



SUMMER INTERNSHIP PROGRAM 2012

PROJECT
On
ONLINE SHOPPING ZONE

UNDERTAKEN AT

Robosapiens Technologies Pvt. Ltd.
In

Research and Development Department

SUBMITTED IN PARTIAL FULFILLMENT OF THE DEGREE
OF
BACHELOR OF TECHNOLOGY

Under the Guidance of:

Name: Mr.Umesh Tiwari

Designation: Sr. Research Engg.

Department: Research & Development

Submitted By:

Name:Manish Kumar Singh

College Roll No: CS10018

CERTIFICATE OF TRAINING

This is to certify that **Manish Kumar Singh** student of Bachelor of Technology from **National Institute of Technology, Puducherry** has successfully completed Summer Inernship Program from **23/05/2012** to **23/06/2012**

During this training, he worked on PHP with Project under the guidance of **Mr.Umesh Tiwari** (Sr. Research Engg). His overall performance during the training period was Excellent.

Signature

Name: Mr. Umesh Tiwari

Designation: Sr. Research Engineer

Robosapiens Technologies Pvt. Ltd.

Signature

Name: Mr. Pradeep k. Sharma

Designation: Director

Robosapiens Technologies Pvt. Ltd.

Self -Certificate

This is to certify that the project report entitled “**ONLINE SHOPPING ZONE**” is done by me, an authentic work carried out for the partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** under the guidance of **Mr. Umesh Tiwari**.

Signature of the student

Manish Kumar Singh

Roll No. 2010082

NIT Puducherry

Acknowledgement

Training as teaching is an essential part of an individual's future career. The “learn while you work” attitude is a very practical touch in the complete tenure of a personal life. Training bridges the gap between the learnt and the happening. During this phase the trainer or guide or the supervisor is the one who can help make the most of this golden opportunity.

I would like to put forth my regardful thanks to all those who have and are making it a remarkable attempt in guiding me and making me learn the most during my training at ROBOSAPIENS TECHNOLOGIES INDIA Pvt. Ltd., Noida.

I also pay my special thanks to **Mr. Umesh Tiwari** (Sr. Research Engg) who cared to give out an ample amount of time to me, regardless of being extremely busy at their work. I would also like to appreciate that they gave me experience of almost every cell of the company. so, that I could utilize every single minute in the company.

Ahead I put my special regards to the management, workers and my co-trainees at Robosapeins Technologies India Pvt Ltd. who have always been so supporting, loving and always ready to help. I have been in close touch with them since the beginning of my training. And I appreciate the relationship they all have developed with me.

INDEX

S.No.	Project Content	Page No.
1.	Introduction	07
2.	Scope of the Project	09
3.	About the Project	10
4.	Technology Used	24
5.	Advantages of .NET	29
6.	Software and Hardware Requirement	31
7.	Software Development Life Cycle	33
8.	Software Requirement Specification	38
9.	Block Diagram	42
10.	Data Flow Diagram	43
11.	Entity Relationship Diagram	44
12.	Data Diagram	45
13.	Web Forms	46-78
14.	Tables Used	79-87
15.	System Testing	88-90
16.	System Implementation & Maintenance	91-92

Robosapiens Technologies Pvt. Ltd. at a glance

5.1 INTRODUCTION

Robosapiens is India's most leading company in robotics. The company was founded in 2003 with the goal of providing technologies to promote the widespread adoption of robotics in education. Robosapiens offers a complete line of technology solutions to brand name. Robosapiens solutions represent a low-risk and cost effective way for manufacturers to deliver innovative products quickly. It is Recognized for its innovations, and with a growing portfolio of industry-leading partners, Robosapiens meets the needs of manufacturers by providing embedded software solutions that respect the system and cost constraints required for mass-production. With strong connections to leading R & D and educational institutions, as well as a leading role in several international research projects, Robosapiens Robotics' engineers are constantly growing the pool of solutions available to clients. The company's success in the high-growth consumer robotics market has helped transform the company from an ambitious startup to an international leader in its field.



Founded in 2003 by robotics experts **Mr. Pradeep Sharma, Mr. Toshendra Sharma** and their research team & development efforts

prior to opening the doors at Robosapiens. Their early work focused on creating the technologies for producing modular and autonomous robots. Robosapiens founders concentrated on building a team of qualified roboticists, engineers, and mechatronics, creating the current product line-up and embedded robotic technologies, and filing the necessary patents to pursue. Robosapiens basically works on Robotics & embedded system and it gives various workshops in different colleges. The basic objective of the organization is to generate a need for robotics education among engineering Students and schools in India and become a name synonymous with robotics education and related events in the country by providing the most comprehensive and fulfilling services and by creating an ambience of creativity and an approach towards seeking logical solutions to everyday problems.

5.2 OVERVIEW



‘Training first, Education Second’

Robosapiens India is a Unit of Robosapiens Technologies Pvt. Ltd. Robosapiens India is India’s leading provider of end to end training and education solutions, covering Robotics Education and allied fields & Research & Development. We are among eminent Robotics Education providers pan India. We are ranked among top training institutions / education centers and graded among India's most trusted service brands. We provide Workshops, Trainings Certifications, DIY Kits to engineering colleges and schools all across India via a good delivery network. We are also pioneer and affluent in (DSM) designing, supplying and maintenance of Robotics Lab equipments with high quality services. We organized India’s Biggest Robotics Championships in Institutions like IIT-Bombay, IIT-Delhi, IIT-Guwahati, IIT-Roorkee etc. We are the only one in India having done an outreach organizer of Technothon’09 IIT-Guwahati.

Recently, we are providing training/workshops in collaborations with Technex’11 IT- BHU. We are the official partner of IT-BHU’2011 and organizing workshops and training programs all across India. We also have developed our own teaching methodology inspired by various top notch training/educational institutions. ‘Let Education Evolve’, The company’s Robotics Development programs help youths to achieve real-world skills to compete better in today’s scenario.

MISSION

Our Mission is to promote the Robotics Education among Indian youth by organizing Workshops and Competitions at National Level. The workshop would help youth to enter the real world of Robotics and to create an aptitude in the limitless field of Robotics. The workshop will help them to get the feel of Robotics and how powerful and exciting it can be.

Our aim to provide face to face sessions to the candidates which help them to understand the theory as well as practical aspects of the Robotics World.

The students will definitely learn the basic concepts and will gain the practical as well as theory experience while working on the Robotics kit.

VISION

Empowering youth through high quality & endless education.

Robosapiens India team has been granted the Patent on 'SSBMC' by Government of India. This achievement entails a long story involving dedicated efforts and hard work. The team Robosapiens India has faced many obstacles and roadblocks on its journey to success but it's never ending zeal for success and excellence has made them the best team.

