish this.
* **Cost-effectiveness:** its cost is under the budget and make within give time period. It is desirable to aim for a system with a minimum cost subject to the condition that it must satisfy the entire requirement. Scope of this document is to put down the requirement, clearly identify the information need by the user the source of the information and output
* expected from the system

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