

PROJECT REPORT ON

“Web Portal of Bhubaneswar Municipal Corporation”

Project submitted in partial fulfillment of
the requirement for the degree
of

MASTER IN COMPUTER APPLICATION

BY

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Roll No: 31MCA/06

Under The Guidance Of

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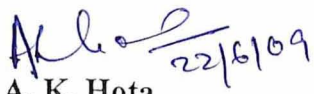
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दिनांक / Date... 22/6/2009


CERTIFICATE

This is to certify that the work in this project report entitled "Web Portal of Bhubaneswar Municipal Corporation" by Miss Monalisa Priyadarshini Sahoo of Centre for Post Graduate Studies, Orissa University of Agriculture and Technology (O.U.A.T) bearing Roll No. 31MCA/06 has been carried out under our supervision for the partial fulfillment of Master in Computer Application (M.C.A). No part of this project has been submitted by any one else for any other degree.

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CERTIFICATE

This is to certify that the project report entitled "Web Portal Of Bhubaneswar Municipal Corporation", submitted by Miss Monalisa Priyadarshini Sahoo to the Centre for Post Graduate Studies, Orissa University Of Agriculture And Technology, Bhubaneswar, in the partial fulfillment of the requirement for the award degree of Master in Computer Application , has been approved by the Students' Advisory Committee after an oral examination on the same in collaboration with an external examiner.

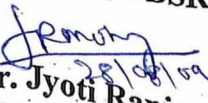

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Place : Bhubaneswar
Date : 23/6/2009

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DECLARATION

I , Monalisa Priyadarshini Sahoo, Final Year 6th semester student of MCA, Center for Post Graduate Studies ,Orissa University Of Agriculture and Technology(O.U.A.T), Bhubaneswar , do hereby declare that the project entitled “Web Portal of Bhubaneswar Municipal Corporation” has done by me at National Informatics center (Orissa State Unit) Bhubaneswar under the guidance of Shri A.k. Hota (Project Coordinator) and Shri A. K.Mahapatra (Project Guide) for the partial fulfillment of the requirement for the award degree of Master in Computer Application.

I also hereby declare that this report has not been submitted earlier to any other university institutions.

Monalisa Priyadarshini Sahoo
Signature of the Student
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INTRODUCTION

OVERVIEW OF NIC (NATIONAL INFORMATICS CENTRE)

National Informatics Centre (NIC) is a premiere IT organization of Government of India in the field of Informatics Services and informatics Technology (IT) applications, and has been instrumental in steering Information and Communication Technology (ICT) Applications in Government Departments at Centre, States and Districts facilitating improvement in government services, wider transparency in government functions and improvement in decentralized planning and management. To facilitate this, NIC has established a nationwide ICT Network NICNET-with gateway nodes at about 53 Central Government Departments, 35 State/UT Secretariats, and 570 District Collectorates, for IT services. The Government has designed the nation-wide computer-Communication Network, NICNET, as the Government Network.

NIC is offering network services over C-band and Ku-band (TDMA, FTDMA, SCPC & Satellite broadband) VSATs , Wireless Metropolitan Area Network (MANs) and Local Area Networks(LANs) with NICNET gateway for internet resources, to promote economic, social, scientific and technological activities, and also for macro-economic adjustment program to the Government.

NIC has played an important role of an “active” catalyst and “facilitator” in informatics development program in Governments at the national, state and district levels, during the last 25 years, which made them, take policy decisions to create “knowledge societies” that can exploit knowledge to derive competitive advantage using the opportunities provided by “digital technology ”. NIC has been instrumental in adopting Information Technology and Communication Technology “to reach out into India“ i.e. by implementing IT applications in Social & Public administrations), which are discernible from the following developments:

Central Government Informatics Development Program - A strategic decision to overcome “Digital Divide” in Central Government and Ministries during the Fifth Plan Period (i.e. 1972-1977); NICNET gateway for Internet/Intranet Access and Resource

Sharing in central Government Ministries and Department in 1980s and 1990s; IT Social Applications and Public Administrations.

State Government Informatics Development Program – A strategic decision to overcome “Digital Divide” in Central and State Governments/UT Administrations, during the Seventh Plan Period (i.e. 1985-1990); NICNET – A first of its kind among the developing countries, using the state – of – art Ku – band VSAT technology – facilitates :
(i) decentralized planning, (ii) improvement in government services, (iii) wider transparency of national and local governments and improving their accountability to people

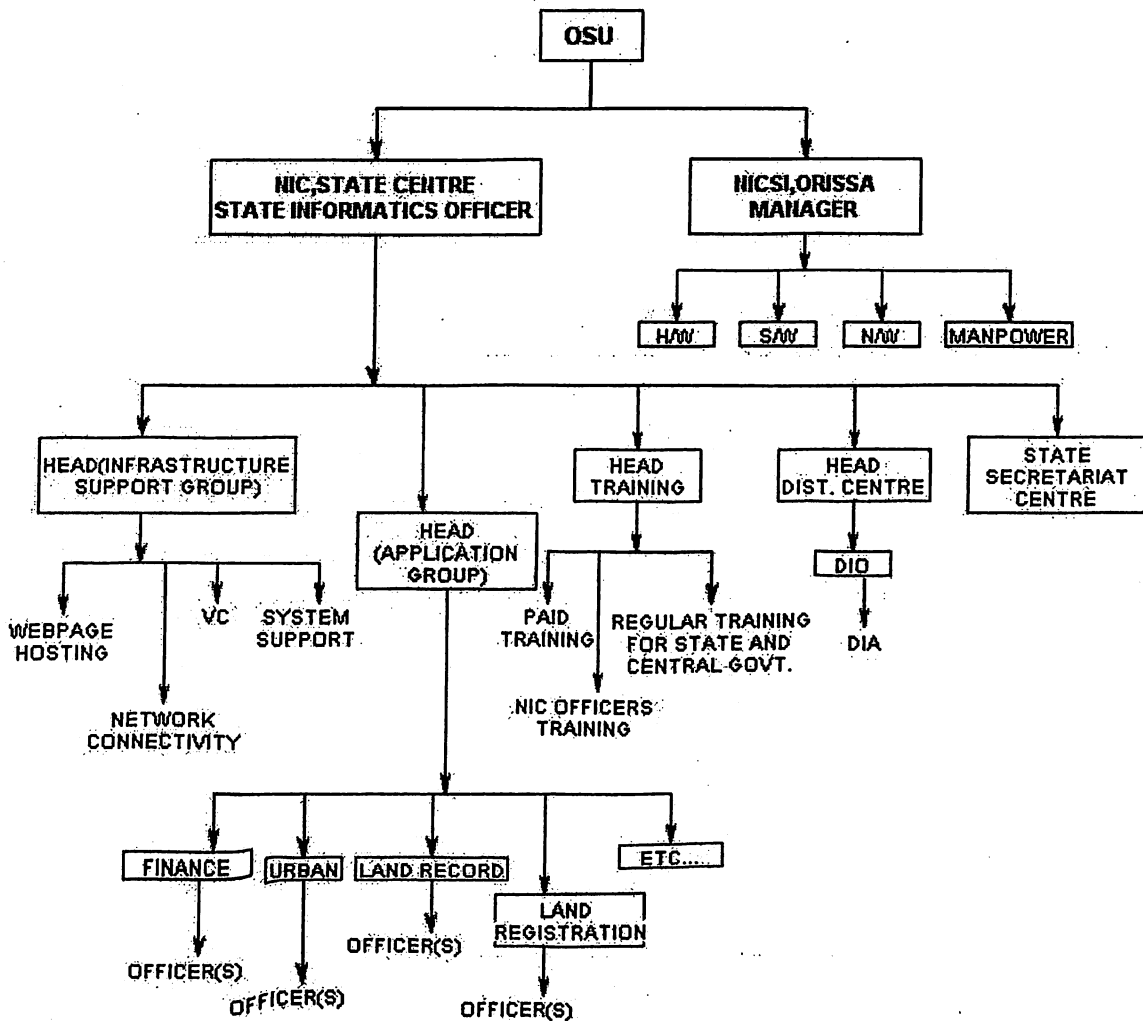
DISNIC – A NICNET Based District Government Informatics Program – A strategic Decision in 1985 to overcome –“Digital Divide” in 540 District Administrations; Reaching out to into India during 1985-90, even before arrival of “Internet” Technology, to 540 districts of country, which is a land of diversities with different types of terrain, various Agroclimatic conditions, different levels of socio-economic conditions, and varied levels of regional development, etc. As a major step in bringing e-governance , NIC implement the “minimum agenda” of e-governance , as announced by the central Government : Internet/Intranet infrastructure (PCs, Office Productivity Tools, Portals on Business of Allocation and Office Procedure) upto Section Officers level IT Empowerment of Officers /Officials(Training) IT enabled Services, G2G-Government-to-Government Portal, G2b-Government to Business Portal ,G2C-Government-to-Citizen Portal, G2E- Government to Employees Portal, its plan to Sectoral Development, Business Process Re-engineering, Starting as a small programme under an external stimulus by an UNDP project, NIC has grown incrementally and exponentially as one of India’s major S & T Organization promoting “informatics-led Development”, which has helped to usher in required transformation to cope with the trends in the new millennium .Services, Commerce, General Information services, E-Governance, Global market informatics services, Expert Systems and knowledge Bases, Medical Informatics and Tele medicine Services ,Geographical Information System(GIS) ,Bibliographic Services, IT training for Government Employees , Intellectual Property & Know-How Informatics Services