4.3 ORGANISATION STRUCTURE

The organization set up of ROBOSAPIENS INDIA encompasses its corporate office at G-46 Sector 3 Noida-201301.

Scope of the Project

Since the development of the Internet many things that were pretty hard to obtain or to do, like information on a large variety of topics or communication with distant friends have become so simple that anyone can have access to them just by using a computer.

Among the many advantages that the Internet gives us, one of the main ones is online shopping, an activity that many have become addicted to. Shopping is a necessity for all of us, some of us really enjoys it, and others try to keep it as simple and short as possible. Well, online shopping is the best solution for both those who consider it a chore that they try to avoid and for those who do it on a daily basis.

The main advantage of online shopping is that it allows people to browse through many items and categories without leaving their house, to compare the prices of as many shops as they want, and also to order as many items as they can afford without having to worry about how they will transport them, because the online shopping websites also deliver the things to the buyer's home. Furthermore, the Internet is open 24 hours a day, 365 days a year, so you don't have to hurry or worry about finding a parking spot.

If you plan on shopping from the Internet then first use a search engine to find online shops. If you want fast deliveries and low shipping fees then try to search for the shops that are in your country. You can use a shopping directory that contains categorized links to stores from a specific region or from all over the world, together with reviews from other customers. If you live in a big country you'll be surprised to find out that there are thousands of online shops available where you live, and these shops sell everything that can be sold, from baby products to dog houses and motor oil.

Most of the online shopping websites have the same pattern, first you choose the category under which your item is listed, and then you can select the item that you're looking for, and add it to your shopping cart. If you want to buy other items, you click the "add to cart" button near them, and when you're finished you check out. After that you can see a list with everything that you've ordered, and the total

amount that has to be paid. You can also remove items from your shopping cart if you desire to do so. Payment is usually done by credit card. The buyer enters the data on the credit card and the shop charges the price and then delivers the items to the buyer's house in a few days. The transaction is perfectly safe and the credit card data you send is encrypted so it can't be stolen.

Remember to always compare the prices, check for discounts, search for the lowest shipping taxes and make sure that what you've found can't be found cheaper anywhere else.

After you've done some online shopping you'll see how easy it is and you'll quickly get used to it. Soon you will know what the best shopping websites are and you will be able to buy the things you need very easy and fast, saving a lot of time and trouble. Online shopping is the most practical, economical and fun method of shopping, that is perfect for everyone.

About the Project

The online shopping cart project is useful for the customers who want to purchase various computer parts or branded computers .the real benefit for the user is that a new customer can get full details about the individual product or fully complete branded computer, which he wants to purchase. The advantage of this project is that the user can perform online shopping easily. The whole process of purchasing and money transaction is very easy. The main advantage of this project is that it is very much user friendly.

Seven reasons it makes sense to shop online:

- Lower prices.
- More savings with online coupons.
- Research capabilities
- Increased selection.
- Convenience
- Saves time
- Environmental Benefits

TECHNOLOGY USED

The strength of any project depends upon the technology on which the project is based. Today we are living in a world where technologies related to computer science are evolving every day new technologies are taking an edge over the older ones. Every new technology is provides some new benefits, but only small part of them remains in the competitive world. NET is the latest technology, which is in use nowadays and has proved to be the most reliable development framework. The technologies we have used in the development of the project are:

- PHP
- HTML
- JavaScript
- Ajax
- JQuery
- Mysql,SQL
- CSS

What is PHP?

PHP is a widely-used general-purpose scripting language that is especially suited for Web development and can be embedded into HTML. PHP is a powerful tool for making dynamic and interactive Web pages.

PHP is the widely-used, free, and efficient alternative to competitors such as Microsoft's ASP.

- PHP stands for **PHP: Hypertext Preprocessor**
- PHP is a server-side scripting language, like ASP
- PHP scripts are executed on the server

- PHP supports many databases (MySQL, Informix, Oracle, Sybase, Solid, PostgreSQL, Generic ODBC, etc.)
- PHP is an open source software
- PHP is free to download and use

Why PHP?

- PHP runs on different platforms (Windows, Linux, Unix, etc.)
- PHP is compatible with almost all servers used today (Apache, IIS, etc.)
- PHP is FREE to download from the official PHP resource: www.php.net
- PHP is easy to learn and runs efficiently on the server side

PHP - What's it do?

It is also helpful to think of PHP in terms of what it can do for you. PHP will allow you to:

- Reduce the time to create large websites.
- Create a customized user experience for visitors based on information that you have gathered from them.
- Open up thousands of possibilities for online tools. Check out [PHP - HotScripts](#) for examples of the great things that are possible with PHP.
- Allow creation of shopping carts for e-commerce websites.

What is HTML?

HTML is a language for describing web pages.

- HTML stands for **Hyper Text Markup Language**
- HTML is not a programming language, it is a **markup language**
- A markup language is a set of **markup tags**
- HTML uses **markup tags** to describe web pages

HTML Tags

HTML markup tags are usually called HTML tags

- HTML tags are keywords surrounded by **angle brackets** like <html>
- HTML tags normally **come in pairs** like and
- The first tag in a pair is the **start tag**, the second tag is the **end tag**
- Start and end tags are also called **opening tags** and **closing tags**

What is JavaScript?

- JavaScript was designed to add interactivity to HTML pages
- JavaScript is a scripting language
- A scripting language is a lightweight programming language
- JavaScript is usually embedded directly into HTML pages
- JavaScript is an interpreted language (means that scripts execute without preliminary compilation)
- Everyone can use JavaScript without purchasing a license

What Can JavaScript do?

- **JavaScript gives HTML designers a programming tool** - HTML authors are normally not programmers, but JavaScript is a scripting language with a very simple syntax! Almost anyone can put small "snippets" of code into their HTML pages
- **JavaScript can react to events** - A JavaScript can be set to execute when something happens, like when a page has finished loading or when a user clicks on an HTML element
- **JavaScript can read and write HTML elements** - A JavaScript can read and change the content of an HTML element
- **JavaScript can be used to validate data** - A JavaScript can be used to validate form data before it is submitted to a server. This saves the server from extra processing
- **JavaScript can be used to detect the visitor's browser** - A JavaScript can be used to detect the visitor's browser, and - depending on the browser - load another page specifically designed for that browser
- **JavaScript can be used to create cookies** - A JavaScript can be used to store and retrieve information on the visitor's computer

What is CSS?

