DESIGN AND DEVELOPMENT OF ORDER COLLECTION SYSTEM

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science & Engineering.

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APPROVAL

This Project Titled "**Design & Development of order Collection System**", Submitted by Esrat Karim to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering(BSc) and approved as to its style and contents. The presentation has been held on 22 August, 2015.

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DECLARATION

I hereby declare that, The Work Presented in this project has been done by me under the Supervision of **Md. Mahmudul Hasan, Senior Lecturer, Department of CSE** Daffodil International University. in Partial fulfillment of the Requirements for the Degree of Bachelor of Computer Science. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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I would like to express our heartiest gratitude to Dr.Syed Akhter Hossain, Head**,** Department of CSE, for his kind help to finish my project and also to other faculty member and the staff of CSE department of Daffodil International University.

I would like to express thanks our entire course mate in Daffodil International University, who took part in this discuss and helping us while completing the entire project.

Finally, I have must acknowledge with due respect the constant support and patients of our parents and family, who are really wish and blessed us for glorious future.

ABSTRACT

The project intended to develop a web based application named order collection system. Today the world is digitalized to aid business success. The project aims to take a master step to communication between customer and owner. Business can now greatly expand their markets. this web application dynamically changes the nature and the marketing activities of some business, possibly encouraging the business to expand the diversity of its products and services. This Order Collection System (SOC) is a customizable online (i.e. Smart Mobile Apps) ordering tool which is tailored and embedded into our consumer based business organization which can expand their business at grass route level throughout the country. It's an effective tools for collecting purchase order and place to the concerned person within a second and it can be used by any kind of smart phones from anywhere in the world through internet.

This Project has been created by Oracle Database using oracle application Express and written in SQL, PLSQL with HTML and CSS functionalities. This Software has been designed as ordering collection system software to those companies, which are worried about expenses and maintenance of the ordering System.

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Introduction

1.1 History

Smart Order Collection System is a customizable online (Smart Mobile Apps) ordering tool tailored embedded into our consumer based business organization those who expand their business at grass route level throughout the Country. It's a effective tools for collecting purchase order and place to the concerned within a second and it can be used by any kind of smart phone from anywhere, any place. By selecting date range we can visualize weekly, monthly and yearly sales volume, collection, and delivery reports and also can evaluate the performance of the respective sales representative thought the year. product display on mobile for better marketing of product. Maintenance the list of product and price information.

1.2 Aim of the project

The main aim of this project is to develop a handsome software for smart order collection system that will help to build up a strong relationship in between clients/customer and Company with smooth business monitoring .This software is really smart and expecting will be more smart in the near future by improving its various feature and it can be shown as mobile APPs. I hope definitely this will satisfy the entire user in complement manner.

1.3Principle operation of this project

Smart Order Collection System is a customizable online (Smart Mobile Apps) ordering tool tailored embedded into our consumer based business organization those who expand their business at grass route level throughout the country. It's an effective tools for collecting purchase order and place to the concerned within a second and it can be used by any kind of smart phone from anywhere, any place. This Ordering System, end to end software solutions for sales channel management.

- Maintains list of distributor, sales force, territory, outlets.
- Completing sales order using mobile apps.
- Print order instantly.
- Make available order information throughout the channel.
- Geo-location of outlets and sales force movement captured and simplified report option available for management, monitoring sales force.
- Product display at mobile for better marketing of product.
- Maintains list of product, price and information on offer (Promotional), discount, returns etc.

1.4 Motivation

Every company is trying to provide a better and easy customer services for their valuable customers over the phone or online via the internet. As a result, internet telephony based call centre's are becoming more expensive. To make it easy and user friendly with less cost, everyone is trying to switch over a cheaper solution. In this context, customer supports become very expensive and demanding which is gradually affecting the IT sectors. The objective of this project is to provide an effective and interactive project for users. product Sales and customer authentication transparency. Fast, secure real time transaction. That is why I decided to develop a project which will be helpful and efficient in case of updated information and individuals view and concepts and it is such software which will help customers ordering their information daily, weekly, monthly, and yearly.

1.5 Expected Outcome

The main Feature of this project are as follows:

- Product Sales and customer authentication transparency.
- Fast, secure real time transaction.
- Backup of sales data available for later use.
- No loss of Data.
- More order more business
- Best service on busy hour
- Present the new or previous offer to the customers directly
- No transaction difficulties

1.6 Organization of the Report

The report arranges as follows, chapter one discusses the introductory parts of the project and gives a brief description of the overall exertion. chapter two discusses the Literature review of system context, Feasibility Study, Benefits and other in details. chapter three discusses about the requirements of this project. high level requirements use case model and description. chapter four discusses develops the methodology of designing and architecting the project. To be more precise, it gives the conception of how to design objectives to achieve the goals. And Represent the Entity relationship model. chapter five discussing about the implementation and testing, process implementation. Testing and evaluation chapter describes the whole testing strategy of the project. And the last chapter presents result of conclusion and the future scope of this project.

CHAPTER TWO

Literature Review

2.1 Feasibility Study

In The 21st Century, no country can develop without the help of information technology. Every Sector now heavily uses IT for providing exhaustive and values-added information Services. Depending on the results of the initial investigation, it was found that presently well-qualified IT person is very low rate in our manpower. Before starting our main project I generate a survey to understand what I really need to keep on mind in the time of developing my Project.

Some common factors are referred in feasibility study [12]. These are as follows:

- Technical Feasibility
- Software Availability
- Economic Feasibility
- Operational Feasibility

Technical Feasibility

The technical feasibility study compares the level of technology available in the software development firm and the level of technology required for the development of the product. Here the level of technology consists of the programming language, the hardware resources, other software tools etc.

Software Availability

For implementing the project a couple of software is needed. First of all, I have need server software which has strong security management. I can use my won server system if possible or i can take part of any professional server provider. Software will need for maintaining the database server. At present we use the SQL Server.

Economic Feasibility

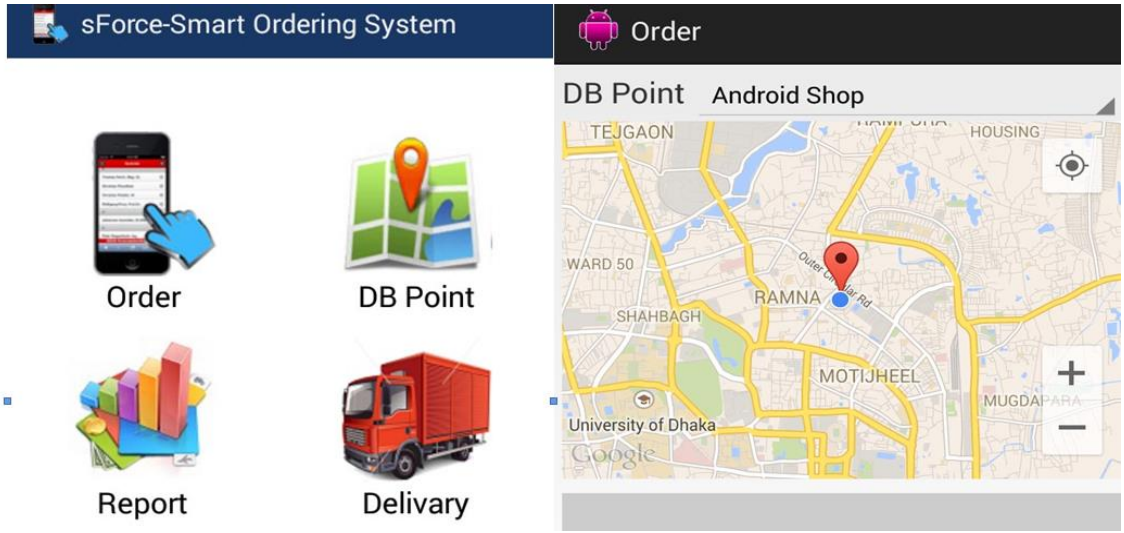
Economic analysis is the most frequently used method for evaluating the effectiveness of a new system. More commonly known as cost/benefit analysis, the procedure is to determine the benefits and savings that are expected from a candidate system and compare them with costs. If benefits outweigh costs, then the decision is made to design and implement the system. Time Based: This application will save working time and will change the regular working style. Cost Based: Some investment is needed to manage the application. For this application host is needed. And also an IT expert is needed as the manpower.

