Α

#### **DISSERTATION**

ON

"World of Utensils"

#### **UNDERTAKEN AT**

National Institute of Technology, Tiruchirappalli

Ву

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#### **SUBMITTED TO**

**Department of Computer Applications** 

In

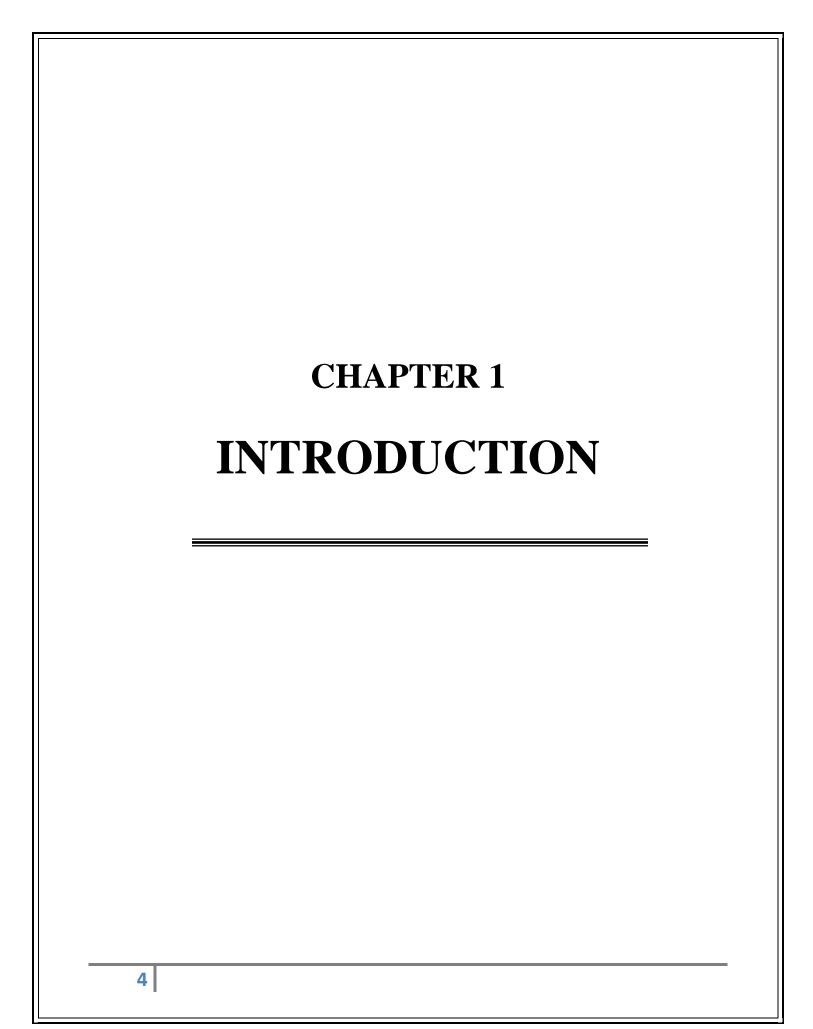
Partial fulfilment of the requirement for the Award of the Degree of Master of computer application (M.C.A)

**JULY 2020** 

# **LIST OF CONTENTS**

CHAPTER NO.	SUBJECT	PAGE NO.
1.	Introduction	5
1.1	Objective of System	6
2	System development life cycle	7
2.1	Program design	9
2.2	Program coding	9
2.3	Operating and maintaining the system	10
3	Analysis	11
3.1	Requirement analysis	12
3.2	Requirement specification	13
3.3	Functional requirement	14
3.4	Non-functional requirement	14
3.5	Use case analysis	15

4	Design	16
4.1	System flow diagram	17
4.2	Sequence diagram	18
4.3	Activity diagram	19
4.4	Data flow diagram	21
5	Implementation	22
5.2	Technology used	23
5.3	Table structure	26
5.4	Snapshots	27
6	Conclusion	31
6.1	Important features	32
6.2	Advantage	32
6.3	Disadvantage	33
6.4	Conclusion	33
7	Bibliography & references	34