- **CSS** stands for **Cascading Style Sheets**
- Styles define **how to display** HTML elements
- Styles were added to HTML 4.0 **to solve a problem**
- **External Style Sheets** can save a lot of work
- External Style Sheets are stored in **CSS files**

What is SQL?

- SQL stands for Structured Query Language
- SQL lets you access and manipulate databases
- SQL is an ANSI (American National Standards Institute) standard

What Can SQL do?

- SQL can execute queries against a database
- SQL can retrieve data from a database
- SQL can insert records in a database
- SQL can update records in a database
- SQL can delete records from a database
- SQL can create new databases
- SQL can create new tables in a database
- SQL can create stored procedures in a database
- SQL can create views in a database
- SQL can set permissions on tables, procedures, and views

What is jQuery?

jQuery is a library of JavaScript Functions.

jQuery is a lightweight "write less, do more" JavaScript library.

The jQuery library contains the following features:

- HTML element selections

- HTML element manipulation
- CSS manipulation
- HTML event functions
- JavaScript Effects and animations
- HTML DOM traversal and modification
- AJAX
- Utilities

What is AJAX?

AJAX = Asynchronous JavaScript and XML.

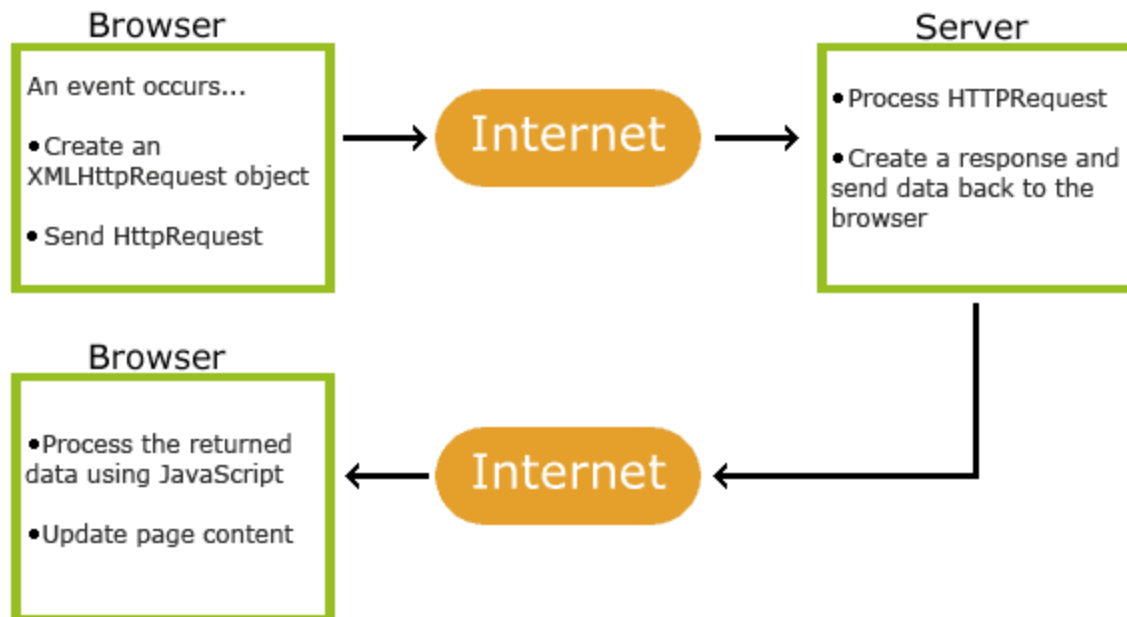
AJAX is a technique for creating fast and dynamic web pages.

AJAX allows web pages to be updated asynchronously by exchanging small amounts of data with the server behind the scenes. This means that it is possible to update parts of a web page, without reloading the whole page.

Classic web pages, (which do not use AJAX) must reload the entire page if the content should change.

Examples of applications using AJAX: Google Maps, Gmail, Youtube, and Facebook tabs.

How AJAX Works



Software and Hardware Requirements

Software requirements:

➤ **Operating System:**

Windows 2000 and above

➤ **Development Environment:**

Adobe dreamweaver CS5

Server ex-WampServer

➤ **Database Server:**

Mysql

➤ **Languages Used:**

PHP

HTML

➤ **Word Processor:**

Microsoft Word 2010

➤ **Image Processing Tool:**

Microsoft Paint

Photoshop

➤ **Web Browser**

Google Chrome

Hardware Requirements

➤ Microprocessor

X86 Family 6 Models 8 Stepping 6 GenuineIntel~930 MHZ

➤ RAM

512 MB

➤ Hard Disk Space Required

100 MB

➤ Hard Disk Drive

40 GB

➤ Visual Display Unit

HCL-56V

➤ CD ROM

Samsung CD ROM sc-152c

SDLC

INTRODUCTION:

Human is dealing with the data and information since a long time, perhaps since the beginning of civilization man is manipulating data. Since then, give and take of information is in practice, but this has been considered as an important discipline for the last few decades. Today's data manipulation and information processing have become the major tasks of any organization small or big, whether it is educational institution, government concern, scientific, commercial or any other.

Information is the requirement of every organization. Infact, large organizations have started having information systems whose work is together the necessary data and to process those data into meaningful information. System is a buzzword today. Everybody talks of the system such as an educational system, transportation system, accounting system, financial system, computer system, and information system. A system is a set of interrelated elements that operate together to achieve an objective. The general model of system has an inputs, process and output. A system can have many inputs and many outputs. Most talk about system is information system. It receives the data and collects the information and instructions, process the data according to the instructions and outputs the result which itself has some information. An information system in which storage methods are also added, the information processing function means not only the transformation of the data into information but also the storage of the data for later use. The information system receives data as input and converts them into information.

An information system can comprises of both human and machines. It is not that an information system simply means machine. Information system uses the various tools to collect data. These tools can be humans as well as machines. Then these tools data is processed into information. The data can be processed using some manual methods or electronic method. Then the information that they get after processing of data is the output of that information system.

An information system is to an organization, what a nervous system is to the body. They do not operate independently, but exists in organization to support the organization process at different levels. Timely information is required at every level of any organization to take the important decision. To cater the needs of organization, information systems in any organization, are available at different levels.

REQUIREMENT ANALYSIS:

A systematic investigation of a real or planned system to determine the function of the system and how they relate to each other and to any other system is known as system analysis.

System analysis is conducted with the following objectives in mind:

- Identify the customer's need,
- Perform economic and technical analysis,
- Evaluate the system concept for feasibility,
- Allocate functions to hardware, software, people, database and other system elements,
- Establish cost and schedule constraints,

- Create a system definition that forms the foundation for all subsequent engineering work.