Operational Feasibility

Operational feasibility study tests the operational scope of the software to be developed. The proposed software must have high operational feasibility. The usability will be high.

2.2 System Context

Apps for sales order collection and management: Integrated with mobile application and server data. S-Force is a Mobile app, which is enabled with rich user interface as an android app, Supports Google API library, Build with latest version compatibility. Backend supports SQL DB. Which is light and powerful storage for mobile data storage.



Order Collection Process:

1. Click on the sforce Android Apps
2. Click on the Order Point
3. Click New order
4. Select Db point
5. Select item and quantity
6. Click save button
7. Click Sync button
8. Click upload button
9. After upload complete, click download button
10. When download complete, the data is stored server. and show using this project.

2.3 Shortcomings

- ✓ Initial Cost of implementation of this online business site is moderately high.
- ✓ This project is online based directly on internet. The internet provides various opportunities for Hacker's crackers and competitors who may attempt to gain access to internet system via the web server.
- ✓ Information stored in the Server.
- ✓ Field base sailing network
- ✓ Field based sailing organization
- ✓ Applicable for Medicine company
- ✓ Applicable for company those who produce daily need based product at grass route level of the country.

2.4 USE CASE DESCRIPTION

The Use Case Model describes the proposed functionality of the new system. A Use Case represents a discrete unit of interaction between a user (human or machine) and the system. A Use Case is a single unit of meaningful work; for example login to system, register with system and create order are all Use Cases. Each Use Case has a description which describes the functionality that will be built in the proposed system. A Use Case may 'include' another Use Case's functionality or 'extend' another Use Case with its own behavior [13].

Use Cases are typically related to 'actors'. An actor is a human or machine entity that interacts with the system to perform meaningful work. In our Project there are two actors. They are

- User
- Admin

2.4.1 USE Case Title: Login & other information

Actor: User

Primary Path:

User

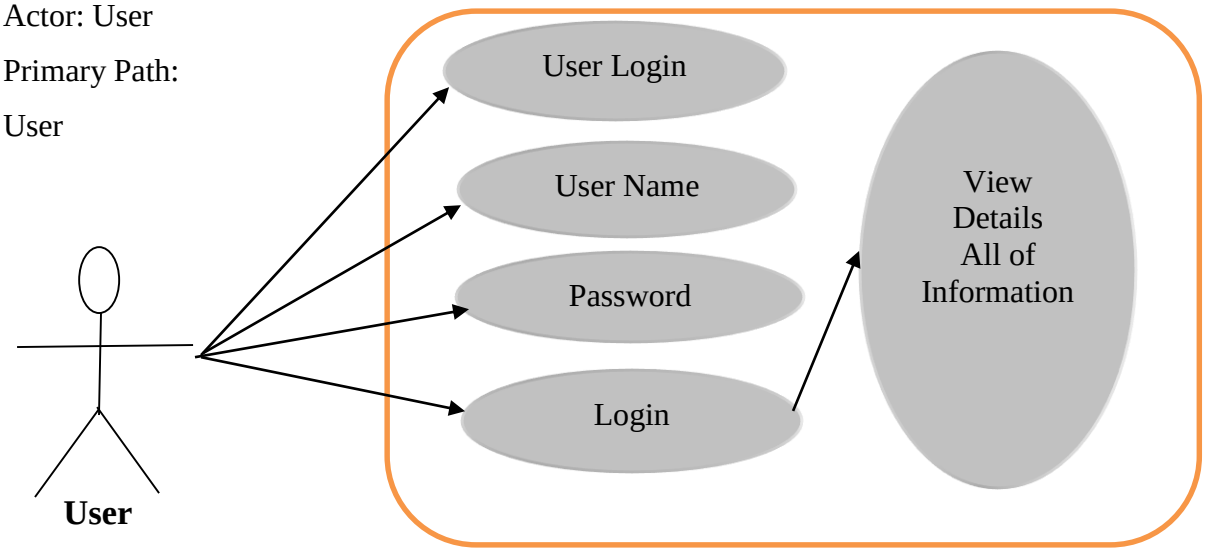


Figure: 2.4.1 Use case model for user login

2.4.2 USE Case Description: (for Admin)

USE Case Title: Control

Actor: Admin

Primary Path:

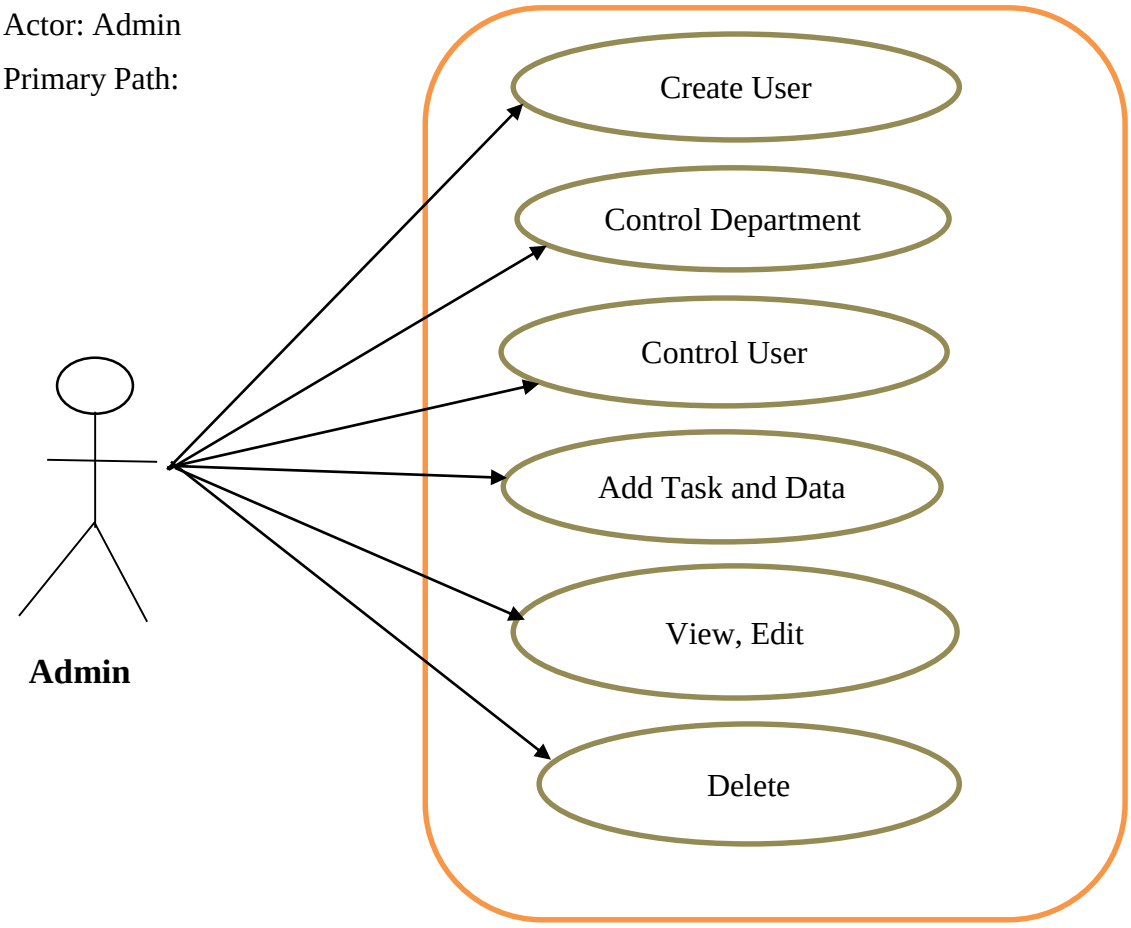


Figure: 2.4.2 Use case model for Admin

2.5 Advantages

- Summary of the sales is generated real time.
- No need for paper inputs or manual report maintenance.
- Digital report generation.
- Product Sales and customer authentication transparency.
- Fast, secure real time transaction.
- Backup of sales data available for later use.
- Easy to install.
- No loss of Data.