(Internet/Intranet), Weather Resource Information Services , Sectoral IT Plan Formulation , Autonomous organizations/Institutions, National Centre for Trade Information (NCTI) as joint venture with India Trade Promotion Organization (ITPO), Ministry of Commerce for promoting “Global Trade Informatics”. Regional computer centers at Chandigarh and Kolkata as autonomous scientific societies ,to provide “ total-IT-solution ” and execute total “Project Framework Contracts” of NIC ; and RCC Institute of Information Technology (Kolkata) approved by All India Council Of Technical Education(AICTE).

Overview of NIC State Unit

National Informatics Centre, Orissa State Unit was formally set up at Bhubaneswar in January 1986 and it started its activities from September 1986 onwards.

NIC ORISSA STATE UNIT ORGANISATIONAL STRUCTURE



1.APPLICATION GROUP:

The Orissa State Unit comprises of Application groups, which provide informatics support to the Govt .Department .This group includes Technical Director, Principal Systems Analyst supported by Technical officers and Assistants of different levels. Group heads of different groups report to the state informatics officer.

2.SUPPORT GROUP:

The center has two supports namely, Training and System Support Group .Training Group is responsible for training students/trainees from the university .System Support Group provides support of Hardware and Software maintenance. It looks after installation and maintenance of computers and communication equipments in the state of Orissa and also maintenance of system software.

The major responsibilities of this centre include:

- Finding out possible areas where computer as a decision making tool could be introduced with benefits.
- Introduction of computers to the identified areas by way of designing, developing and implementing computer based systems.
- Training of concerned personnel of the concerned departments so that a proper understanding of the background and the system of implementation could be given.

DISTRICT CENTRES:

At district level NIC district centers provide effective informatics support to development, revenue and judiciary administration of the district .NIC district centers have been functioning in all the 30 districts; most of them are located in the collectorate offices. Each center has one district Informatics Officer and one district Informatics Associate of NIC .The centre is equipped with :

- Pentium IV server
- Pentium IV clients
- Pentium III server with 16 terminals (including GIST multilingual ones)
- An UPS

- IPA VSAT for NCNET/Internet connectivity
- DAMA VSAT for Video Conferencing

Each NIC district center is engaged in regularly entering data for different applications. Centers with NICNET connection are operational at the office of the R.D.C., Berhampur, Commercial Tax, Cuttack, Central Excise, Bhubaneswar etc.

VIDEO CONFERENCING AT NIC

By representing a social presence ,Video Conferencing closely resembles face-to-face meetings. People not only hear what is being said but also see each other. Organization is making use of this technology for a number of purposes like product announcement, press conference shareholder meeting , educational programs etc.

NIC is providing high quality video conferencing service free of cost to central and state government officials through the high speed satellite network providing Video Conferencing service for Group Video Conferencing, Desktop Video Conferencing and multiple point Conferencing. NIC has already setup Video Conferencing facility for major Ministers/ Departments of Central Govt., For Chief minister's offices in different states and also at different districts using DAMA VSAT. The video conferencing system will help in lowering the cost of customers for dealing with urgent work at district places and will also save time and money.

Overview Of Web Portal Of Bhubaneswar Municipal Corporation

Bhubaneswar Municipal Corporation embarked on a series of ventures not only to impart a much needed facelift to the city, but also to prove the fact that a good administrative set up is always humane, accommodative & citizen centric. The right city is one which caters to the need of all in such manner that all diverse element , integral to the city's fabric live in harmony imparting beauty and design to it . All ventures of BMC preferred to term all of them "Prayas": efforts-attempts-trials, learning & enriching & improving itself all way.

Bhubaneswar Municipal Corporation is the urban local body for city governance in Bhubaneswar city. This governance system forms a sub-system of the political system of the state and at the national level. Since the population of Bhubaneswar city has been in sharp rise over the decades and over more than 3 lakhs the local city governance of Bhubaneswar city has been evolved from a Notified Area Council to Bhubaneswar Municipality and ultimately reached to its apex level becoming to Bhubaneswar Municipal Corporation.

. It has well defined executive deliberate wings, ceremonial nature and short term of the mayor and ultimate power of control under supervision of the State Government. The Bhubaneswar Municipal Corporation has been the composition of 47 corporators till September 2008 which has been increased to 60 corporators (in 60 wards) owing to population growth up to 12 lakhs from 6 lakh. The Bhubaneswar Municipal Corporation is regulated under the Orissa Municipal Act – 2003.

This Web Portal will be the medium of Interface between Urban Local Body and Stakeholder's .The major Objective of Portal is to :

- To provide the economic ,scientific ,technological , social and culture development of Bhubaneswar by promoting the utilization of Information Technology.
- One element under-scoring "Prayas" has been our firm belief in "Progress Through Partnership".
- To promote messages and notice to the public that are being changed by BMC administrative.
- Through this Computer-Communication will be widely spreaded about the

infrastructure and Services and Citizen-Centric applications aided by Bhubaneswar Municipal Corporation such as –

1. Birth & Death Registration & Issuance of Certificates
2. Kalayan Mandap Reservation/Cancellation
3. Holding Tax Monitoring System
4. Yatri Nivas Reservation/Cancellation
5. Citizen Centric Grievance Monitoring System
6. Online Tender Publication
7. Marriage Registration
8. License Monitoring System

- A citizen friendly public transport system.
- An effective Solid Waste Management System.
- Operationalisation of Electric Crematorium at Satyanagar.
- Setting up of Night Shelters.
- Establishment of slaughter house.

Scope:

The document identifies the requirement of “**Web Portal Bhubaneswar Municipal Corporation**”. It aims to realize the following processes and database requirements.

- Recording , storage , retrieval of data.
- Information retrieval via user-friendly screens & customized reports.

Main components of Web Portal Of Bhubaneswar Municipal Corporation

- **BMC SERVICES:**

- **Providing Health Services at Hospital** - BMC manages a 108 bedded hospital and it is the oldest hospital in the city having a century's old history with a full-fledged Blood Bank unit.

- **Providing Sanitation-** Sanitation activity in 25 wards out of 60 have been privatized. In privatized wards door to door garbage collection is being ensured
- **Streetlight Services-** It is one of the major concerns of BMC. Orissa Mining Corporation (OMC) and Punjab National Bank (PNB) were requested to supplement BMC's fund earmarked for street.
- **Vending Zones -** ahead towards a new direction solving the problems of street vendors.
- **Solid Waste Management-** BMC has its own sanitation and has privatized sanitation in some wards.

- **Deliberative Wings:**

It gives descriptive information about standing committee ,information about the Corporator's data in each Ward, Corporation Resolution that are held in BMC's Organization.

- **Notification:**

It gives notice to the Public and Official Circular Order and flashes the news to the public.

- **Ward Details:**

- Information of each Ward
- Residential Welfare Association
- Disbursement of OAP & ODP
- Landed Property
- Hospital

- **Budget Report :**

Both Expenditure and Receipt of Budget is being accounted every year.