System Analysis Overview:

Problem recognition means detailed study of the current system being used by the user. A detailed study of system being currently used must be carried out of sessions with customer and end user. It can be termed as a process of recognizing problems and opportunities.

A complete understanding of software requirement is essential to the success of a software development effort. The problem evaluation and solution synthesis is the next major area of effort for analysis. It enables the system, engine to redefine the software allocation and build model of process followed

Identification of need

Preliminary investigation

Identification of need:

The first step of the System Analysis process involves the identification of need. The analyst meets the customer and the end user (if different from the user). The intent is to understand the products objective and to define the goals required to meet the objectives. Timely Customer-Analyst communication is an important ingredient of a system analyst's work. The specific objectives are:

- Reducing the Duplication during manual Processing
- Designing and Developing User friendly interfaces through which user will interact with the package
- Interaction of these GUI with the Database
- Managing the Database

- Improve efficiency and quality of services

There are a number of factors that needs to be actively handled, the system must track the data and be able to manage it as well as give the detailed account of the comparative study in the forms of graphs and reports.

Every system must have some complexity attached with it, which is needed to be simplified so that we can achieve a system, which is easier, less complex and easily accessible to the less trained user.

The above stated complexity being faced by the staff in respect of such a large number of departments and variety of programs being run by each department, each having its own criteria makes it entice the official to look for a system which can operate with a such a complex nature of data and be developed in such a way so that it becomes relatively easier to operate by the end user.

Preliminary investigation:

During the analysis phase of the project, first we decided to sit/talk /and understand the current workflow. And found that the basic functionality is divided into 12 major modules, which deals with registration management, searching for tender management, supplying and purchasing of tender management, generation of reports for each requirement and searching for many other facilities etc.

FEASIBILITY STUDY:

All the projects are feasible given the unlimited resources and infinite time. Unfortunately, the development of a computer-based system or product is more likely to be plagued by the scarcity of resources and difficult delivery dates. It is

both necessary and prudent to evaluate the feasibility of a project at the earliest possible time. Months or years of effort, thousand or millions of rupees, and untold

professional embarrassment can be averted if an ill-conceived system is recognized early in the definition phase.

Feasibility and risk analysis are related to each other. If project risk is great, the feasibility of producing quality software is reduced.

However, we confine our attention to:

- Technical Feasibility.
- Economical Feasibility.
- Operational feasibility.

Technical Feasibility:

A study of function, performance, and constraints that may affect the ability to achieve an acceptable system. It is the most difficult area to assess because objectives, functions, and performance are somewhat hazy; anything seems possible if the right assumptions are made.

A clinical attitude should prevail during an evaluation of technical feasibility. The considerations normally attached with the technical feasibility:

Development Risk:

- Can the system element be designed so that necessary function and performance are achieved within the constraints uncovered during analysis?

Resource availability:

- Are skilled staffs available to develop the system element in Question? Are any other necessary resources (hardware and software) available to build the system?

Technology:

- Has the relevant technology progressed to a state that will support the system?
- All of the above consideration also applies to the work I have done. As far as developments risks are concerned, yes necessary functions and the constraints under which they have to perform have been identified and divided into modules so that each module perform its own assigned task.
- As for skilled staff for development is concerned, I am the only person performing this task and I have fully understood the problem. I am sufficiently equipped with the use of programming and can perform this tasks in the given time constraints.

The use of programming language enables the programmer to develop software that can help end-user to operate the system more easily. The use of GUI tool VB.NET and Oracle 8i can be really helpful in case of developing an information system. The tool comprises of all the components required to solve me problem system.

Economical Feasibility:

An evaluation of development cost weighed against the ultimate income or benefit derived from the development system or product. It includes a broad range of concerns such as:

- Cost-benefit Analysis
 - Long-term m corporate income strategies
 - Impact on other profits/products
 - Cost of resources needed for development
 - Potential market growth
-
- The work being done is economically feasible since the work is not being done at very large scale, although it might be a bit complex. The cost of resources needed to do the work was not big. I did receive the necessary monetary help required to develop this software.

Operational Feasibility:

This study helps us in finding whether the work to be done will be operational with the available staff and with in the given time. The staff is fully capable of handling information system. The IT literacy is of good order and the software has been made in such a way that it becomes easier for the user to answer queries being asked. This will facilitate easy use and adoptability of the system. Based on this, it was felt that the proposed system would be operationally feasible. With the use of menus, simple command buttons and proper validation required it become fully understandable to the common user and operational with the user.

SOFTWARE REQUIREMENT SPECIFICATION

A document describing the requirements of a computer system from the user's point of view. An SRS document specifies the required behavior the system in terms of input data, required processing, output data, operational scenarios and interfaces and the attributes of a system including performance, security, maintainability, reliability, audit ability, availability and safety requirements and design constraints. Alias: user requirement specification, functional specification.

The software requirement specifications produced at the culmination of the analysis task. The function and the performance allocated to software as part of the system engineering are refined by establishing a complete information description, a detailed functional and behavioral description, an indication of performance requirements and design constraints, appropriate validation criteria, and other data pertinent to requirements. [Pressman Roger S.] SRS was evolved based on brain storming sessions and active interactions with the following set of stakeholders:

Assistant registrar (PGS)

Superintendent (PGS)

Assistant

Chairman, grades and registrations.

The main area of the I.T. dept, which had to be automated, was described in module description.

Input/output design

Design is the first step in the development phase for any engineered product or system. It may be denned as “the process of applying various techniques and principles for the purpose of defining a device, a process or a system in sufficient detail to permit its physical realization”. The design of a system is a blueprint, or a plain for a solution for a system. The design a solution a “how to” approach compared to analysis, a “what is” orientation. It translates the system requirements into ways of operating them. Software design sits at the technical kernel of the software process model that is used. Design is the phase where the quality is fostered in software development. Design provides us with a representation of software that can be assessed for quality.

Risk Analysis:

These steps are performed in risk analysis for designing the system because:

- The future of the system is our concern. We identifying what risks might create problem in the life of the system.
- We also identified that what change in the user requirements, technologies, hardware and all other entries connected to the system will effects the system.

Risk Identification:

We were able to identifying the risk under the following categories: -

- Project risk
- Technical risk
- Business risk
- Following list was identifying under the categories mentioned above:

- Enough number of people was available, as estimated, to complete the system.
- All staff involved in the system was not folly trained on the platform to be used for die development. We also had to study various things about the platform and the system.
- The staff involved in the system was committed for the entire decision of the project. The entire member worked fulltime on the system.