2.6 Summary

I generate a survey before starting our main project, to understand what I really need to keep on mind in the time of developing my Project. A survey has been organized where interested employers, Sales Officer and Customer of Organized participated to share their views, requirements and ideas with us about the system. I examine the various feasibility of our new system. item sales and customer authentication transparency. Fast, secure real time transaction. this software Maintains list of product, price and information on offer (Promotional), discount, returns etc. no transaction difficulties.

CHAPTER THREE

Project Requirements

3.1 High Level Requirements

Requirements Stands for the need or want of an individual or a company. Requirements in human lives in a never ending procedure, every individual will remain only satisfied till the time something new or better is not available in the market, thus his demands never end and his requirements for something remain endless. in the field of Engineering, the term requirements are known as singular document need of what a certain service or product should be. The term is very commonly known as requirements phase.

3.2 Language & Tools

The language and Tools that I used to develop my project of order collection system are as follows:

3.2.1 Language

The Language that I used for develop my project are:

- SQL (Structured query Language)
- PLSQL (Programmable Structured query Language)
- HTML (Hyper Text Markup Language)
- CSS (Cascading style Sheets).

SQL: SQL stands for Structured Query Language. Using SQL we can access and manipulate databases. SQL is an ANSI (American National Standards Institute) standard. SQL can execute queries against a database. SQL can retrieve data from a database. SQL can insert records in a database [14].

Join: An SQL JOIN clause is used to combine rows from two or more tables, based on a common field between them. There are different type of join,

- INNER JOIN: Returns all rows when there is at least one match in BOTH tables
- LEFT JOIN: Return all rows from the left table, and the matched rows from the right table
- RIGHT JOIN: Return all rows from the right table, and the matched rows from the left table.
- FULL JOIN: Return all rows when there is a match in ONE of the tables.

PL/SQL: PL/SQL (**Procedural Language/Structured Query Language**) is Oracle Corporation's procedural extension for SQL and the Oracle relational database.PL/SQL stands for Procedural Language extension of SQL.PL/SQL is a combination of SQL along with the procedural features of programming languages. It was developed by Oracle Corporation in the early 90's to enhance the capabilities of SQL[15].

HTML: HTML stands for Hyper Text Markup Language. an HTML File is a text file containing small markup language HTML documents are described by HTML tags. an HTML File must have an html or html file Extension. An HTML File can be created using a simple text editor.

CSS: Cascading Style Sheets (CSS) are a way to control the look and feel of HTML documents in an organized and efficient manner [2].

- Add new looks to old HTML
- Completely restyle a website with only a few changes to CSS Code.
- Use the "Style" create any can wish.

3.2.2 Tools

A Software tool is a program or application that software developer uses to Create, debugs, maintain or otherwise support other programs and applications. The term usually refers to relatively simple programs that can be combined together to accomplish a task, much as one might use multiple hand tool to fix a physical object. I developed my project using of this following tools:

- Oracle(11g)
- Apex 4.2.2(oracle application express)
- Toad (10.5)

Oracle:

A database server also prevents unauthorized access and provides efficient solutions for failure recovery. an oracle database is a collection of data treated as a unit. The purpose of a database is to store and retrieve related information. A database server is the key to solving the problems of information management. The database has logical structures and physical structures. Because the physical and logical structures are separate, the physical storage of data can be managed without affecting the access to logical storage structures. The Oracle Corporation also supplies interface tools to access data stored in an Oracle database. Two of these tools are known as SQL*Plus, a command line interface, and Developer, a collection of forms, reports and graphics interfaces. [4] The oracle Relational Database Management System (RDBMS) is an industry leading database system designed for mission critical data storage and retrieval. The RDBMS is responsible for accurately storing data and efficiently retrieving that data in response to user queries. The Criteria of oracle database [10]. that describe the following below.

Oracle Database 11g: Standard Edition One for Windows, a developer edition of the world's leading enterprise database.

Oracle SQL Developer: A powerful tool used to interact with your Oracle database, which is also covered, in part, in this book.

Oracle Application Server 10*g* Standard Edition One for Windows: Oracle's powerful application server.

Oracle Business Intelligence 10*g* Standard Edition One for Windows: A collection of powerful analytic tools to unlock the value in your Oracle data.

Oracle Warehouse Builder 11*g*: A tool to help you create data warehouses to use for robust analysis of your Oracle data.

Apex:

Apex is a strongly typed, object-oriented programming language that allows developers to execute flow and transaction control statements on the Force.com platform server in conjunction with calls to the force.com API. Using syntax that looks like java and acts like database stored procedures, Apex enables developers to add business logic to most system events, including button clicks, related record updates, and visual force pages. Apex code can be initiated by Web service requests and from triggers on objects. apex introduces new elements, it uses syntax and semantics that are easy to understand and encourage efficient use of the Force.com platform [7]. Click on the link to go to the login page for your hosted account, shown in Figure 1. Enter your workspace name and your user name, which is the email address. Check your email for your credentials, and enter the password sent to you. Click Login, which will bring you to Oracle Application Express, your development destination.

Click on the link to go to the login page for your hosted account, shown in Figure 1-Enter your workspace name and your user name, which is the email address. Check your email for yourc redentials, and enter the password sent to you [9].

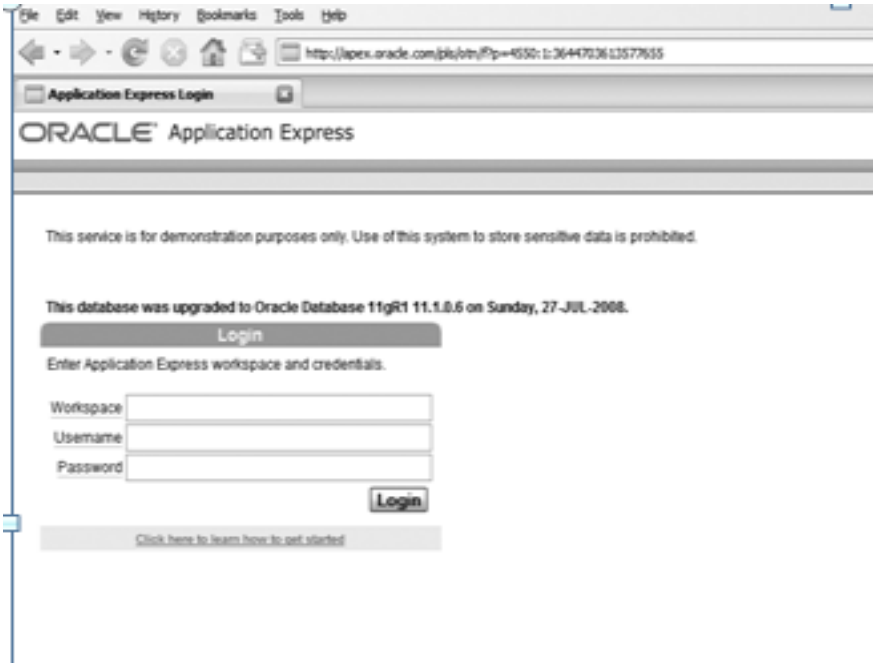


Figure 1: User login

Click Login, which will bring you to Oracle Application Express, your development destination, shown in the following figure-2 [9].