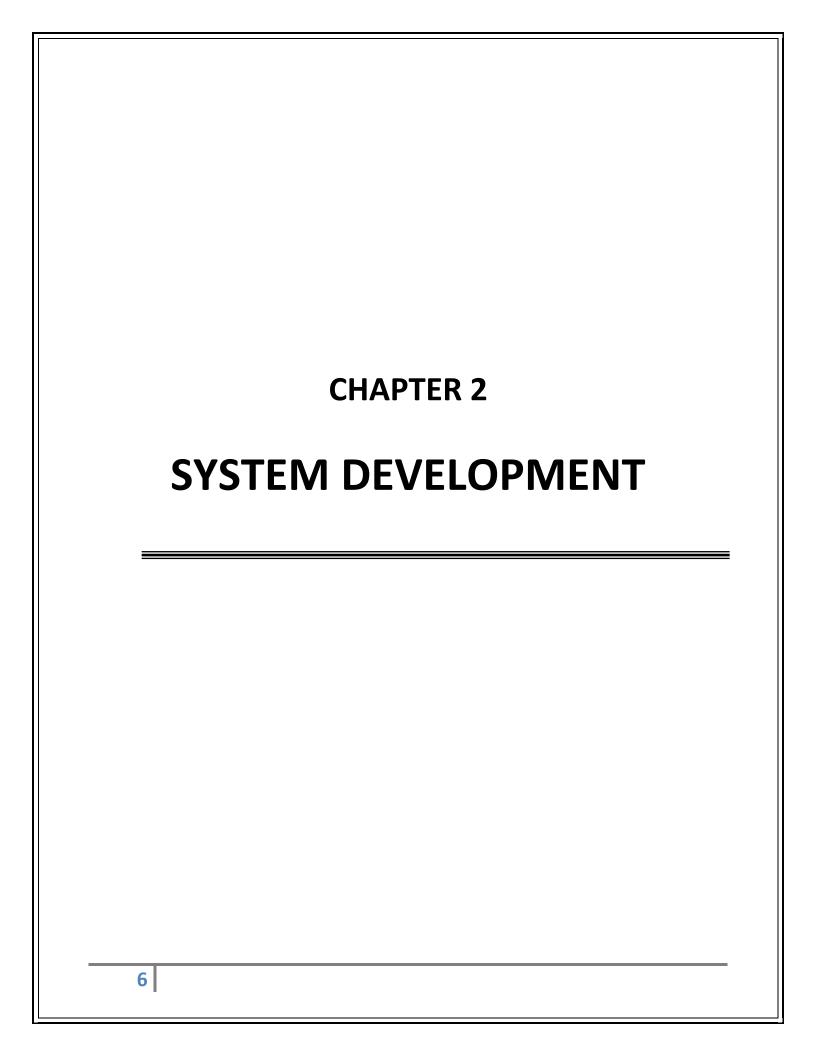


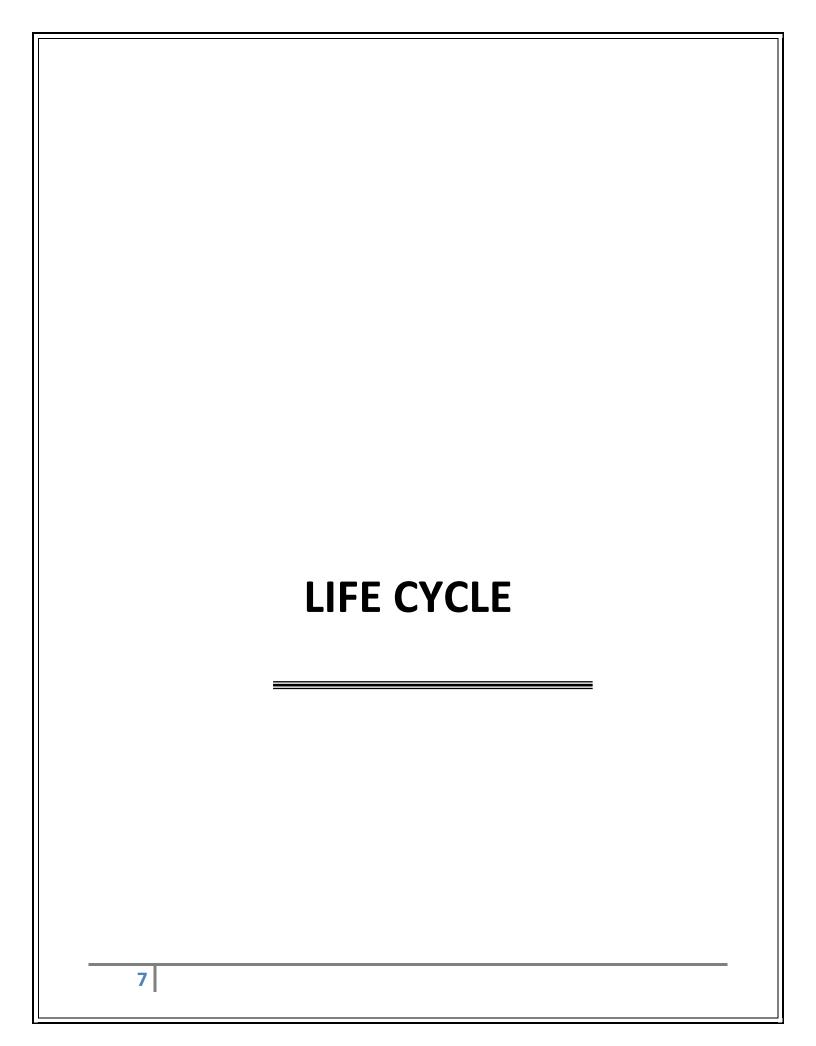
# **INTRODUCTION**

This project is totally focused on the sale of utensils through Internet. There are many websites which are selling all needs of humans but this project is mainly focused of utensils selling.

# **Objective of system**

- Making a dedicated platform where the focus is only on utensils.
- Provide all varieties of utensils.
- Selling at reasonable rate.
- Ease to buy.
- Providing user friendly interface.
- Customer satisfaction.





#### 2.1 Analysis of user requirements

During this stage, the problem is defined so that a clear understanding can be gained of what the system should do, i.e. what the inputs to the system are, what the output should be, and the operational parameters within which the system is expected to work.