Probability of risk:

The probability for the project risks such as schedule, resources, customer, requirement problems and their impact on the system was negligible. There was a risk on the technical grounds because the system was developed with a new technology hence the experience on the tools was taking which faced the management to think whether the choice made was right or wrong. But a survey done on the use of new platform gave us the confidence of continuing on this decision. As we know system design is a solution a “how to” approach to the creation of a new system. This important phase is composed of several steps. It provides the understanding and procedural details necessary for implementing the system recommended in the feasibility study.

Several activities were carried out during Design. They were:

- Database design
- Program design

Data base design:

Databases:

Database is an organized logical grouping of related files. In a database, data are integrated and related so that one set of software programs provide access to all the data, alleviating many of the problems associated with data file environments. Therefore, data redundancy, data isolation, and data inconsistency are minimized, and data can be shared among all users of the data.

Database Management System:

The program (or group of programs) that provides access to a database is known as a database management system (DBMS). A DBMS contains three major components:

A data definition language (DDL) is the language used by programmers to specify the content and structure of the database. The DDL is essentially the link between the logical and physical views of the database. (“Logical” refers to the way data are physically stored and processed).

The data manipulation language (DML) is used with a third/fourth generation language to manipulate the data in the database.

Structured Query Language (SQL) is the most popular relational database language, combining both DML and DDL features.

Logical Data Organization:

There are three basic models for logically structuring database: hierarchical, network, and relational. Each has its own advantages and disadvantages.

The Hierarchical Database Model:

The hierarchical model relates data by rigid structuring data into an inverted “tree” in which records contain two elements:

- A single root or master field often called a key, which identifies the type location, or ordering of the records.
- A variable number of subordinate fields that defines the rest of the data within the record.

The Network Database Model:

The network model creates relationship amongst data through a linked-list structure in which subordinate records (called members) can be linked to more than one parent (called owner).

The Relational Database Model:

While organizations have been organized in a hierarchical fashion, most business data have traditionally been organized into tables of columns and rows, especially accounting and financial data. Hierarchical and network structures have several disadvantages. All the access paths, directories, and indices must be specified in advance. Once specified, they are not easily changed without a major programming effort. Therefore, these designs have low flexibility.

Relational database designs have flexibility in regard to

- Ad hoc queries,
- Power to combine information from different sources,
- Simplicity of design and maintenance,
- Ability to add new records without disturbing existing applications.

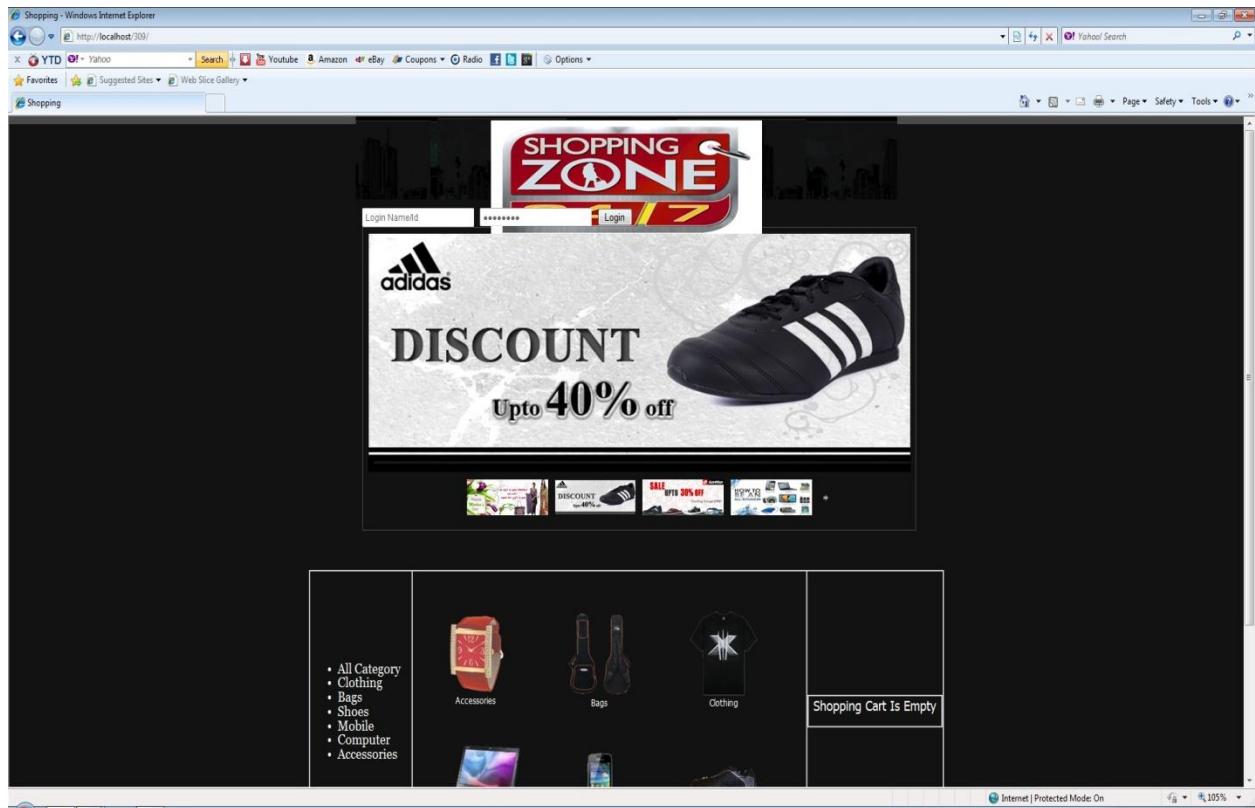
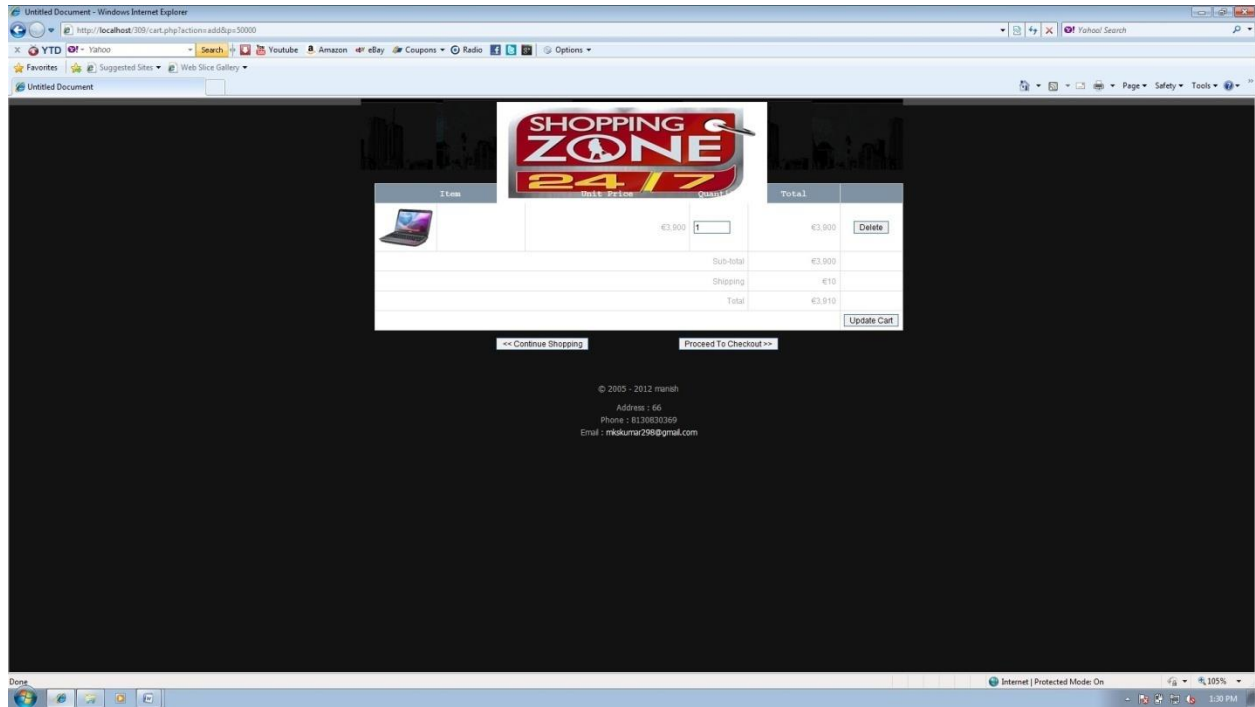
Logical Database Design:

It is necessary to develop a conceptual model of data, which specifies the relationships between data. This is used to group data into a number of tables.

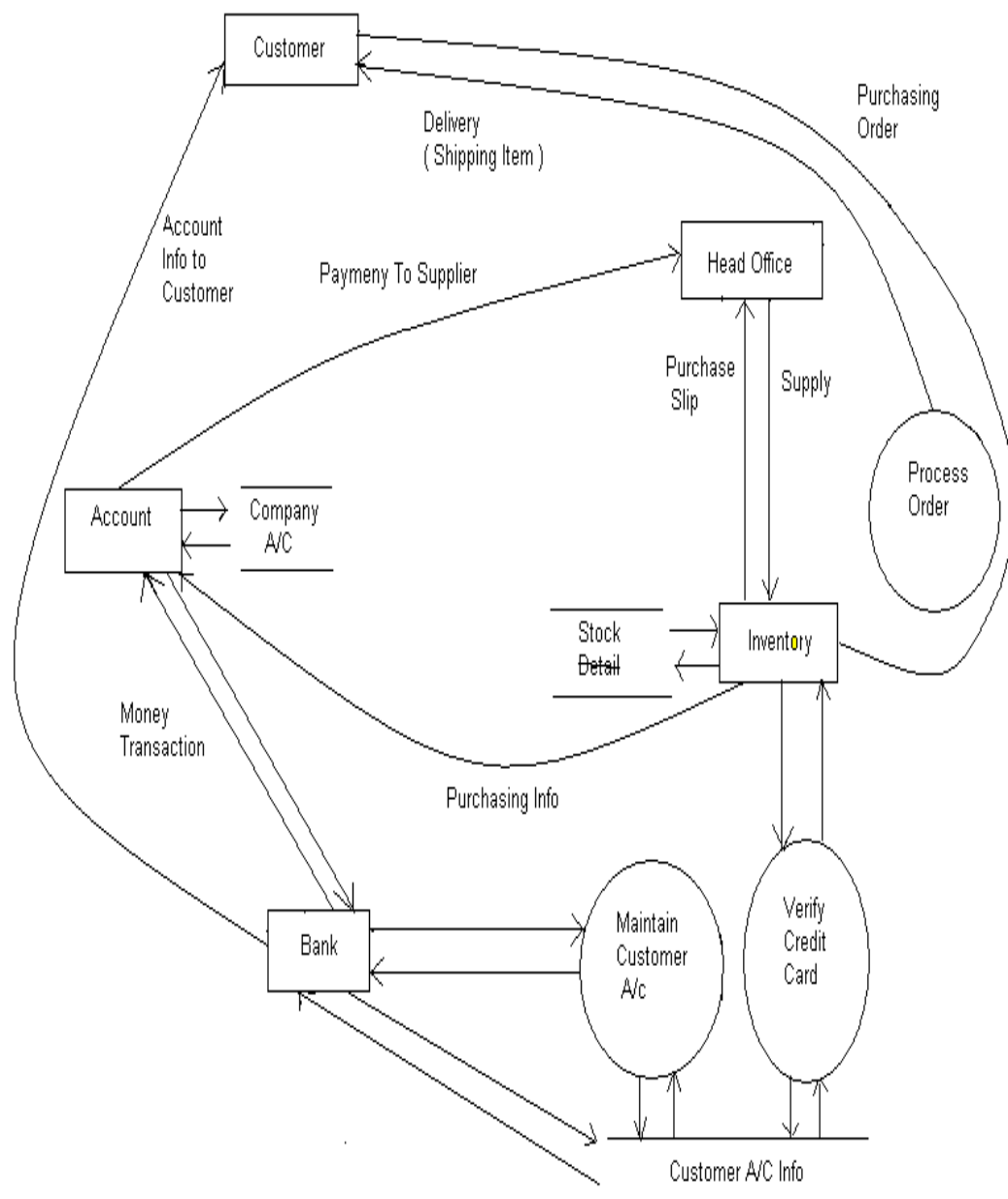
The tables are organized to:

- Reduce duplication of data,
- Simplify functions like adding, deleting and updating data,
- Retrieving data