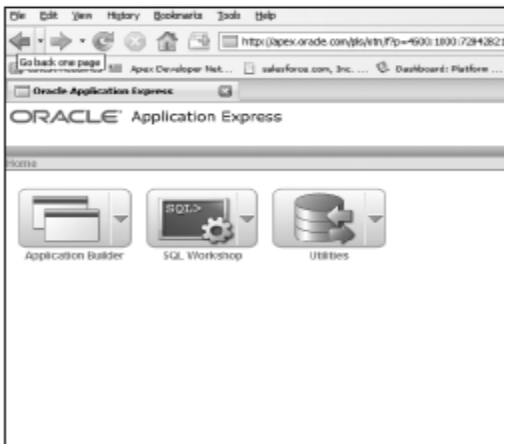


Figure 2: Development Destination

3.3 Database

A database is an integrated collection of logically related records or files consolidate into a common pool that provides data for one or more multiple uses. The Oracle RDBMS stores data logically in the form of table spaces and physically in the form of data files. A DBA can impose maximum quotas on storage per user within each table space [1].Oracle targets high-end workstations and minicomputers as the server platforms on which to run its database systems.

Create Database

A database is a collection of information that is organized so that it can easily be accessed, managed, and updated. In one view, *databases* can be classified according to types of content: bibliographic, full-text, numeric, and images [4]. always database name should be unique within the RDBMS.

SQL CREATE DATABASE Syntax:

CREATE DATABASE databasename;

Example: CREATE DATABASE my_db;

Database Features:

- High Performance.
- High Availability.
- Scalability and Flexibility run anything.
- Robust Transactional Support.
- Web and Data Warehouse Strengths.
- Strong Data Protection.
- Comprehensive Application Development.
- Management Ease.
- Lowest Total Cost of Ownership.

CHAPTER FOUR

Design & Development

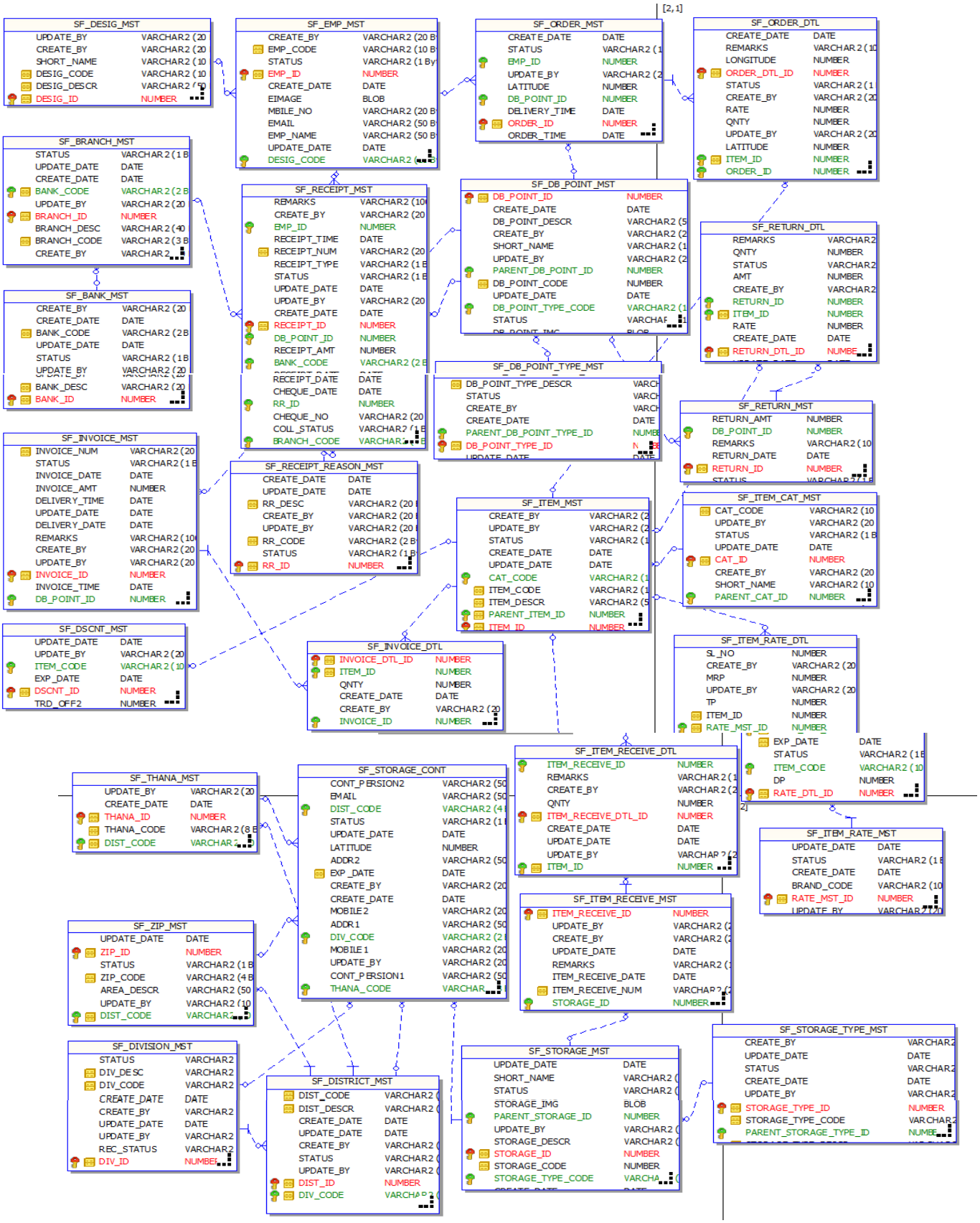
4.1 System Design

Smart Order Collection System is a customizable online (Smart Mobile Apps) ordering tool tailored embedded into our consumer based business organization those who expand their business at grass route level throughout the Country. It's a effective tools for collecting purchase order and place to the concerned within a second and it can be used by any kind of smart phone from anywhere, any place. The main Aim of this project is to develop a handsome software for smart order collection system that will help to build up a strong relationship in between clients/customer and Company with smooth business monitoring .This software is really smart and expecting will be more smart in the near future by improving its various feature and it can be shown as mobile APPs.

4.2 Physical Database Design

Database systems are ubiquitous today and most people interact either directly or indirectly with database many times every day. The Goal of database is to generate a set of relation schemas that allows us to store information without unnecessary redundancy and allows us to retrieve information easily. I can achieve optimization ease of use in maintenance by design the database using the relational model in which the data is stored in the form of table and their exists relation between or among the tables. The following figure shows the relation between all tables and physical database design [4] [1].There are three type of relation.