- **Slum Details:**

Detail information of each ward is being noted.

- **Messages by Mayor,Deputy Mayor and Commissioner To all the Citizen.**



SYSTEM STUDY

OVERVIEW OF THE SYSTEM

The proposed system entitled "Web Portal of Bhubaneswar Municipal Corporation" will be used by all the Municipality Or Urban Local Body(ULB) of the Orissa and its subordinate offices situated in Bhubaneswar . This Monitoring System is proposed by NIC, Orissa.

BMC is centrally sponsored in the states. The beneficiaries of this BMC are Individuals and communities. This programme targets the Local People and Members of BMC. So for the development this programme have to apply for the different sources for getting the benefits. Then the public member will get detail information according to the changes made. As there are large number of information that should reach to all and every citizen residing in Bhubaneswar. The development Of Bhubaneswar is an ongoing process and complex in our Bhubaneswar, so to maintain their applications and all the details of BMC's wants to develop a "Monitoring System" to keep track of all the undergoing processes.

EXISTING SYSTEM

There is no such web based monitoring system developed previously for BMC. All the processes are going on the pen & paper. To maintain such a large scheme is not so easy & safe by pen & paper work.

DRAWBACK OF THE EXISTING SYSTEM

- Getting so much of data from municipalities is time taking and during the passage of information some valuable data may be overlooked.
- There is no transparency. So data are not available to the public.
- A great deal of paper work is needed.
- The data are distributed all over the state, so compilation of data is difficult at state level.
- Each municipality maintains their own system, so the information kept by them are different, so analysis is difficult at the state level.

PROPOSED SYSTEM

After analyzing the above problem the following system has been suggested. All districts(NIC) have Internet Connection. A centralized database system has been suggested. Each Administrative members of BMC will login to the system through their password. As the most of people know how to use computer or internet ,even they can spent that much time & money to spent on browsing internet, they will update their knowlegde .The member of BMC will enter all the applications to the central database for their further decisions and processes . Since the system is web based they can enter the data any time and anywhere. They can generate the report as required any where at any time.

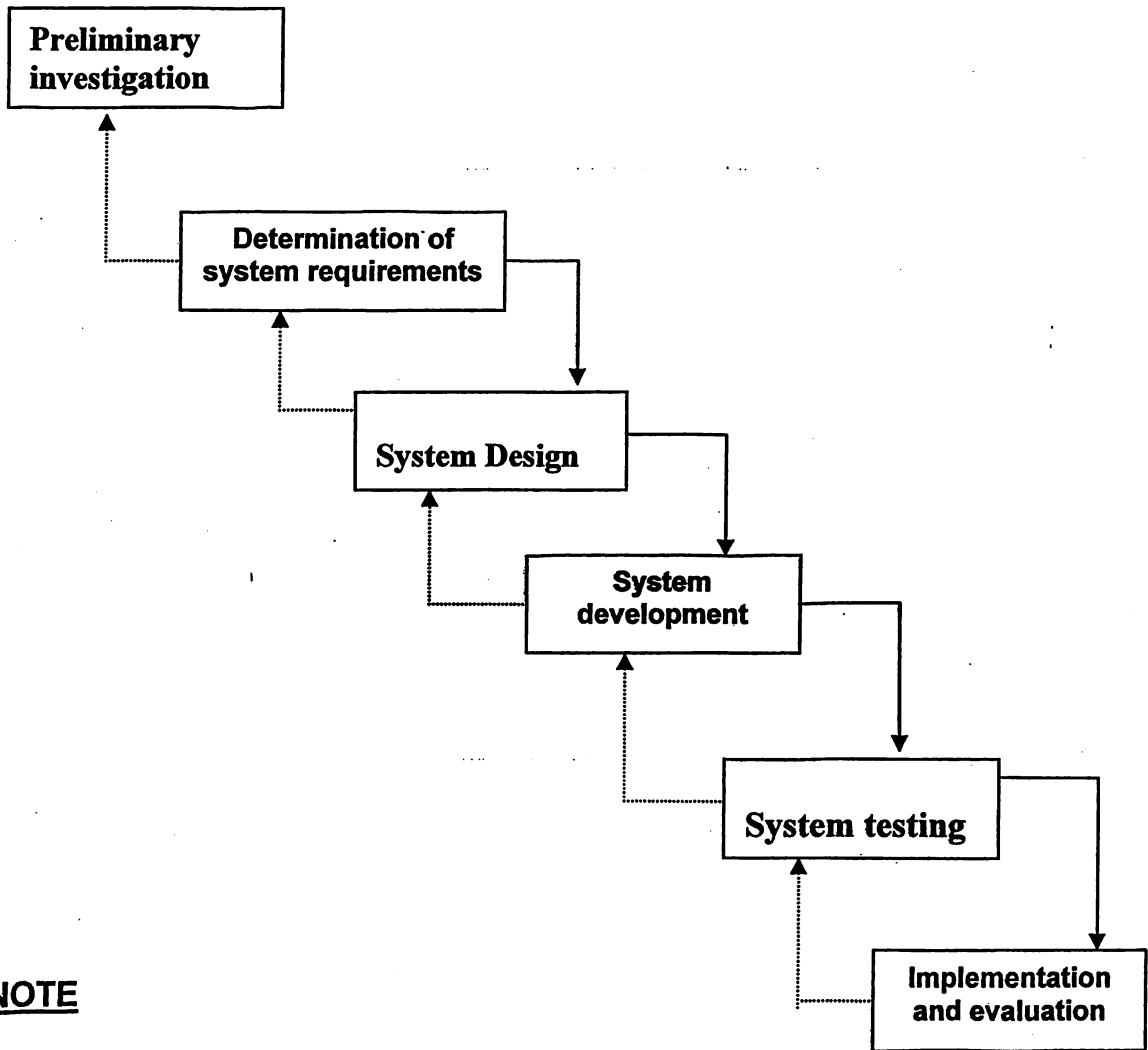
OBJECTIVE OF PROPOSED SYSTEM

- To make the system web based.
- To make the system transparent to the end user.
- To maintain a central database for the whole state.
- To have easy access to the data.
- To get the information quickly by generating reports..
- To make the data more secure.

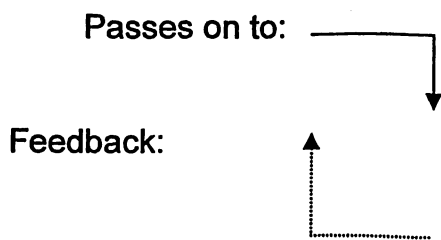
ADVANTAGE OF THE PROPOSED SYSTEM

- Retrieval of information becomes very easy because of quality software.
- As we are dealing with database to store huge amount of records so paper work is eliminated.
- Standardization makes the work easier.
- The backup of the data can easily be kept, so in case of any mishap there is no loss of valuable data.

WATERFALL OR CLASSICAL LIFE CYCLE



NOTE





SYSTEM ANALYSIS

REQUIREMENT ANALYSIS

The most critical phase of managing a system is planning. To launch a system investigation, we need a master plan detailing the steps to be taken, the people to be questioned and the outcome expected. The initial investigation has the objective of determining whether the users request has potential merit. The major steps are defining user requirements, studying the present system to verify the problem, and defining the performance expected by the candidate system to meet user requirements.

FEASIBILITY STUDY

After the study of the existing system, and proposing a system, it is reasonable to ask, "Can we build software to meet this scope? Is the project feasible?" Feasibility study is done so that an ill-conceived system is recognized early in the definition phase. Preliminary investigation examines project feasibility and determines the likelihood of the system being useful for the organization. There are three aspects in the feasibility study portion of the preliminary investigation:

TECHNICAL FEASIBILITY

It is seen that the system can be developed with the current equipment, with the existing software technology and with the available personnel. It can be developed with VB .net and ASP .net technology . SQL Server is used as backend. To develop the software, we need a browser like Internet Explorer. All these are available at the development center. Hence the system is technically feasible.