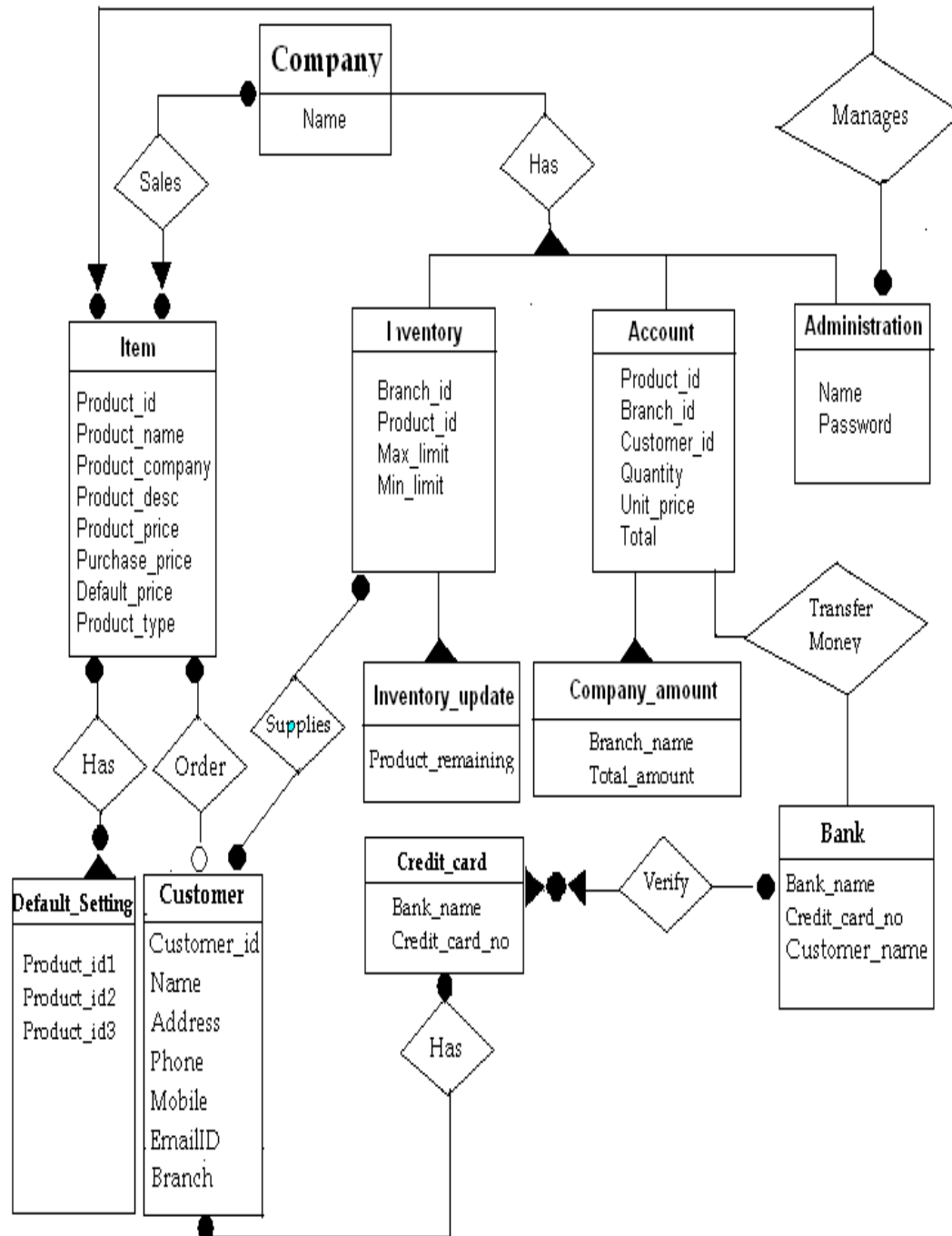
The method of organizing or structuring data into tables is known as Normalization. The collection of tables of data is called a Database. This analysis is then used to organized data as relations, normalizing relations, and obtaining a relational database. This approach we used is based on the one described by Turban.