1. One to one
2. One to many
3. Many to many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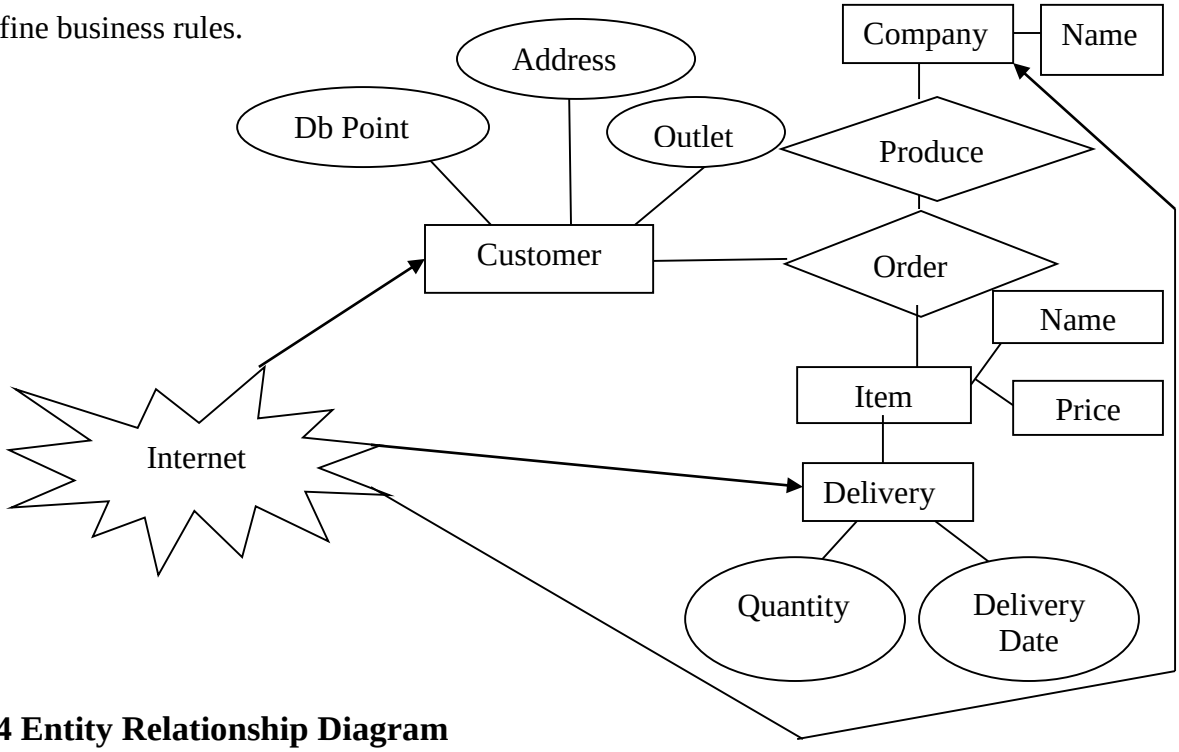
STORAGE_TYPE_ID NUMBER
STORAGE_TYPE_CODE VARCHAR2
PARENT_STORAGE_TYPE_ID NUMBE
SF_DIVISION_MST
STATUS VARCHAR2
DIV_DESC VARCHAR2
DIV_CODE VARCHAR2
CREATE_DATE DATE
CREATE_BY VARCHAR2
UPDATE_DATE DATE
UPDATE_BY VARCHAR2
REC_STATUS VARCHAR2
DIV_ID NUMBE
SF_DISTRICT_MST
DIST_CODE VARCHAR2 (
DIST_DESCR VARCHAR2 (
CREATE_DATE DATE
UPDATE_DATE DATE
CREATE_BY VARCHAR2 (
STATUS VARCHAR2 (
UPDATE_BY VARCHAR2 (
DIST_ID NUMBER
DIV_CODE VARCHA
SF_STORAGE_MST
UPDATE_DATE DATE
SHORT_NAME VARCHAR2 (
STATUS VARCHAR2 (
STORAGE_IMG BLOB
PARENT_STORAGE_ID NUMBER
UPDATE_BY VARCHAR2 (
STORAGE_DESCR VARCHAR2 (
STORAGE_ID NUMBER
STORAGE_CODE NUMBER
STORAGE_TYPE_CODE VARCHA

4.3 Logical Data Model

A Logical data model is the version of a data model that represents the business requirements (entire or part) of an organization and it is developed before the physical data model. This is the actual implementation and extension of a conceptual data model. A sound logical design should streamline the physical design process by clearly defining data structures and the relationships between them. Logical data model includes all required entities, attributes, key groups, and relationships that represent business information and define business rules.



4.4 Entity Relationship Diagram

The entity-relationship (E-R) Diagram is based on a perception of a real world that consists of a collection of basic objects, called “entities” and relationship among these objects. An entity is a “thing” or “object” in the real world that is distinguishable from any other object. Entities are described in a database by a set of attributes. For example username is an attribute of a user, Diagram created using this process are called entity-relationship diagrams or ER diagrams for short. the Following figure showing the (ERD)
Diagram.


SF_ORDER_MST
SF_ORDER_DTL
SF_EMP_MST
SF_ITEM_RATE_
SF_DESIG_MST
SF_DB_POINT_MST
SF_ITEM_RA
TE_DTL
SF_ITEM_RECEIVE_MST
SF_ITEM_RECEIVE_DETA
SF_RETURN_M
ST
SF_DB_POINT_TYPE_MST
SF_STORAGE_TYPE_MST
SF_RETURN_DTL
SF_INVOICE_MST
SF_STORAGE_MS
T
SF_INVOICE_DTL
SF_STORAGE_CONT
SF_DSCNT
_MST
SF_ITEM_MST
SF_ITEM_CAT_MST
SF_RECEIPT_MST
SF_BANK_MST
SF_RECEIPT_REASON_MST
SF_DIVISION_MST
SF_BRANCH_MS
SF_DISTRICT_MST
SF_THANA_MST
SF_ZIP_MS

4.5 Database Table

Table are created using the CREATE TABLE Command. table are owned by the user who creates them. The names of tables owned by a given user must be unique. the column names must be unique.

Create Table Syntex:

create table tablename (<column name><data type> (size), ----);

Table can be created by any time. Table structure can also be modified. I have use various kind of table. Such as:

```
CREATE TABLE TABLEITEM_MST
(
ITNO NUMBER (4 BYTE),
NAME VARCHAR2 (50 BYTE),
QOH NUMBER (5 BYTE),
RATE NUMBER (8 BYTE),
CLASS VARCHAR2 (1 BYTE),
ROQ NUMBER (5 BYTE),
CLASS VARCHAR2 (1 BYTE)
)
```

LIST OF TABLES

Table 4.5.1 APP_MENU PLUS

The following Table 4.5.1 App_Menu Plus used creating for menu.

Where m_application_num, parent_m_app_num data type is number, and date format data type is DATE. numeric datatype is number. Text data type is CHAR.

Column Name	ID	Pk	N...	Data Type	Default	Histogram	Num Distinct	Encryption Alg	Salt	Seq/Trigger
M_APPLICATION_NUM	1		Y	NUMBER		None	9			
PARENT_M_APP_NUM	2		Y	NUMBER		None	1			
DESCRIPTION	3		Y	VARCHAR2 (100 Byte)		None	9			
URL	4		Y	VARCHAR2 (100 Byte)		None	7			
SESSION_ID	5		Y	NUMBER		None	0			
LABEL	6		Y	VARCHAR2 (100 Byte)		None	0			
IN_USE	7		Y	NUMBER		None	0			
MODULE_FLAG	8		Y	VARCHAR2 (1 Byte)		None	2			
MODULE_IMAGE	9		Y	BLOB		None	0			
REC_STATUS	10		Y	VARCHAR2 (1 Byte)		None	0			
CREATE_BY	11		Y	VARCHAR2 (30 Byte)		None	0			
CREATE_DATE	12		Y	DATE		None	0			
UPDATE_BY	13		Y	VARCHAR2 (30 Byte)		None	0			
UPDATE_DATE	14		Y	DATE		None	0			
MJR_CODE	15		Y	VARCHAR2 (2 Byte)		None	0			
MNR_CODE	16		Y	VARCHAR2 (2 Byte)		None	0			
USER_GRANT	17		Y	VARCHAR2 (30 Byte)		None	0			
SL_NO	18		Y	NUMBER		None	0			

Table 4.5.2 SF_ITEM_MST

This table used for creating item code, item name, item image, and category code. And Creating relation between order master table.