ECONOMIC FEASIBILITY

Is it financial feasible? Can development be completed at a cost the software organization, its client, or the market can afford? An evaluation of development cost weighed against the ultimate income or benefit derived from the developed system. The cost of conduction of investigation and development of the system was not high. The software used to develop the system is freely available on net. Since it is web based, it needs to be installed on a server and the client can access the system with a browser. It gives immense economical benefit to the organization. So it was found to be economically feasible

OPERATIONAL FEASIBILITY

The users are acquainted with windows environment, so there is necessity of trained them only to use the new system. In the existing system all the transactions are carried out manually which are time consuming. With the use of computerized system selection of the batch is easier and time saving. This is online system, which saves lots of operational time.

REQUEST APPROVAL

Hence the investigation is able to fulfill every type of requirement testes. Project has been approved finally for development.



SYSTEM SPECIFICATION

SOFTWARE SPECIFICATION

Language/Technology

ASP .NET (VB)

HTML

Java Script

AJAX

Macromedia Flash 8.0

Photoshop 7.0

Backend

SQL Server 2000

HARDWARE SPECIFICATION

Minimum Hardware Platform

Hardware	Specification
Processor	Pentium-III,1.4GHz
RAM	128 MB
Hard Disk	40GB
Monitor	SVGA
Keyboard	----



ABOUT TOOLS

ABOUT TOOLS

FRONTEND TOOL :

.NET:

.NET is a set of common services, which can be used from number of language and have

the following specialities:

- These services are executed in the form of intermediate code that is independent of the underlying architecture.
- The operate in runtime(Common Language runtime), which manages resources and monitors application execution.

The .NET framework is a multi-language environment for building, deploying and running Web services and applications.

VB.NET :

1. First of all, VB.NET provides managed code execution that runs under the Common Language Runtime (CLR), resulting in robust, stable and secure applications. All features of the .NET framework are readily available in VB.NET.
2. VB.NET is totally object oriented. This is a major addition that VB and other earlier releases didn't have.
3. The .NET framework comes with ADO.NET, which follows the disconnected paradigm, i.e. once the required records are fetched the connection no longer exists. It also retrieves the records that are expected to be accessed in the immediate future. This enhances Scalability of the application to a great extent.
4. VB.NET uses XML to transfer data between the various layers in the DNA Architecture i.e. data are passed as simple text strings.
5. Error handling has changed in VB.NET. A new Try-Catch-Finally block has been introduced to handle errors and exceptions as a unit, allowing appropriate action to be taken at the place the error occurred thus discouraging the use of ON ERROR GOTO statement. This again credits to the maintainability of the code.

6. Another great feature added to VB.NET is free threading against the VB single-threaded apartment feature. In many situations developers need spawning of a new thread to run as a background process and increase the usability of the application. VB.NET allows developers to spawn threads wherever they feel like, hence giving freedom and better control on the application.

7. Security has become more robust in VB.NET. In addition to the role-based security in VB6, VB.NET comes with a new security model, Code Access security. This security controls on what the code can access. For example you can set the security to a component such that the component cannot access the database. This type of security is important because it allows building components that can be trusted to various degrees.

8. The CLR takes care of garbage collection i.e. the CLR releases resources as soon as an object is no more in use. This relieves the developer from thinking of ways to manage memory. CLR does this for them.

ASP.NET:

ASP.NET is a programming framework built on the common language runtime that can be used on a server to build powerful Web applications. ASP.NET is a programming framework built on the common language runtime that can be used on a server to build powerful Web applications. ASP.NET offers several important advantages over previous Web development models:

1. Enhanced Performance:

ASP.NET is compiled common language runtime code running on the server. Unlike its interpreted predecessors, ASP.NET can take advantage of early binding, just-in-time compilation, native optimization, and caching services right out of the box. This amounts to dramatically better performance before you ever write a line of code.

2. World-Class Tool Support:

The ASP.NET framework is complemented by a rich toolbox and designer in the Visual Studio integrated development environment. WYSIWYG editing, drag-and-drop server controls, and automatic deployment are just a few of the features this powerful tool provides.

3. **Power and Flexibility:**

Because ASP.NET is based on the common language runtime, the power and flexibility of that entire platform is available to web application developers. The .NET framework class library, Messaging and Data Access solutions are all seamlessly accessible from the Web. ASP.NET is also language-independent, so you can choose the language that best applies to your application or partition your application across many languages. Further common language runtime interoperability guarantees that your existing investment in COM-based development is preserved when migrating to ASP.NET.

4. **Simplicity:**

ASP.NET makes it easy to perform common tasks, from simple form submission and client authentication to deployment and site configuration. For example- the ASP.NET page framework allows you to build user interfaces that cleanly separate application logic from presentation code and to handle events in a simple, forms processing model.

5. **Manageability:**

ASP.NET employs a text-based, hierarchical configuration system, which simplifies applying settings to your server environment and Web applications. Because configuration information is stored as plain text, new settings may be applied without the aid of local administrator tools. This “zero local administration” philosophy extends to deploying ASP.NET Framework applications as well. An ASP.NET Framework application is deployed to a server by copying the necessary files to the server. No server restart is required, even to deploy or replace running compiled code.

6. **Scalability and Availability:**

ASP.NET has been designed with scalability in mind, with features specifically tailored to improve performance in clustered and multiprocessor environments. Further, processes are closely monitored and managed by the ASP.NET runtime, so that if one misbehaves(leaks, deadlocks), a new process can be created in its place, which helps to keep your application constantly available to handle requests.

7. **Customizability and Extensibility:**

ASP.NET delivers a well-factored architecture that allows developers to “plug-in” their code at the appropriate level. In fact, it is possible to extend or replace any subcomponent of the ASP.NET runtime with your own custom-written component. Implementing custom authentication or state services has been easier.

8. Security:

With built in Windows authentication and peer-application configuration, you can be assured that your applications are secure.

ADO.NET

ADO.NET is a collection of classes that expose methods and attributes used to manage communication between an application and a data source.

ADO.NET is not an upgrade to complete redesign. At the core of ADO.NET is a set of libraries that are designed to communicate with a variety of back-end data stores. The ADO.NET libraries are part of the System. Data namespace and encompass a variety of additional libraries that enable data source connection, query submission, and processing results. One of the goals of the redesign of ADO.NET was to provide a hierarchical, disconnected data cache that works offline and online. The design of ADO.NET is based on XML and enables ADO.NET to bridge the gap between the traditional database access and XML development. Developers are able to work with both XML data and database data using a common set of data interfaces as shown in figure below.

BACKEND TOOL

SQL SERVER 2000

Microsoft SQL Server 2000 is a full-featured relational database management system (RDBMS) that offers a variety of administrative tools to ease the burdens of database development, maintenance and administration. In this article, we'll cover six of the more frequently used tools: Enterprise Manager, Query Analyzer, SQL Profiler, Service Manager, Data Transformation Services and Books Online. Let's take look at some of its special features :

- **Enterprise Manager** is the main administrative console for SQL Server installations. It provides you with a graphical "birds-eye" view of all of the SQL Server installations on your network. You can perform high-level administrative functions that affect one or more servers, schedule common maintenance tasks or create and modify the structure of individual databases.
- **Query Analyzer** offers a quick and dirty method for performing queries against any of your SQL Server databases. It's a great way to quickly pull information out of a database in response to a user request, test queries before implementing them in other applications, create/modify stored procedures and execute administrative tasks.
- **Service Manager** is used to control the MSSQLServer (the main SQL Server process), MSDTC (Microsoft Distributed Transaction Coordinator) and SQLServerAgent processes. An icon for this service normally resides in the system tray of machines running SQL Server. You can use Service Manager to start, stop or pause any one of the services.
- **Data Transformation Services (DTS)** provide an extremely flexible method for importing and exporting data between a Microsoft SQL Server installation and a large variety of other formats. The most commonly used DTS application is the "Import and Export Data" wizard found in the SQL Server program group.



SYSTEM DESIGN

SYSTEM DESIGN

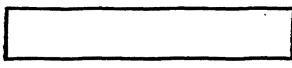
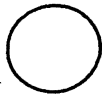


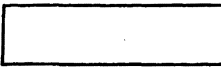
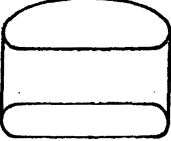
Analysis is the focus of system developing and is the stage when System designers have to work at two levels of definition regarding the study of situational issues and possible solutions in terms of “what to do” and “how to do”.