•

#### 2.2 Program design

In this stage, a solution to the problem is designed by defining a logical sequence of steps that will achieve each of the stated system objectives. Such a sequence of steps is often referred to as an algorithm. Some of the methods used to define program algorithms are described later in this section, and include flowcharts and pseudo code. These tools allow the program designer to break a given problem down into a series of small tasks which the computer can perform to solve the problem. The user interface will also be designed during this stage, and will determine how input is obtained, how output is displayed, and what controls are available to the user.

#### 2.3 Program coding

This stage, sometimes known as the implementation stage, is where the algorithms are translated into a programming language, and tends to be the longest phase of the development life-cycle. In this case, we are using PHP to write the program.

#### 2.4 Operating and maintaining the system

Once the software has been "rolled out" and any necessary user training has been completed, it will be necessary to monitor the performance of the system over time to ensure that it is behaving as expected. The system will need to be maintained, and parts of it will need to be upgraded from time to time to handle evolving user needs or to cope with new problems. Eventually, as the system ages, it may no longer be able to adequately cope with the demands of a growing number of users, take advantage of advances in hardware technology, or adapt to a constantly changing environment. When this time comes, the system will need to be decommissioned and replaced by a new system. Hence, the software development life cycle will begin again.

# CHAPTER 3 ANALYSIS

# **ANALYSIS**

#### 3.1 REQUIREMENT ANALYSIS

Requirements are a feature of a system or description of something that is capable of doing in order to fulfil the system's purpose. It provides the appropriate mechanism for understanding what the customer wants, analyzing the needs, assessing feasibility, negotiating a solution, specifying the solution unambiguously, validating the specification and managing the requirements as they are translated into an operational system. Requirement Analysis is a task done under software engineering that bridges the gap between system level requirements engineering and software design. While requirements engineering specifies software's operational characteristics i.e. function, data and behaviour, indicates software's interface constraints, requirements analysis let the software engineer (called analyst) to refine the software allocation and construct models of data, functional and behavioural domains. Moreover, requirements analysis provides software developer with a representation of data, function and behaviour that can be converted to data, architectural, interface and component-level designs. At last, we can say that the requirement specification makes available, the developer and the customer, a means to assess quality, once the software has been built.

#### 3.2 REQUIREMENT SPECIFICATION

A Software Requirements Specification (SRS) is a complete description of the behaviour of the system to be developed. It includes a set of use cases that describe all the interactions that the users will have with the software. Use cases are also known as Functional Requirements. In addition to use cases, the SRS also contains Non-Functional (or supplementary) Requirements. Non-Functional Requirements are requirements which impose constraints on the design or implementation (such as performance requirements, quality standards, or design constraints).

#### 3.3 Functional Requirements

In software engineering, a functional requirement defines a function of a softwaresystem or component. A function is described as a set of inputs, the behaviour and outputs. Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that show how a use case to be fulfilled.

Typically, a requirements analyst generates functional requirements after building use cases. However, this may have exceptions since software development is an iterative process and sometime certain requirements are conceived prior to the definition of the use cases. Both artifacts (use cases documents and requirements documents) complement each other in a bidirectional process.

A typical functional requirement will contain a unique name and number, a brief summary, and a rationale. This information is used to help the reader understand why the requirement is needed, and to track the requirement through the development of the system.

The core of the requirement is the description of the required behaviour, which must be a clear and readable description of the required behaviour. This behaviour may come from organizational or business rules, or it may be discovered through elicitation sessions with

Users, stakeholders and other experts within the organization. Software requirements must be clear, correct, unambiguous, specific and verifiable.

#### 3.4 Non-Functional Requirements

In systems engineering and requirements engineering, non-functional requirements are requirements which specify criteria that can be used to judge the operation of the system, rather than specific behaviours. Non-functional requirements are often called qualities of a system. Other terms for non-functional requirements are "constraints", "quality attributes", "quality goals" and "quality of service requirements". Qualities, i.e. non-functional requirements can be divided into 2 main categories:

- 1. Execution qualities, such as security and usability, are observable at runtime.
- 2. Evolution qualities, such as extensibility and scalability, embody in the static structure of the software system.

The non-functional requirements in our project are:

✓ Time: -

The project should be completed within the stipulated time period.

✓ Cost: -

The cost involved in making the project should be less.

✓ Usability: -

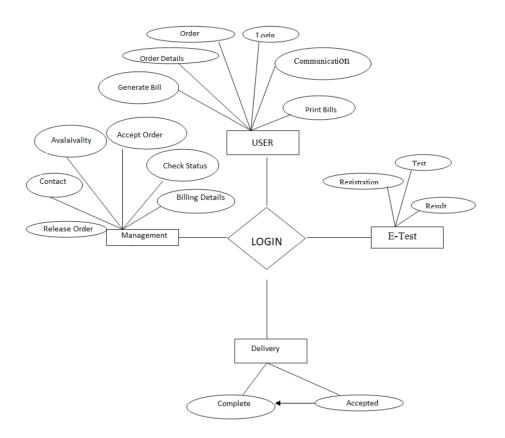
This requirement is present, as this system will interact with user.