Column Name	ID	Pk	Null?	Data Type	Default	Histogram	Num Distinct	Encryption Alg	Salt	Seq/Trigger
ITEM_CODE	1		N	VARCHAR2 (10 Byte)		None	275			
ITEM_DESCR	2		Y	VARCHAR2 (50 Byte)		None	168			
ITEM_ID	3	1	N	NUMBER		None	275			
STATUS	4		Y	VARCHAR2 (1 Byte)		None	0			
CREATE_DATE	5		Y	DATE		None	139			
CREATE_BY	6		Y	VARCHAR2 (20 Byte)		None	2			
UPDATE_DATE	7		Y	DATE		None	12			
UPDATE_BY	8		Y	VARCHAR2 (20 Byte)		None	1			
SHORT_NAME	9		Y	VARCHAR2 (10 Byte)		None	0			
PARENT_ITEM_ID	10		Y	NUMBER		Frequency	135			
IIMAGE	11		Y	BLOB		None	0			
CAT_CODE	12		Y	VARCHAR2 (10 Byte)		Frequency	5			

Table 4.5.3 SF_DB_POINT_MST

This table creating for db point code, db point ID, db point Name, db point image and parent db point. And relation between sf db point type master table.

Column Name	ID	Pk	Null?	Data Type	Default	Histogram	Num Distinct	Encryption Alg	Salt	Seq/Trigger
DB_POINT_CODE	1		N	NUMBER		None	4246		☐	☐
DB_POINT_DESCR	2		N	VARCHAR2 (50 Byte)		None	3156		☐	☐
DB_POINT_ID	3	1	N	NUMBER		None	4246		☐	☐
STATUS	4		Y	VARCHAR2 (1 Byte)		None	0		☐	☐
CREATE_DATE	5		N	DATE		None	4099		☐	☐
CREATE_BY	6		N	VARCHAR2 (20 Byte)		None	1		☐	☐
UPDATE_DATE	7		Y	DATE		None	18		☐	☐
UPDATE_BY	8		Y	VARCHAR2 (20 Byte)		None	1		☐	☐
SHORT_NAME	9		Y	VARCHAR2 (10 Byte)		None	0		☐	☐
DB_POINT_TYPE_CODE	10		Y	VARCHAR2 (10 Byte)		None	7		☐	☐
PARENT_DB_POINT_ID	11		Y	NUMBER		Height Balanced	1310		☐	☐
DB_POINT_IMG	12		Y	BLOB		None	0		☐	☐

Table 4.5.4 SF_DB_POINT_TYPE_MST

This table used creating for db point type code, db point type name, db point type id and status, there are different type of db point. such as area, territory, dealer, market, beat and outlet.

Column Name	ID	Pk	Null?	Data Type	Default	Histogram	Num Distinct	Encryption Alg	Salt	Seq/Trigger
DB_POINT_TYPE_CODE	1		N	VARCHAR2 (10 Byte)		None	7		☐	☐
DB_POINT_TYPE_DESCR	2		N	VARCHAR2 (50 Byte)		None	7		☐	☐
DB_POINT_TYPE_ID	3	1	N	NUMBER		None	7		☐	☐
STATUS	4		Y	VARCHAR2 (1 Byte)		None	0		☐	☐
CREATE_DATE	5		N	DATE		None	6		☐	☐
CREATE_BY	6		N	VARCHAR2 (20 Byte)		None	1		☐	☐
UPDATE_DATE	7		Y	DATE		None	0		☐	☐
UPDATE_BY	8		Y	VARCHAR2 (20 Byte)		None	0		☐	☐
PARENT_DB_POINT_TYPE_ID	9		Y	NUMBER		None	6		☐	☐
SHORT_NAME	10		Y	VARCHAR2 (10 Byte)		None	0		☐	☐

Table 4.5.5 SF_ORDER_DTL

This table creating the relationship between order master, order detail table and item master table. which showing the order id, item name, item quantity, item rate etc.

Column Name	ID	Pk	Null?	Data Type	Default	Histogram	Num Distinct	Encryption Alg	Salt	Seq/Trigger
ORDER_ID	1		N	NUMBER		Frequency	3			
ORDER_DTL_ID	2	1	N	NUMBER		None	5			
ITEM_ID	3		Y	NUMBER		Frequency	2			
QNTY	4		Y	NUMBER		None	3			
RATE	5		Y	NUMBER		None	2			
REMARKS	6		Y	VARCHAR2 (100 Byte)		None	0			
STATUS	7		Y	VARCHAR2 (1 Byte)		None	0			
CREATE_DATE	8		N	DATE		None	5			
CREATE_BY	9		N	VARCHAR2 (20 Byte)		None	1			
UPDATE_DATE	10		Y	DATE		None	0			
UPDATE_BY	11		Y	VARCHAR2 (20 Byte)		None	0			
LATITUDE	12		Y	NUMBER		None	0			
LONGITUDE	13		Y	NUMBER		None	0			

Table 4.5.6 SF_ORDER_MST

This table creating the relationship between employee master table and db point master table. This table showing the order number, order date, order time, order amount, and delivery date and delivery time.

Column Name	ID	Pk	Null?	Data Type	Default	Histogram	Num Distinct	Encryption Alg	Salt	Seq/Trigger
ORDER_NUM	1		N	VARCHAR2 (20 Byte)		None	3			
ORDER_DATE	2		Y	DATE		None	1			
ORDER_TIME	3		Y	DATE		None	3			
ORDER_ID	4	1	N	NUMBER		None	3			
EMP_ID	5		Y	NUMBER		None	0			
DB_POINT_ID	6		Y	NUMBER		Frequency	1			
ORDER_AMT	7		Y	NUMBER		None	3			
DELIVERY_DATE	8		Y	DATE		None	1			
DELIVERY_TIME	9		Y	DATE		None	3			
REMARKS	10		Y	VARCHAR2 (100 Byte)		None	1			
STATUS	11		Y	VARCHAR2 (1 Byte)	'N'	Frequency	1			
CREATE_DATE	12		N	DATE		None	3			
CREATE_BY	13		N	VARCHAR2 (20 Byte)		None	1			
UPDATE_DATE	14		Y	DATE		None	0			
UPDATE_BY	15		Y	VARCHAR2 (20 Byte)		None	0			
LATITUDE	16		Y	NUMBER		None	0			
LONGITUDE	17		Y	NUMBER		None	0			

CHAPTER FIVE

Implementation and Testing

5.1 Implementation

Implementation is the process of realizing the design as a program. Software design is a creative activity in which you identify software components and their relationships, based on a customer's requirements.

5.1.1 Input Analysis

Inaccurate input data are the most common cause of errors in data processing. Errors entered by data entry operators can be controlled by input design. Input design is the process of converting user-originated inputs to a computer-based format. In the system design phase, the expanded data flow diagram identifies logical data flows, data stores, sources and destinations.

5.1.2Input Data

The goal of designing input data is to make data entry as easy, logical, and free from errors as possible. In entering data, users need to know the following:

• Field sequence, which must match in the source document.

• The format in which data fields are entered.

5.1.3 Output Data

Data output is the process and method by which data can be studied under different circumstances and manipulated as required. Data output also involves representation of the data.