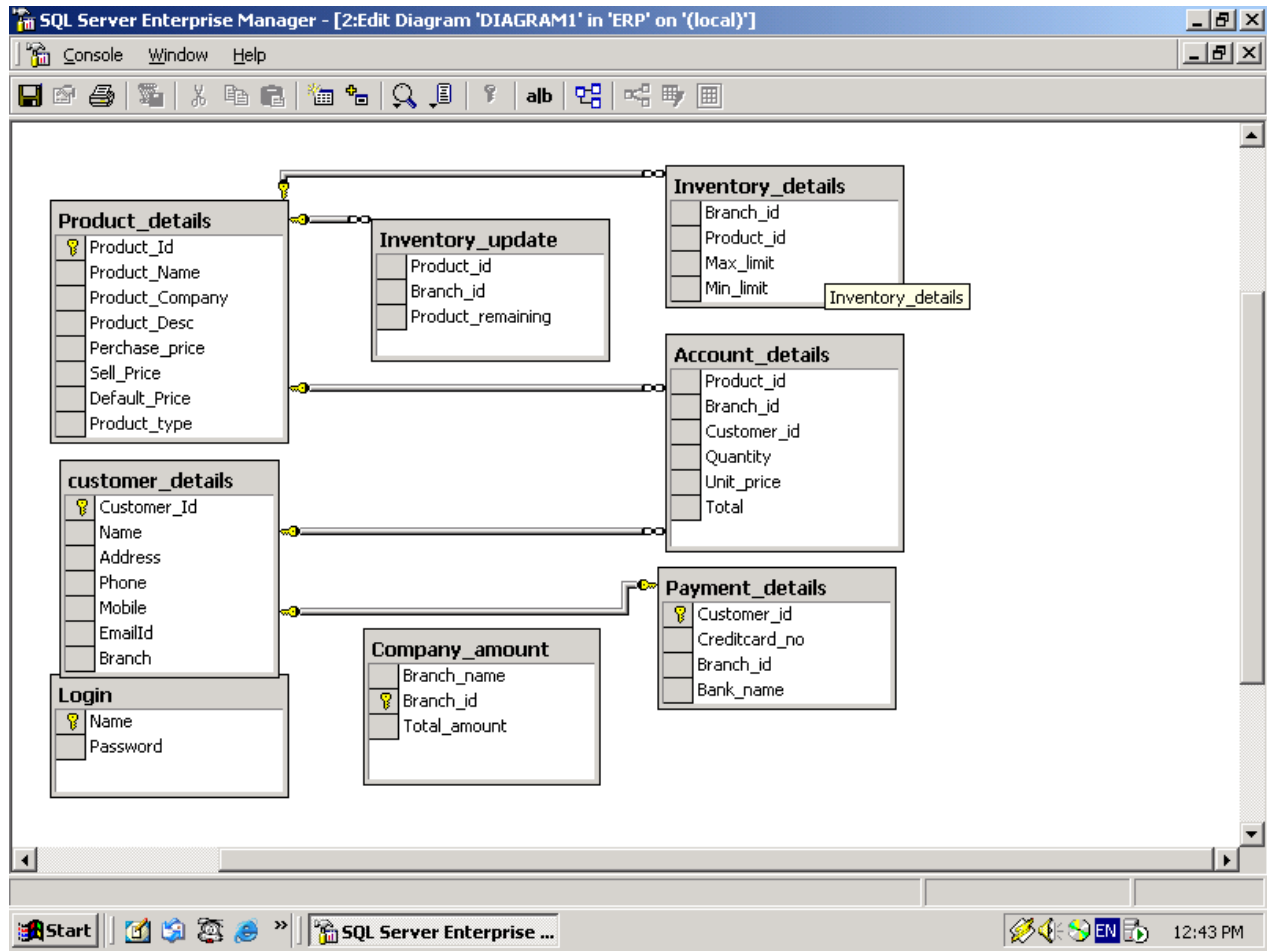
Data Flow Diagram Of Company



Entity Relationship Diagram Of Company



Data Diagram



WEB FORMS

The screenshot shows a Windows Internet Explorer browser window. The address bar displays the URL `http://localhost:300/login.php?step=1`. The page has a solid orange background. In the center, there is a white box with a blue header that reads "Enter your login and password". Inside this box, there are two input fields: "Login:" and "Password:". Below the "Password:" field is a blue "Enter" button. At the bottom of the white box, there is a link that says "Lost your username or password? Find it" and another link that says "Not member yet? Click here to register."

The screenshot shows a Windows Internet Explorer browser window. The address bar displays the URL `http://localhost:300/Register.php?errors=1`. The page features a logo at the top left that says "SHOPPING ZONE 24/7". Below the logo, the text "Welcome to .." is displayed. Underneath, there is a section titled "Registration Form". This section contains several input fields: "Name *", "Email *", "Contact *", "Password *", and "Address *". At the bottom of the form, there are two buttons: "Register" and "Reset".

System Testing

System Testing is very important issue in system development. During system testing the system is used experimentally to ensure that the system does not fail

and will run according to its specification producing desired outputs as per the user expected from it.

In many organization persons other than those who have written it perform testing, so that the software will be more reliable. Following tests can carry out the testing of system:

- White Box Testing.
- Black Box Testing.

White Box Testing

White Box Testing, sometimes called glass box testing is a test case design method that uses the control structure of the procedural design to derive test cases. White Box Testing considers system to be like a White box, which means that every thing about the system is known to me. The different programs used in the system, Procedures used, inputs supplied and I know the outputs produced by it in advance. Person who has developed it generally carries out White Box testing and he/she tests the system against all odd conditions for extreme values. I tested all the modules independently. In the testing of each module I tested all the functionality. Right from 'New or Add' to 'Exit or Close' and from 'Move-first' to 'Move-last' all were tested. All the if-else structures with various values supplied at various times were checked. I checked all the loops used in the system and checked at their boundaries too.

White Box Testing in the application is carried out in two parts:

- Alpha Test
- Beta Test

Alpha Test:

Alpha test of the application involves testing (checking) the system by testing each and every part of the system separately. In this test the experts or those who have made the system test each module of the system for different types of inputs.

Beta Test:

Beta test involves testing of the system treating the system as a whole and the complete system is tested for extreme values for finding the output generated by it are as desired or not. I have tested my application by inputting the sample data and found that my application passed Beta test.

Black Box Testing:

Black Box Testing focuses on the functional requirements of the software. It uncovers a different class of errors than white box testing methods. The end users or the ultimate user carries out Black Box testing for whom the system is made or some one who not knows how the system is being made. Selecting some persons of the organizations who have to operate on the system can perform this testing so that they know what inputs to be given to the system for different options and what should the output generated by the system for those values. To perform this test I selected some persons from the organization including one senior person also and tested the application. They then evaluated that whether the system is working properly or not. They all found the system working according to specification. Some one who neither knows about the work carried out by the system nor about

how it is developed can even perform this test. Thus testing of the system by this method can even be done for absurd values, which are unknowingly entered by the user.

The testing of this project is also done accordingly to these above methods so that it can fulfill the needs, produce all desired output even in the worst possible condition and can prove to be a reliable software. I started the testing of the system right from the Alpha test to Beta test and then Black box test. Initially it was tested for each and every input give to it and how it responds to those inputs. The validation and checks which are masked for certain inputs like Names, Numbers, alpha numeric, floating point numbers, Unique Fields, Maximum Size, Values and other Special Fields and ranges is working or not for each and every entry forms. The testing is then done for the different calculations and queries for the different combinations to find the results in the outputs. By running each individual forms as my software is developed using event based concept.

System Implementation And Maintenance

Implementation:

After the system has been coded and tested the next my next aim and phase was to successfully implement it at the organization. Special care has to be taken for implementation for the software. To implement the Project “ONLINE SHOPPING CART” first it only requires software’s installed on system mentions in software requirement specification. Implementation means install the software to the destination and make it to work there. Implementation is an ongoing process and can be achieved by one of the following methods:

Total Conversion:

Here the system is completely replaced by the new system from the date when the new system software is implemented all the work of old manual system is directly switched to the new system

Gradual Switch Over:

In Gradual Switch over some of the work is carried out on the old system and some is carried out on the new system and gradually the sifting of the work load on the new system is carried out.

Parallel conversion:

Conversion is the process of changing from the old system to the new one. In the implementation of my project I have used the parallel conversion method in which I run both system in parallel! e all the works are also being performed manually and parallel the same activities is also being performed on new computerized system. Under this approach user is free to operate the old system in the usual manner but they also start using the new system. This method is the safest one

because it ensures that in case of any problem in using the new system, the user can still fall back to the old system without loss of time and money.

Demonstration & Training for people:

In order to make my development successful and have successful implementation I organized a short training program for a few hours. Here in this training I have even the users some instructions about how to operate the given system and also provided some manuals to them regarding the software's working and the topics covered in the training programmed. I also demonstrated that they could also use powerful help provided with the system

Maintenance:

Maintenance is the process of eliminating errors in the working system during its working life and to tune the system to any variation in working environment. By proper maintenance I can continue to bring the system to new standards. As my project is error free and produce no bugs for valid data, but I use feature to detect the errors and produce error messages understand by the experienced user and nonprogrammer user.

When the user of my project changes its operating platform that is Windows versions then he/she need to reinstall the "SHOPPING ZONE" Similarly when he/she wants to upgrade his/her Windows version there is no effect of the installation on the Shop Manager. It runs even in later versions of Windows.

BIBLIOGRAPHY

This section gives you the name of the books required for the development of the project.

www.w3school.com

www.php.net

www.mysql.com

www.jQuery.com

www.cssmwww.

wampserver.comania.com