✓ Reliability: -

This system must be highly robust.

#### 3.5 Use Case ANALYSIS

#### Use Case



# CHAPTER 4 DESIGN

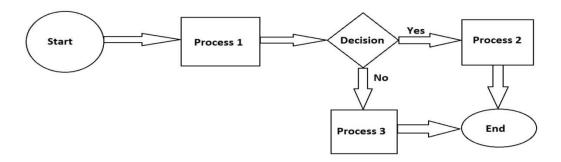
# **Design**

#### 4.1 System Flow Diagram

A System Flow Diagram (SFD) shows the relationships between the major components in the system. It is a systematic representation of an algorithm or a process. The steps in a process are shown with symbolic shapes, and the flow of the process is indicated with arrows connecting the symbols.

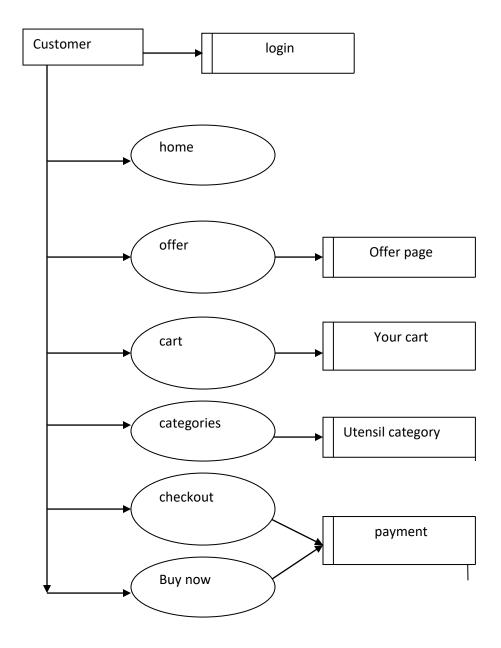
In order to improve a process, it is first necessary to understand its operation in detail. Describing this in text lacks the clarity of a pictorial diagram, where individual steps are more easily seen. The flowchart is a simple mapping tool that shows the sequence of actions within a process, in a form that is easy to read and communicate. The mapping of 'what follows what' is shown with arrows between sequential action boxes, as in the illustration. This also shows the boxes for process start and end points of which there are normally one each.

Processes become more complex when decisions must be made on which, out of an alternative set of actions, must be taken. The decision is shown in a flowchart as a diamond shaped box containing a simple question to which the answer is yes or no.