INPUT - OUTPUT DESIGNS:

DATA FLOW DIAGRAM(DFD) :

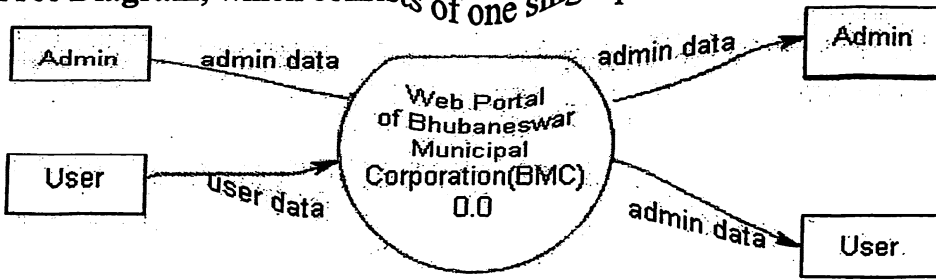
Data Flow Diagram is a diagrammatic representation of data movement through a system – manual or automated – from inputs to outputs through processing. The data flow diagrams help in the analysis of the flow of data through a system and thus help in identifying the system requirements.

Notations Used in DFD:

Entity	
Process	
One way data flow	
Two way data flow	
Data store	
Database	

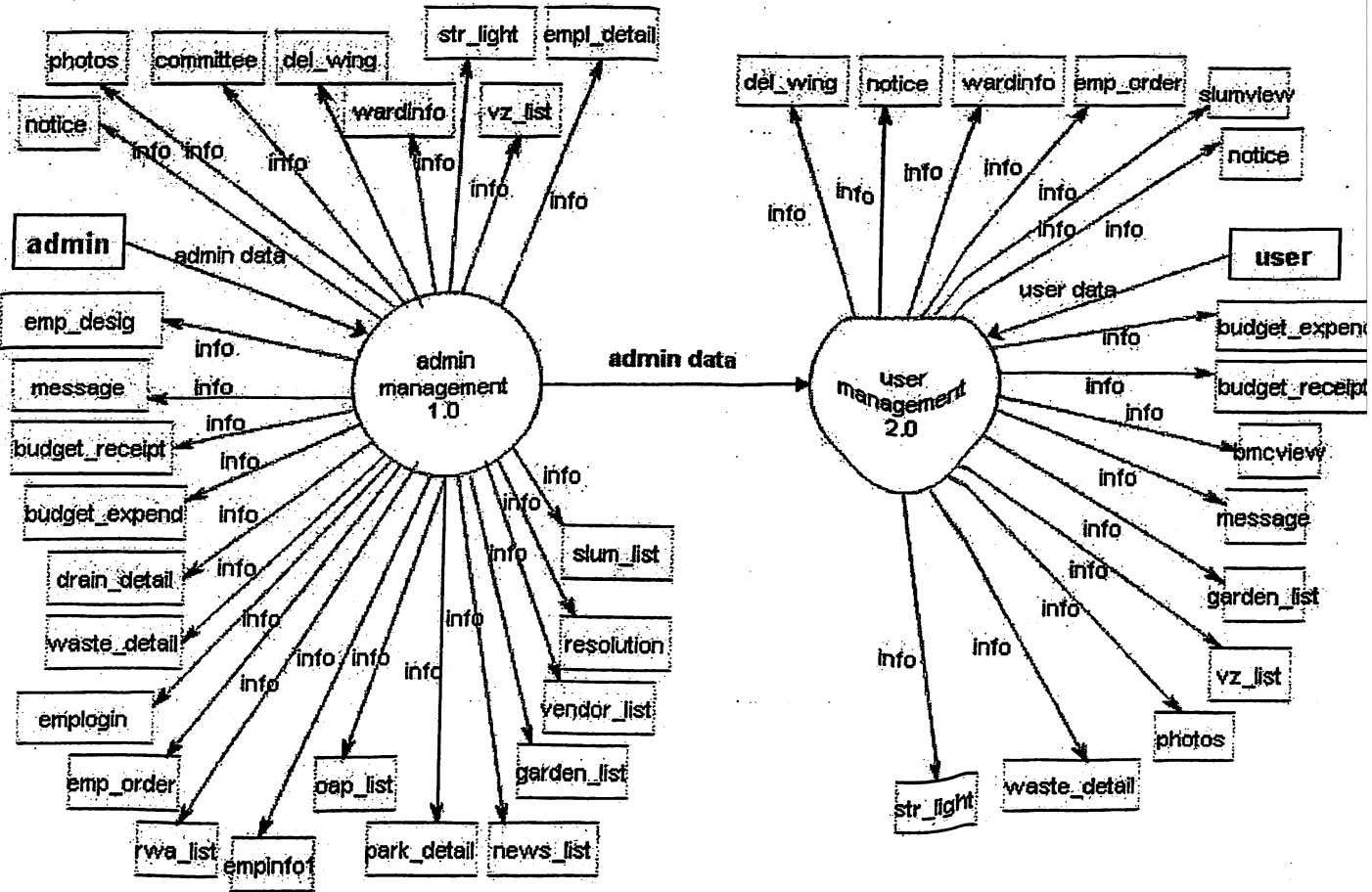
1.CONTEXT LEVEL DIAGRAM (Level-0):

A DFD may consist of a number of levels. The top-level diagram is called a **Context Free Diagram**, which consists of one single process.



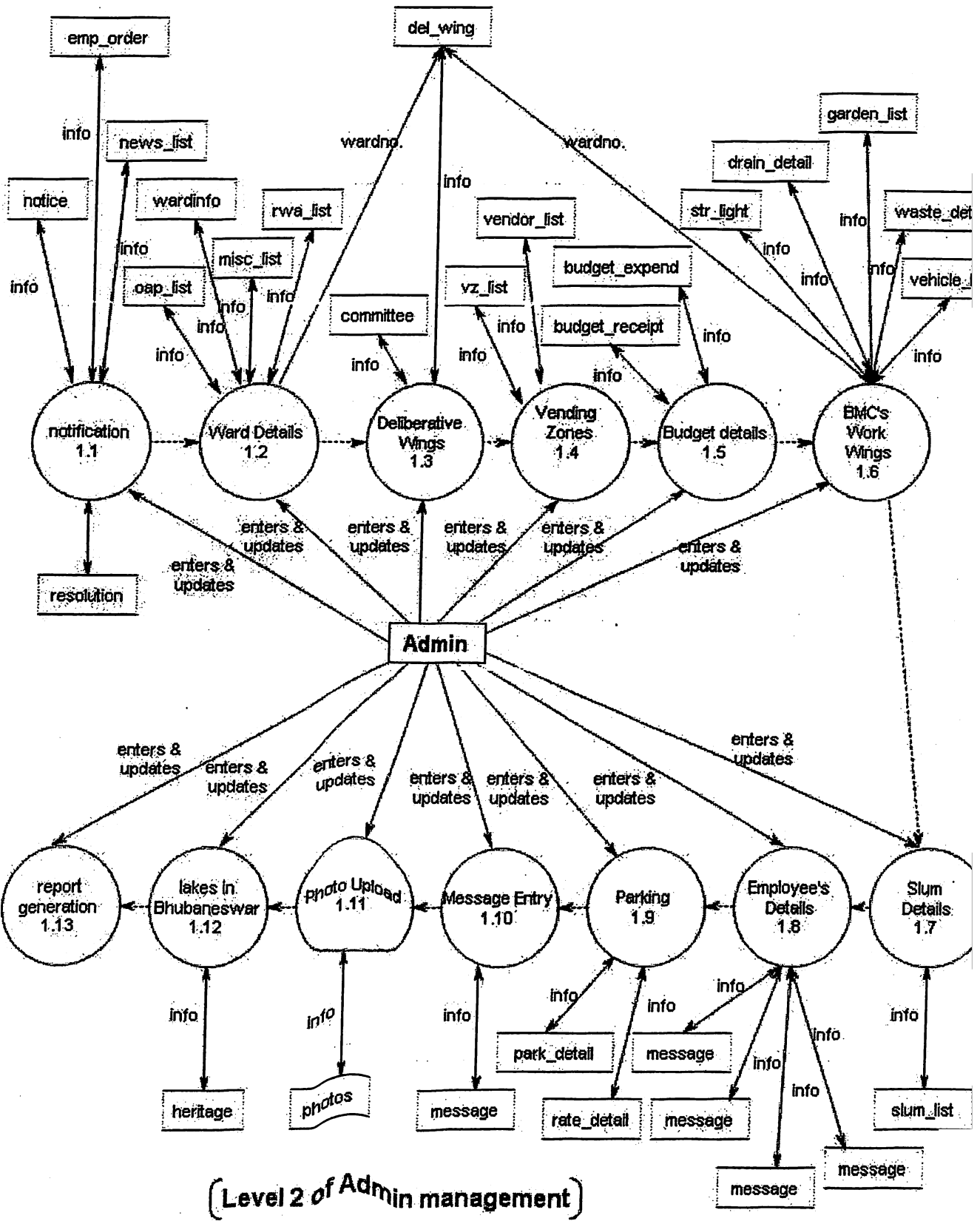
(Context Free Diagram)