5.2 Testing

In general, software testing is used to find out system errors. A software test can be carried out by examining codes, design and execution of the whole system. Testing is inevitable to improve the quality of the system. Reviewing And testing Code is another basic of software engineering that is often overlooked in Project development. Testing is an integral part of

the system development process. The main Standard for software Testing is contained in the ANSI/IEEE standard 829/1983-Standard for software testing Documentation. Some software testing may also be performed by CAST (Computer Aided Software Testing). [12]

5.2.1 Functional Testing

In functional testing tester has to validate the application to see that all specified requirements of the client whatever we have said in SRS have been incorporated or not. There are two categories of functional testing:

• Positive functional testing: testing the application's functions with valid input and also verifying that the outputs are correct.

• Negative functional testing: IT involves exercising application functionality using a combination of invalid inputs, some unexpected operating conditions and by some other "out-of-bounds" scenarios.

5.3 Unit Test

Unit testing is generally used in a detailed designing and implementing phase of a project. The rationale of unit test was to find out the defects in this project.

5.4 System Testing

System Testing: Every service related software should have the ability to perform properly. In order to do this, the software should have the following criteria:

- Performance tests: In this project, performance was a great concern for software evaluation. This type of test was required to ensure that the application was capable of satisfying the performance criteria set on the system.
- User tests: This test was done to check the accuracy and usability of the system.

5.5 Usability Test

Usability tests were carried out by the users. these verify that the system provides the required business functionality and correctly produce the expected business information. Firstly, I selected six users to test my project for usability test. Three of them were Expert and rest of them was novice. Expert users were running my project very smoothly and fast, and facing no problem. Novice users also running my project system very smoothly and facing no problem too, but they spend much time than expert users. However, from the usability test it is true that the users do not face a big problem while using the project.

5.6 Compatibility Test

Compatibility Testing, part of software non-functional tests, is testing conducted on the application to evaluate the application's with the computing Environment.

Software compatibility testing can be more appropriately referred to as user experience Environment. This project is tested on different browsers, to ensure the following:

Browser Name	Test	Result
Mozilla Firefox	Yes	OK
Google Chrome	Yes	OK
Opera	Yes	OK

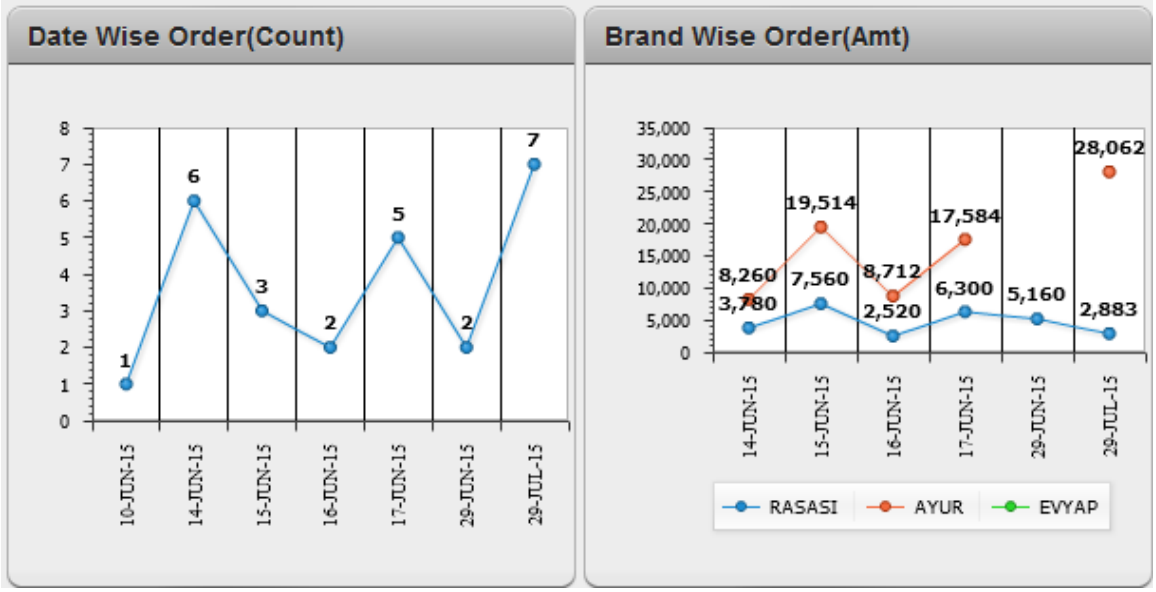
5.7 Test Link and Result

Test link follows all standard specified by oracle (10g), (11g). User web based GUI (Mozilla, Firefox, Google chrome). Supports multiple database like MySQL, SQL server. Supported link protocols: http, www.Maintenance status: Actively maintained Development status: Under active development.

Test order information view-

1. Login this project→ on the project menu choose Transaction→ Click Order Info→ Select db poit type→ Select db point→ Get Start date, end date and status than show the order information.

2. For confirmation→ on the project menu click Dashboard→ Click Db point→ Select db point, start date, end date and status→ then we can see Date wise order and Brand wise order.



LIST OF FIGURES

5.7.1 Login Page Interaction

The following figure 5.7.1 shows the Order Collection System Login Page. is displayed which interacts with Users, User Security and User Type tables of oracle database.

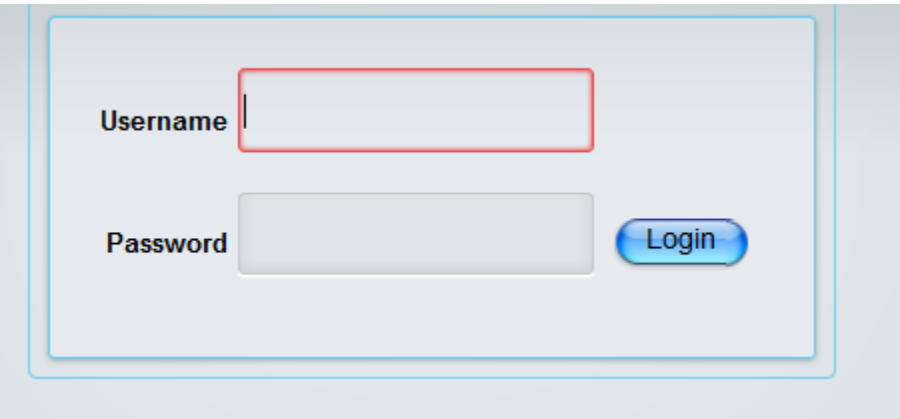


Figure 5.7.1: Login Page

Home Page: The following figure 5.7.2 shows the Home page. A homepage is the main page of a website. like a cover of a book or the front of a store, its function is to welcome people and to inform them of the overall purpose of the website.

Figure 5.7.2: Home Page

Db Point Information: The following figure 5.7.3 shows the db point information. Here the db point Type is order by National, Area, Territory, Dealer, Beat, Market, and outlet. and when the ADDR button click, then show the Whole Address of the outlet.

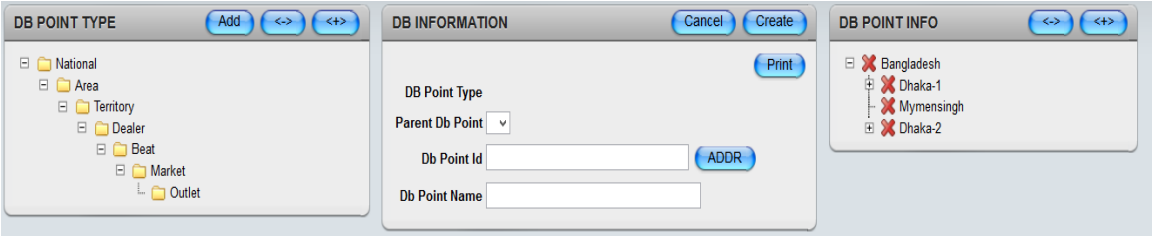


Figure 5.7.3: Db Point Information

Geographical Information: The following figure 5.7.4 shows the Geographical information. That means Division, District, Thana and Post Information of all information of the Bangladesh. this form can be create, edit, and the delete Division, District, Thana, Post Information.