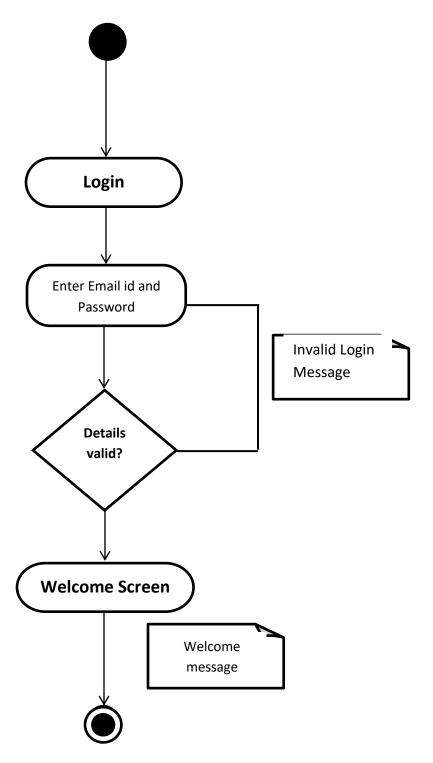
#### **SYSTEM FLOW DIAGRAM**

# **4.2 Sequence Diagram**

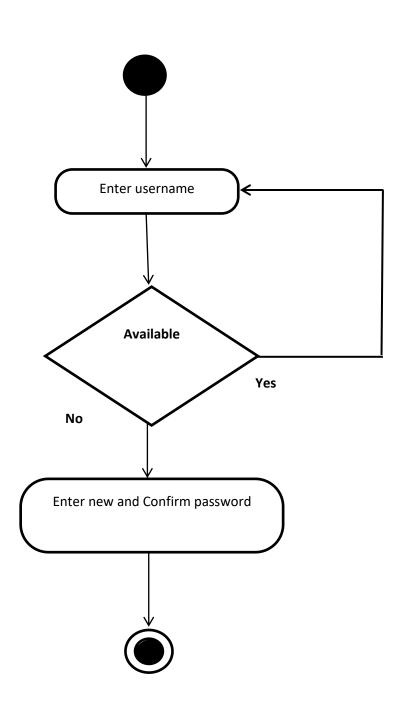


# 4.3Activity Diagram

> Activity Diagram for Login



> Activity Log for Registration



**Activity Diagram For registration** 

#### 4.4 Data Flow Diagram (DFD): -

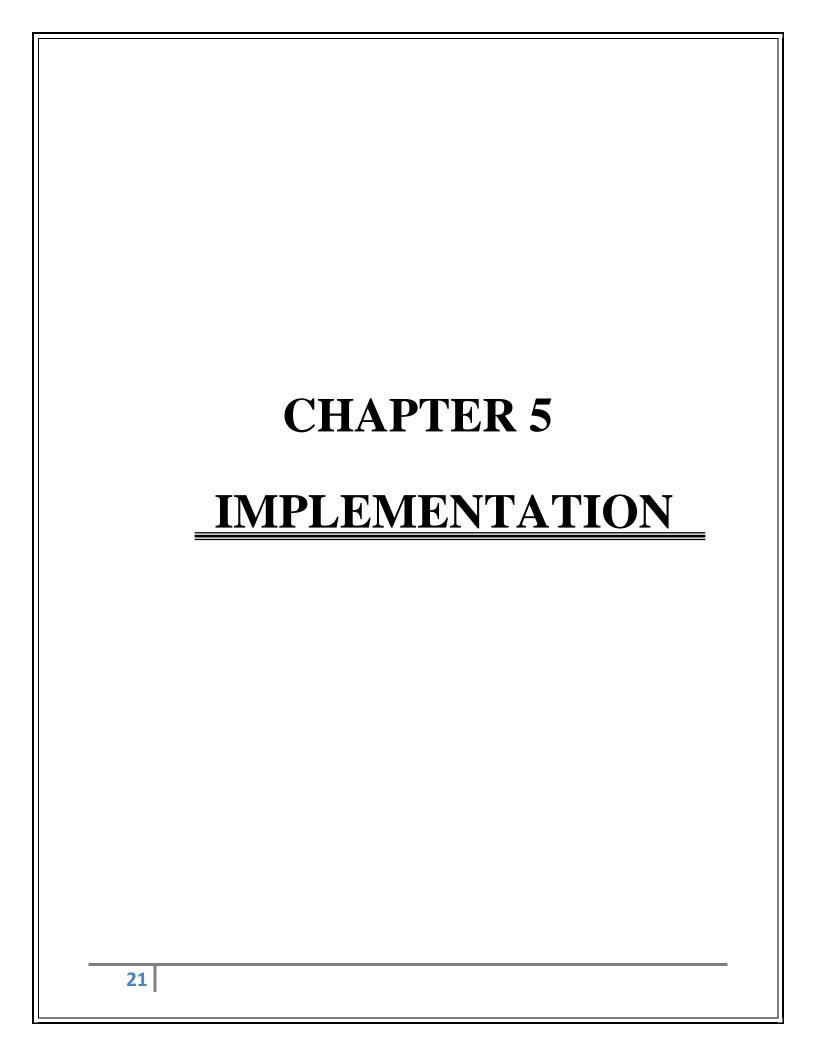
A data flow diagram (DFD) illustrates how data is processed by a system in terms of inputs and outputs. As its name indicates its focus is on the flow of information, where data comes from, where it goes and how it gets stored.

A DFD is a graphical representation of flow of data through information system. DFD can be used to visualize a data processing.

The result is a series of diagrams that represent the business activities in a way that is clear and easy to communicate. A business model comprises one or more data flow diagrams (also known as business process diagrams). Initially a context diagram is drawn, which is a simple representation of the entire system under investigation.

#### > DFD Components:

- **Entities:** -Entities are source and destination of information data. Entities are represented by rectangles with their respective names.
- Process: -Activities and action takes on the data are represented by circle or Round- edge rectangles.
- Data Storage: It can either be represented as a rectangle with absence of both smaller sides or as an open-sided rectangle with only one side missing
- Data Flow: -Movement of data is shown by pointed arrows. Data movement is shown from the base of arrow as its source towards head of the arrow as destination.



# **Implementation**

#### **IMPLEMENTATION**

A crucial phase in the system life cycle is the successful implementation of the new system design. Implementation simply means converting a new system design into operation. This involves creating computer compatible files, training the operating staff and installing hardware terminals, and telecommunication network before the system is up and running.

In system implementation, user training is crucial for minimizing resistance to change and giving the new system a chance to prove its worth. Training aids such as user-friendly manuals, a data dictionary and job performance aids that communicate information about the new system and help screens. Provide the user with a good start on the new system.

#### **5.1 TECHNOLOGY USED:**

#### > PHP as Front End:

PHP is a technology that helps software developers create dynamically generated web pages based on HTML, XML, or other document type.

#### **VISUAL STUDIO IDE:**

#### Best Support for Latest PHP Technologies

Visual Studio IDE is the official IDE. With its editors, code analyzers, and converters, you can quickly and smoothly upgrade your applications to use new Java 8 language constructs, such as lambdas, functional operations, and method references.

#### • Fast & Smart Code Editing

An IDE is much more than a text editor. The Visual Studio Editor indents lines, matches words and brackets, and highlights source code syntactically and semantically. It lets you easily refractor code, with a range of handy and powerful tools, while it also provides code templates, coding tips, and code generators.

#### • Easy & Efficient Project Management

Keeping a clean overview of large application, with thousands of folders and files, and millions of lines of code, is a daunting task. Visual Studio IDE provide different views of your data, from multiple project windows to helpful tools for setting up your applications and managing them efficiently, letting you drill down into your data quickly and easily, while giving you versioning tools via Subversion, Git integration out the box.