2. 1st Level DFD For BMC:

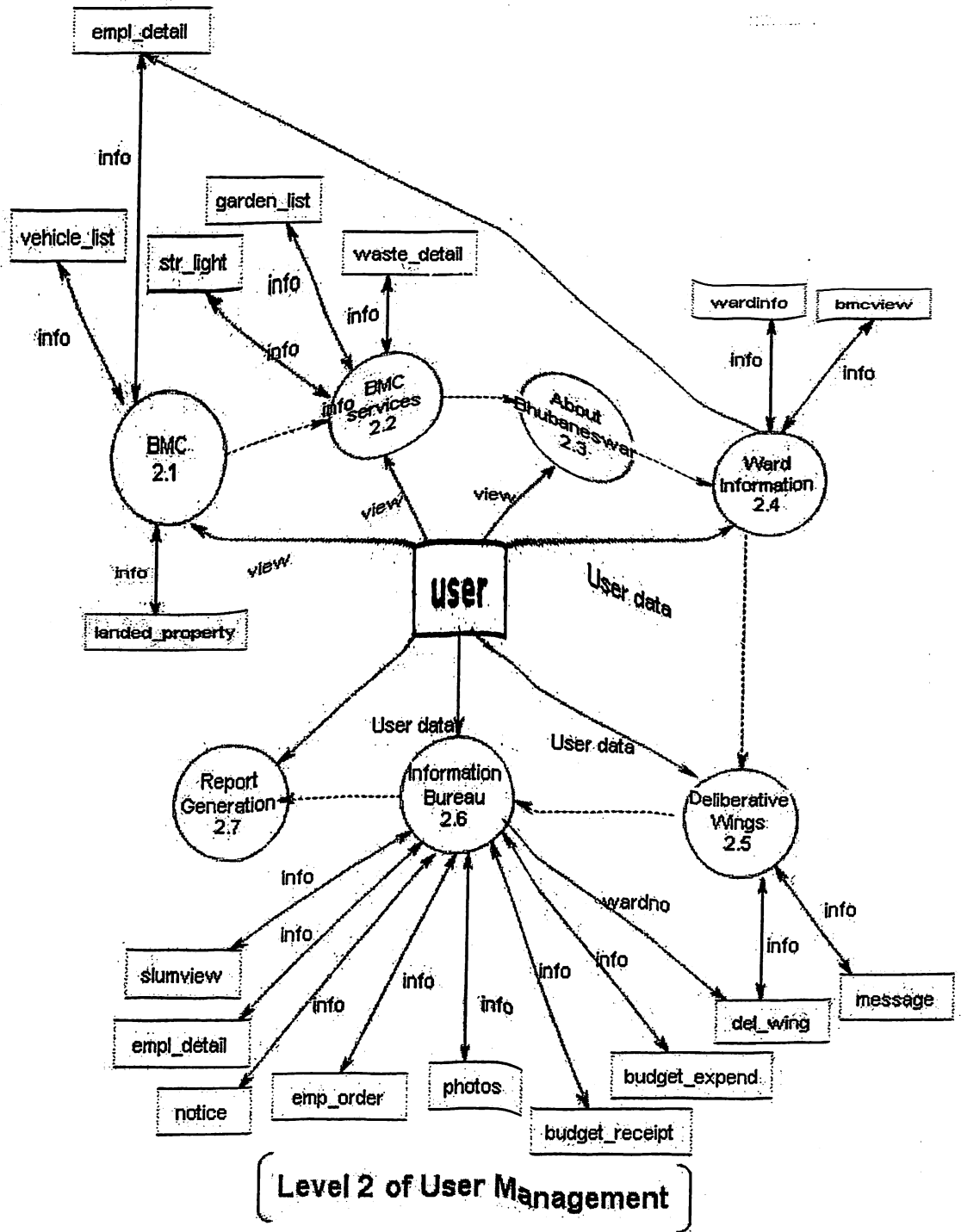


[Level 1 of Web portal of BMC]

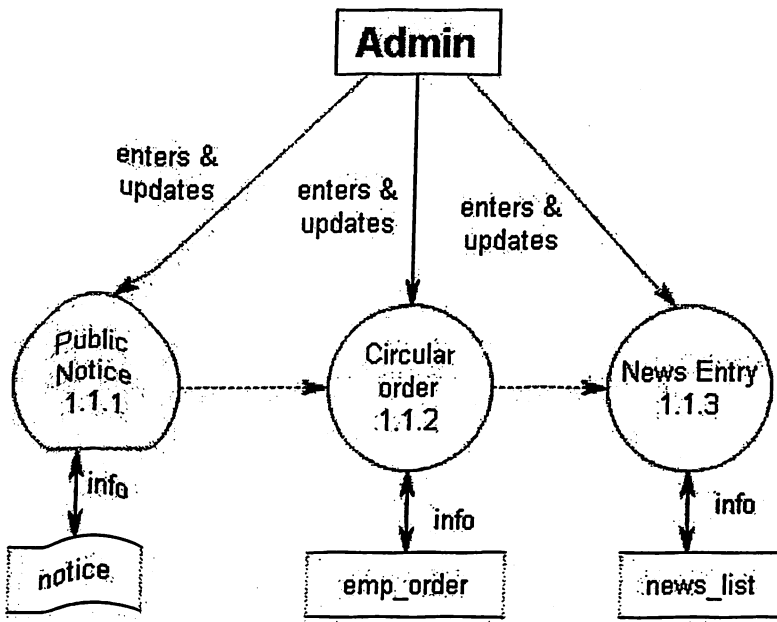
3.2nd Level DFD For Admin Management:



4.2nd Level DFD For User Management:

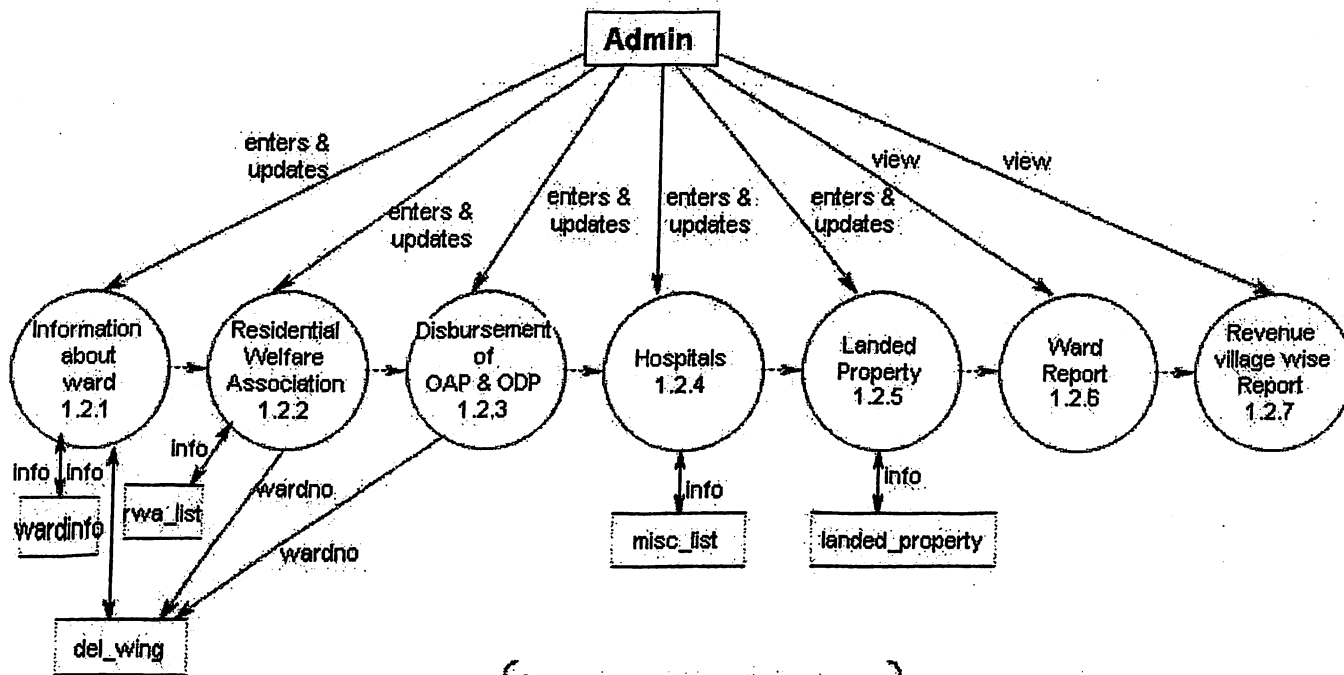


5.3rd level DFD For Notification:



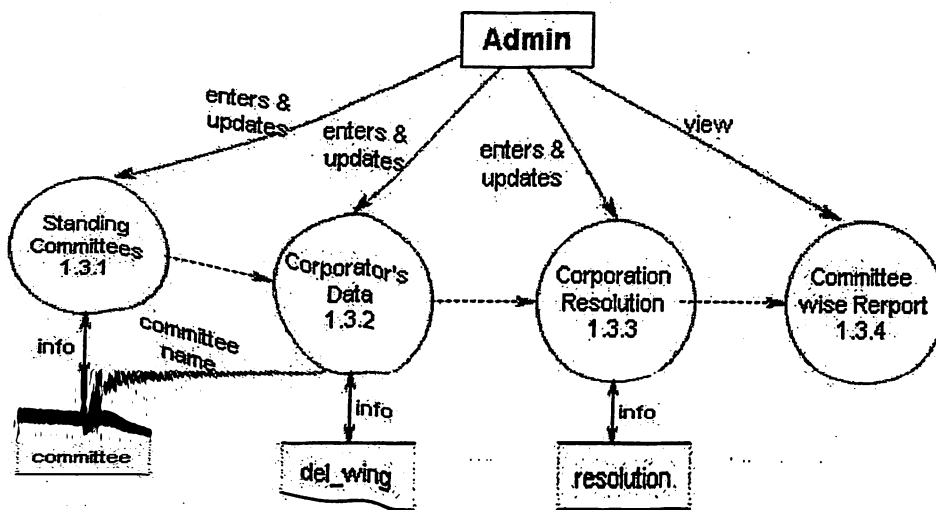
(Level 3 of Notification)

6.3rd level DFD For Ward Details:



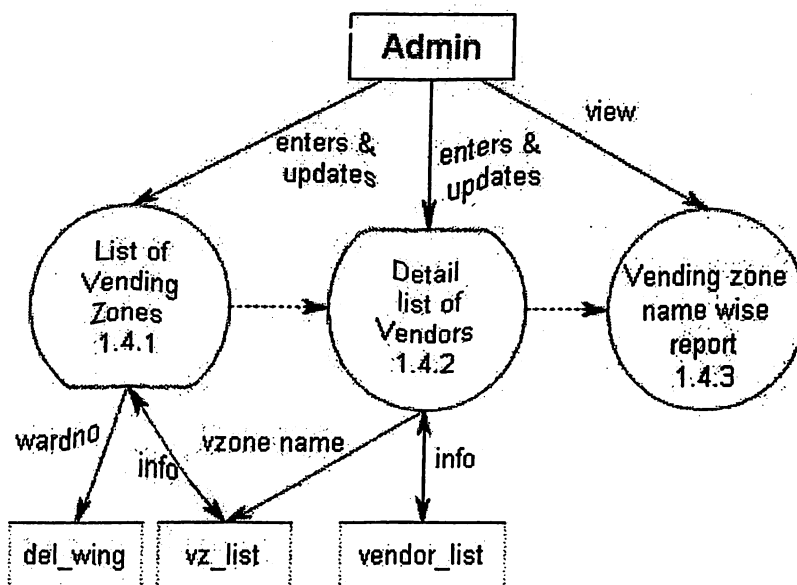
(Level 3 of Ward Details)

7.3rd level DFD For Deliberative Wings:



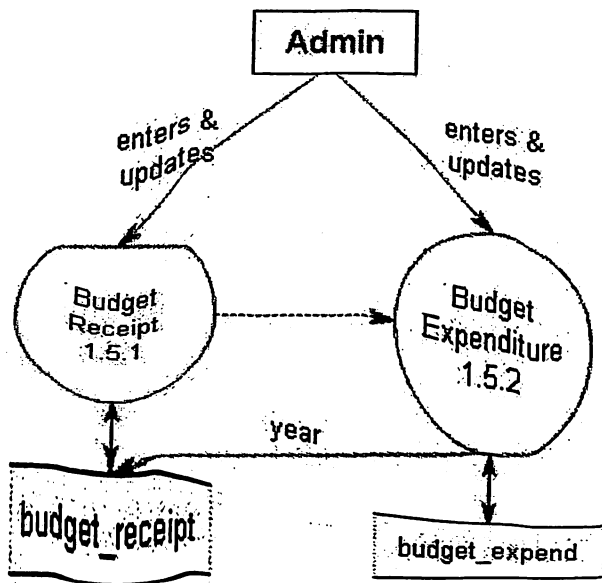
(Level 3 of Deliberative Wings)

8.3rd Level DFD For Vending Zones:



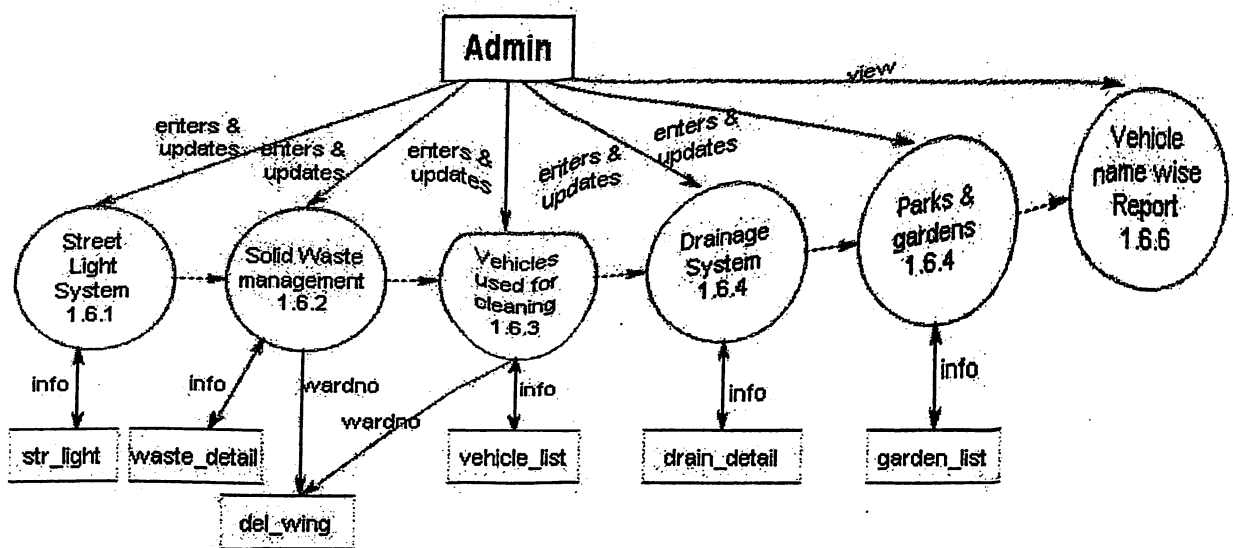
(Level 3 of about Vending Zones)