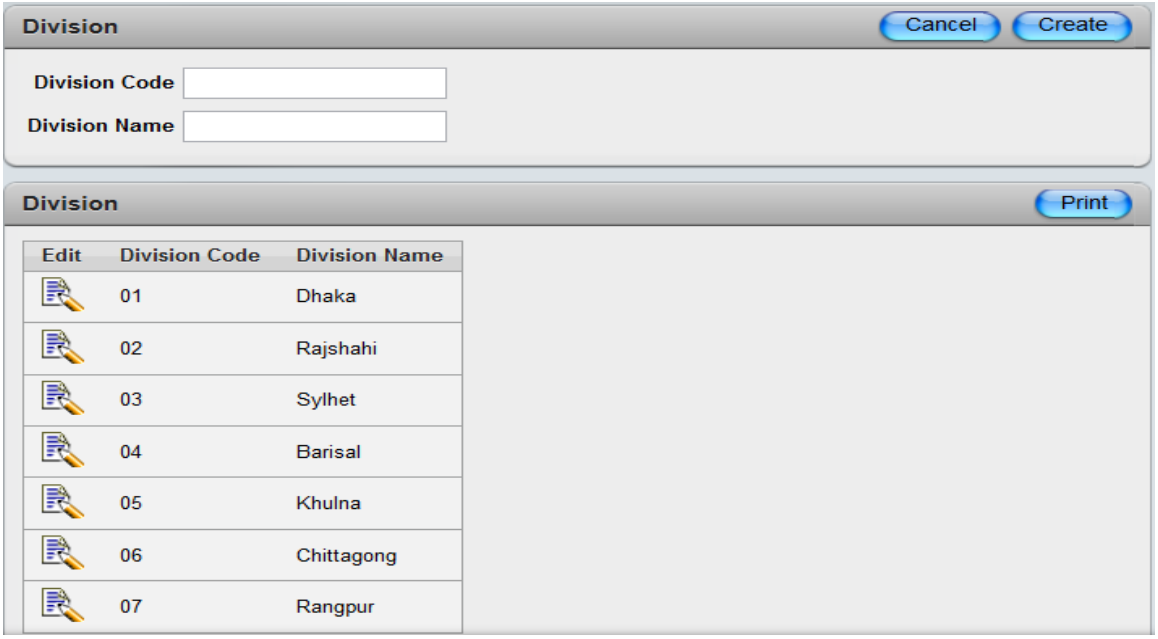


Figure 5.7.4: Geographical Information

Item Information: The following figure 5.7.5 shows the all item information. The item is order by Brand, Major Category, Major sub Category, Minor category, and size. And this form has a image gallery for display all item image.

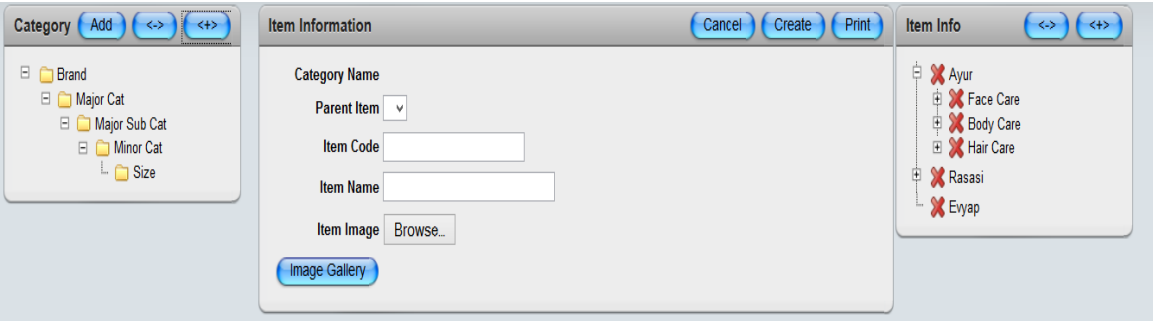


Figure 5.7. 5: Item Information

Order Information: The following figure 5.7.6 shows the order and delivery information between the range of Start date End date. Here the Status is new order, Cancel order, part delivery & Full delivery. Using this form can be shown how many item is ordered, a day and how many item is deliver.

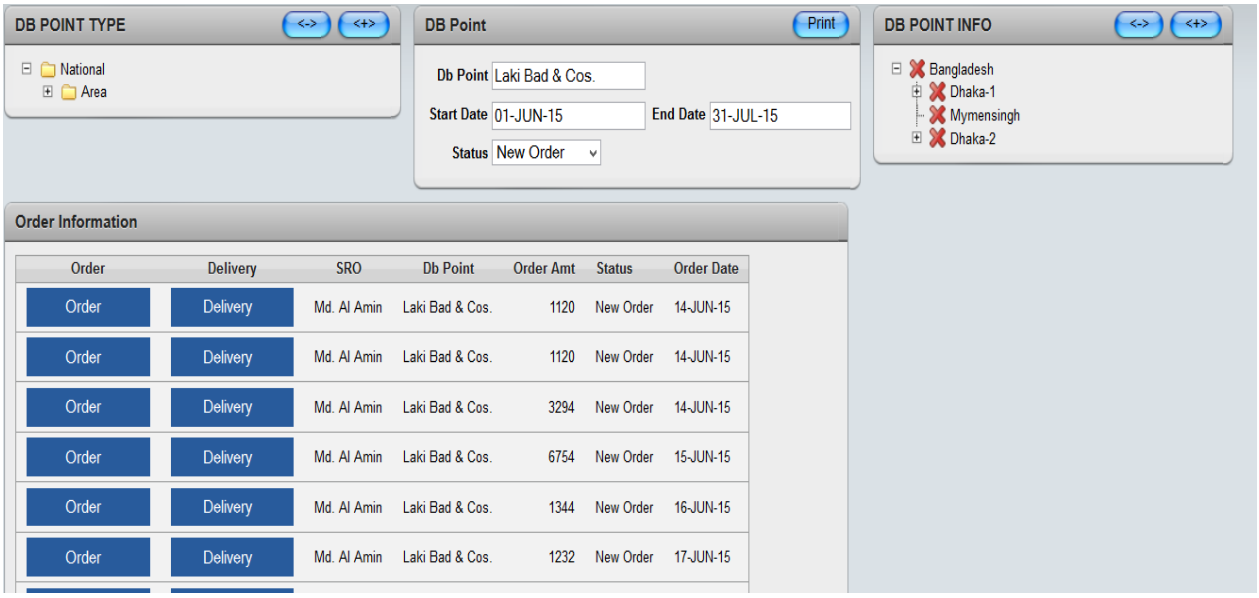


Figure 5.7.6: order Information

CHAPTER SIX

Conclusion& Future Scope

6.1 Conclusion

Different Person may think in different way. I developed the project for use in different organizations sales man. user will decide whether the Sites is effective or not. And anything can be changed any time as per user requirement. The whole procedure that I have done as –First of all made a sketch of the overall procedure into our mind. then I divide the whole task into different parts to make it simple and easy. After that I selected the suitable platform including language and tools. Finally I design the Database and Tested the site by the help of a local host Server. And It is ready to work in real life.

6.2 Future Scope

Everything in this world is changing and it is truer for Information and communication technology. In future it can be done to include some Features in our developed my project and solve all limitation.

- It can be customizable online (Smart Mobile Apps) ordering tool tailored Embedded into our consumer based business organization those who expand their business at grass route level throughout the Country.
- User login system can be included.

This software is really smart and expecting will be more smart in the near future by improving its various features and it can be shown as mobile APPs

.

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