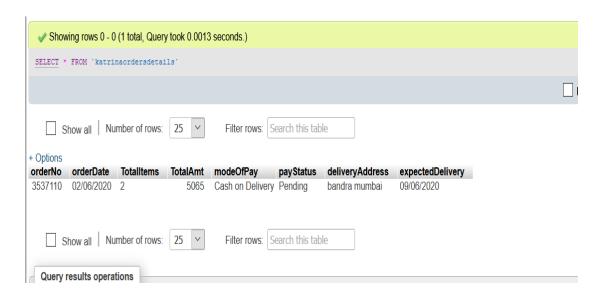
#### **MySQL Database**

MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons –

- MySQL is released under an open-source license. So, you have nothing to pay to use it.
- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.
- MySQL works very quickly and works well even with large data sets.
- MySQL is very friendly to PHP, the most appreciated language for web development.
- MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).
- MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

#### **5.2** Table Structure:

#### Order table



#### Info Table

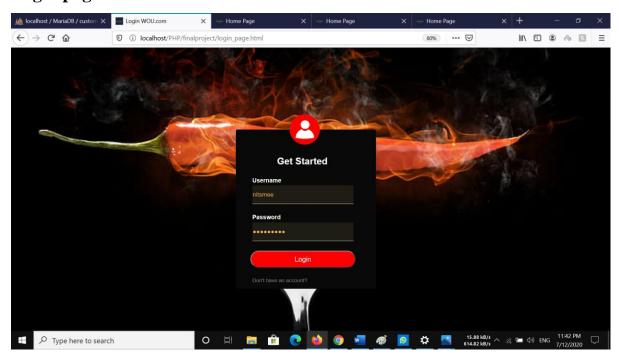


#### **Utensil** table

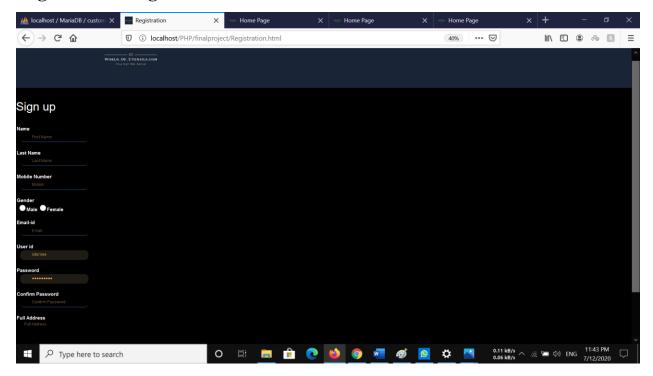
ntro	brand	MRP	price	discount	rating	img_path	Off%	subC	ProdID
Pigeon-Stainless Steel Coffee Cup Set of 6 (with L	Pigeon	900.00	720.00	180.00	4.7 out of 5	Images\\products\\CupsPlatesAndGlasses\\cps1.jpg	20	cplglp1	cps1
Mayur Exports Double Wall Stainless Steel Apple Te	Mayur	1000.00	400.00	600.00	4.2 out of 5	Images\\products\\CupsPlatesAndGlasses\\cps2.jpg	60	cplglp1	cps2
TOUARETAILS Stainless Steel Vacuum Insulated Trave	TOUARETAILS	1400.00	560.00	840.00	5 out of 5	Images\\products\\CupsPlatesAndGlasses\\cps3.jpg	60	cplglp1	cps3
Navrang Meenakari Steel Glass Set for Water, Decor	NAVRANG	600.00	450.00	150.00	4.1 out of 5	Images\\products\\CupsPlatesAndGlasses\\gls1.jpg	25	cplglp1	gls1
K K Traders Stainless Steel Glass Set (Laser Finis	K K Traders	1099.00	494.55	604.45	4 out of 5(Great Bonanza Offer)	Images\\products\\CupsPlatesAndGlasses\\gls2.jpg	55	cplglp1	gls2
PROJAIN STEEL Steel Serving Glasses, Unbreakable W	PROJAIN STEEL	1300.00	650.00	650.00	5 out of 5(Great Bonanza Offer)	Images\\products\\CupsPlatesAndGlasses\\gls3.jpg	50	cplglp1	gls3
Coconut Stainless Steel Hammered Glasses - Set of	Coconut	1100.00	825.00	275.00	4.4 out of 5	Images\\products\\CupsPlatesAndGlasses\\gls4.jpg	25	cplglp1	gls4
Sumeet Stainless Steel Heavy Gauge Medium Halwa Pl	Sumeet	856.00	599.2	256.8	4.3 out of 5	Images\\products\\CupsPlatesAndGlasses\\pits1.jpg	30	cplglp1	plts1
Coconut Stainless Steel Small Dinner Plates with	Coconut	450.00	225.00	225.00	5 out of 5	Images\\products\\CupsPlatesAndGlasses\\plts2.jpg	50	cplglp1	plts2
Planet Stainless Steel Plate Rack/Dish Rack/Plate	Planet	750.00	375.00	375.00	4.3 out of 5	Images\\products\\CupsPlatesAndGlasses\\plts3.jpg	50	cplglp1	plts3
Cello Lush Fiesta Opalware Dinner Set, 18-Pieces,	Cello	1600.00	1120.00	480.00	4.9 out of 5	Images\\products\\CupsPlatesAndGlasses\\crpl1.jpg	30	cplglp2	crpl1
Cello Tropical Lagoon Opalware Dinner Set, 18-Piec	Cello	1600.00	1120.00	480.00	4.4 out of 5	Images\\products\\CupsPlatesAndGlasses\\crpl2.jpg	30	cplglp2	crpl2
Clay Craft Ripple Impression Bone China Cup and Sa	Clay Craft	1200.00	960.00	240.00	4.6 out of 5	Images\\products\\CupsPlatesAndGlasses \\crcp1.jpg	20	cplglp2	crcp1
Organic Clay Crafts Clay Kulhad Tea Cups-Set of 6	Organic Clay Crafts	600.00	240.00	360.00	4.9 out of 5	Images\\products\\CupsPlatesAndGlasses \\crcp2.jpg	60	cplglp2	crcp2
Bje Hot & Cold Ceramic Beverage Mug For Coffee, Te	Bje	900.00	450.00	450.00	3.9 out of 5	Images\\products\\CupsPlatesAndGlasses \\crcp3.jpg	50	cplglp2	crcp3
Kraft Motivational Quote Coffee Mug Home Kitchen	iKraft	950.00	190.00	760.00	4.7 out of 5	Images\\products\\CupsPlatesAndGlasses \\crcp4 jpg	80	cplglp2	crcp4
Hansa Fin Line Juice Tumbler 175 ml (Set of 6)	Hansa	499.00	299.00	200.00	4.4 out of 5	Images\\products\\CupsPlatesAndGlasses\\crgl1.jpg	40	cplglp2	crgl1
Luminarc So Wine Red Wine Stem Glass Set of 4 (470	Luminarc	900.00	792.00	108.00	4.6 out of 5	Images\\products\\CupsPlatesAndGlasses\\crgl2.jpg	12	cplglp2	crgl2

# 5.3 **SITE SNAPSHOTS**

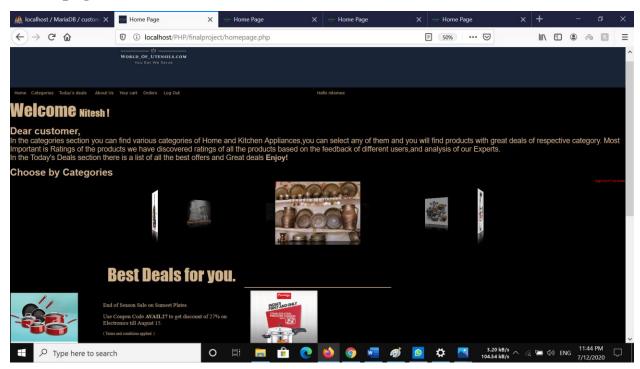
# Login page



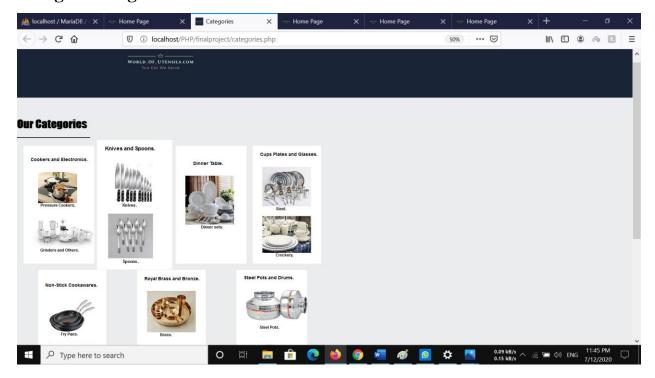
#### **Registeration Page**



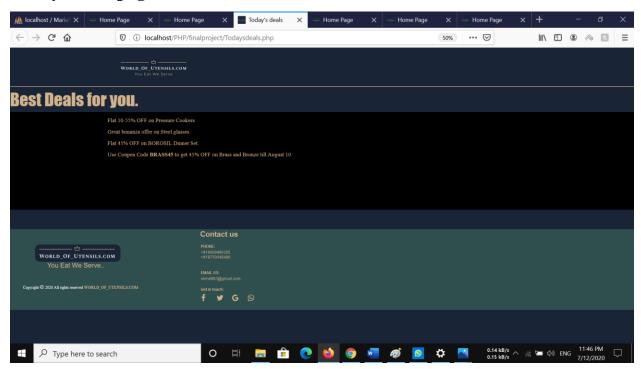
#### Home page



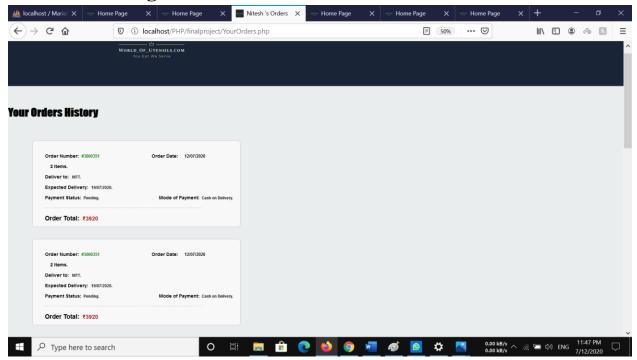
#### **Categories Page**



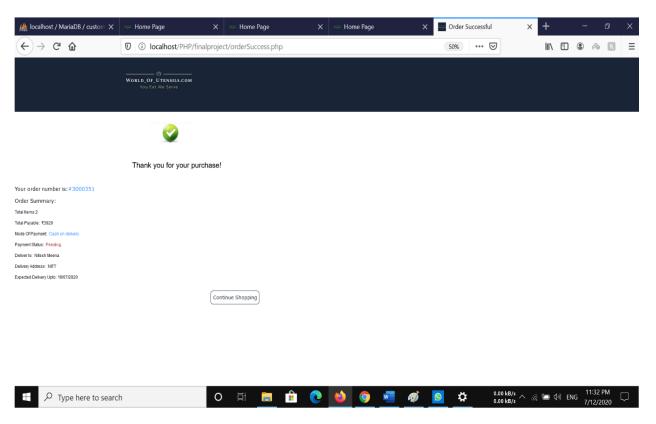
#### Today's deal page

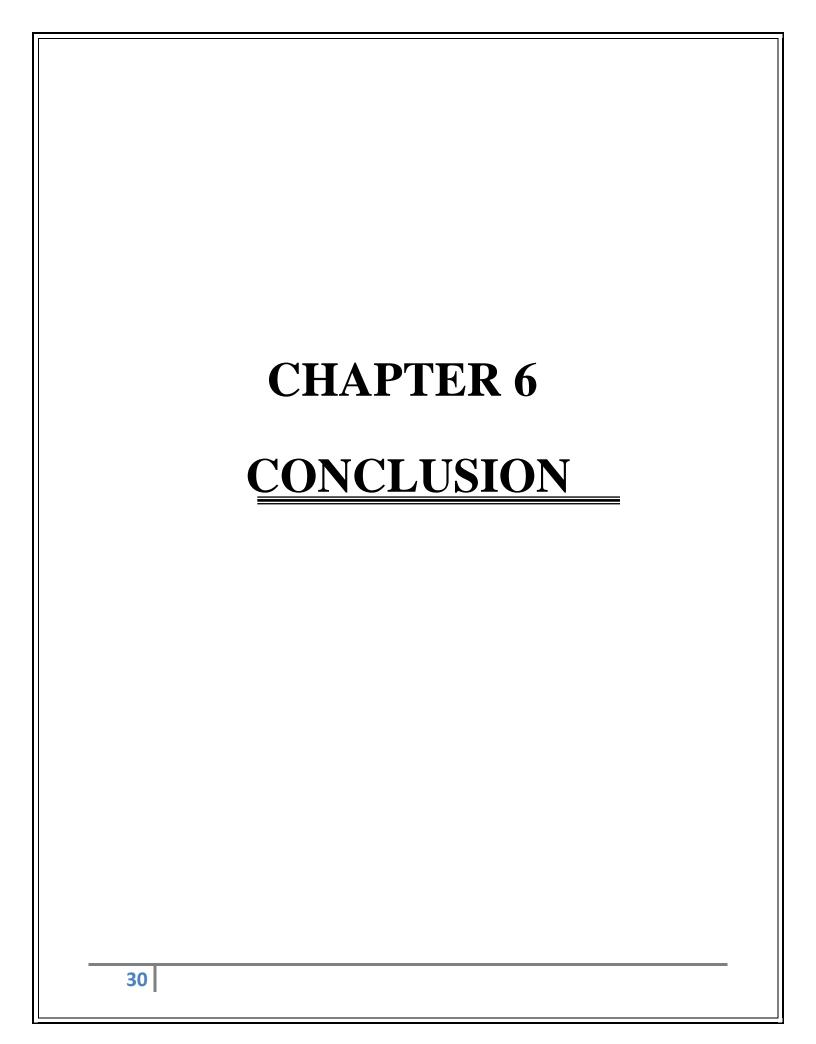


#### **Your Order Page**



# **Payment Success page**





# **CONCLUSION**

#### **6.1 IMPORTANT FEATURE**

- The system should have a login.
- Easy Interface
- Record all order history
- > Reach Home from any where
- Deals page.

#### 6.2 ADVANTAGES

#### > GUI:

The proposed system provides better graphical user interface.

### > Increase work Speed:

Due to automation of some part of the system work speed will increase.

#### Less Paperwork:

For the proposed system less paper work is required.

#### > Reduce Error:

Due to computerized there are less possibilities of error.

#### **6.3 DISADVANTAGE AND LIMITATIONS**

There are few limitations in this web application which are following:

- No search options.
- Not all product covered.

#### **6.4 CONCLUSION**

It is concluded that the application works well and satisfy the customers. The application is tested very well and errors are properly debugged. The site is simultaneously accessed from more than one system. Simultaneous login from more than one place is tested.

The site works according to the restrictions provided in their respective browsers. Further enhancements can be made to the application, so that the web site functions very interactive and useful to existing application. The application satisfies both the company and students by eliminating more input. The speed of the transactions become more enough now.

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AND

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# 1. Search Engine

• www.google.com