9. 3rd level DFD For Budget Details:



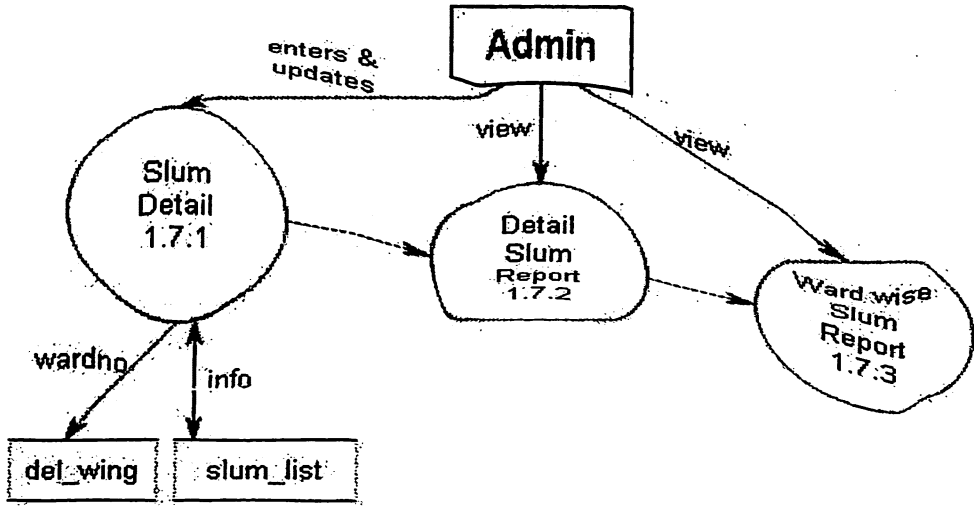
(Level 3 of Budget Details)

10. 3rd level DFD for BMC's Work Details:



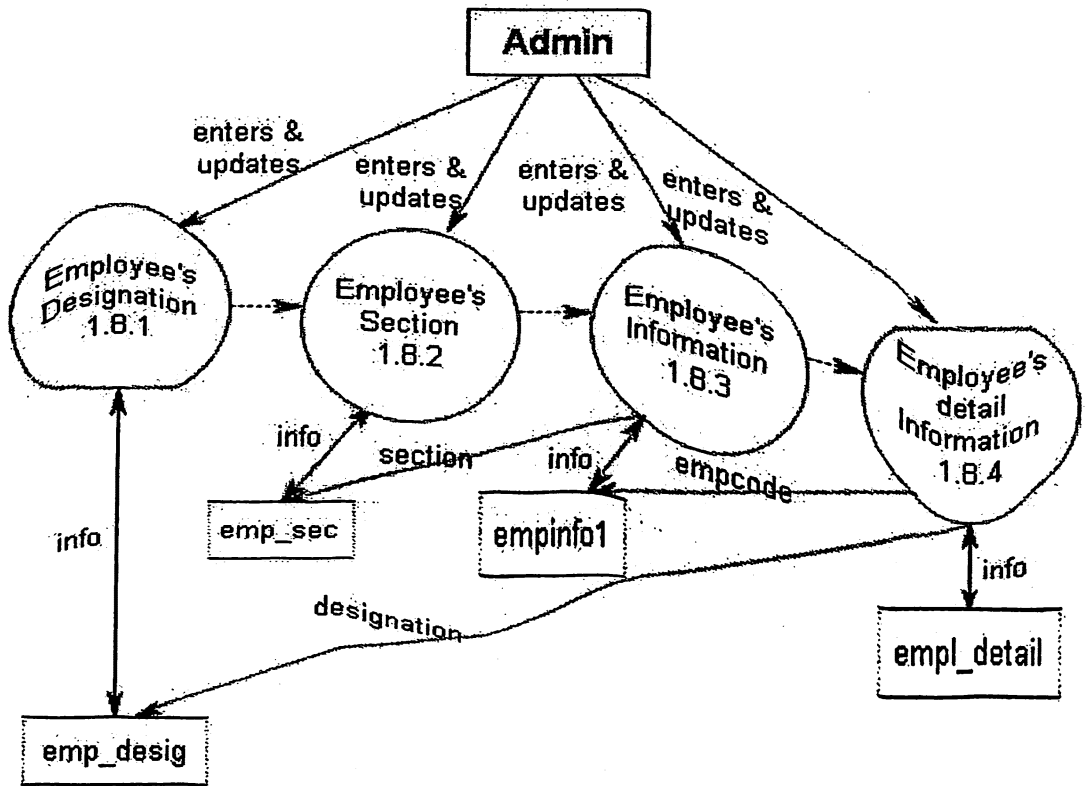
(Level 3 of BMC's Work Details)

11. 3rd Level DFD For Slum Details:



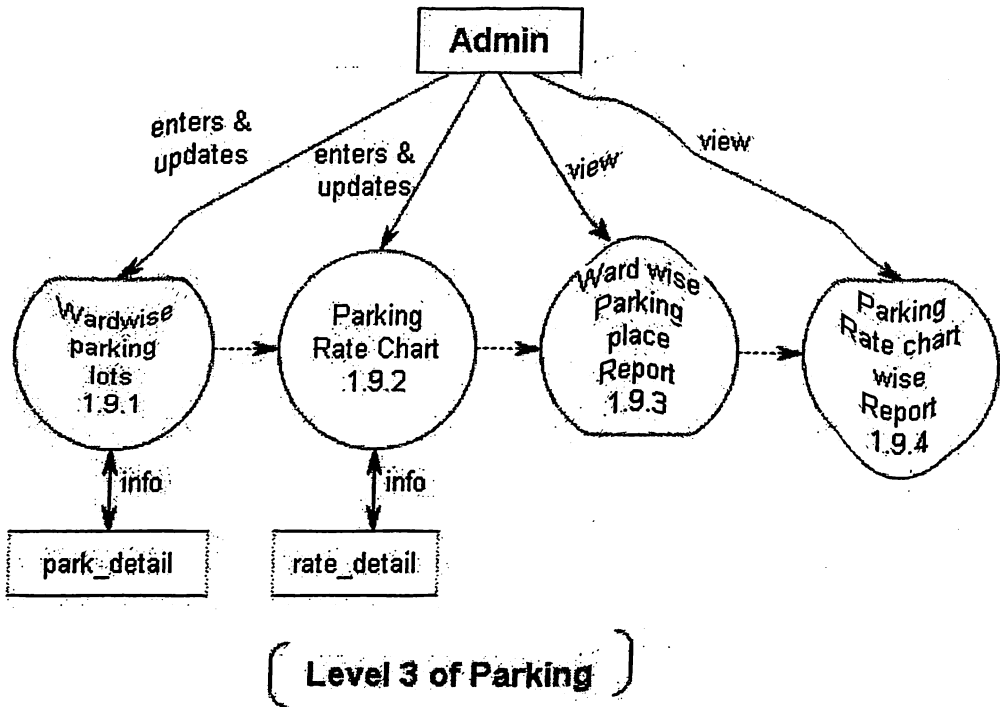
(Level 3 of slum details)

12. 3rd level DFD For Employee's Details:

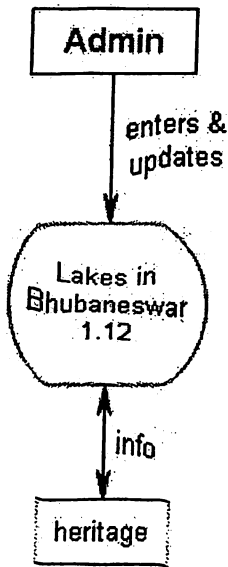


(Level 3 of Employee's Details)

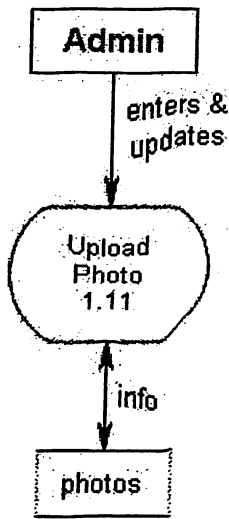
13.3rd level DFD For Parking:



14.3rd level DFD For Lakes in Bhubaneswar:

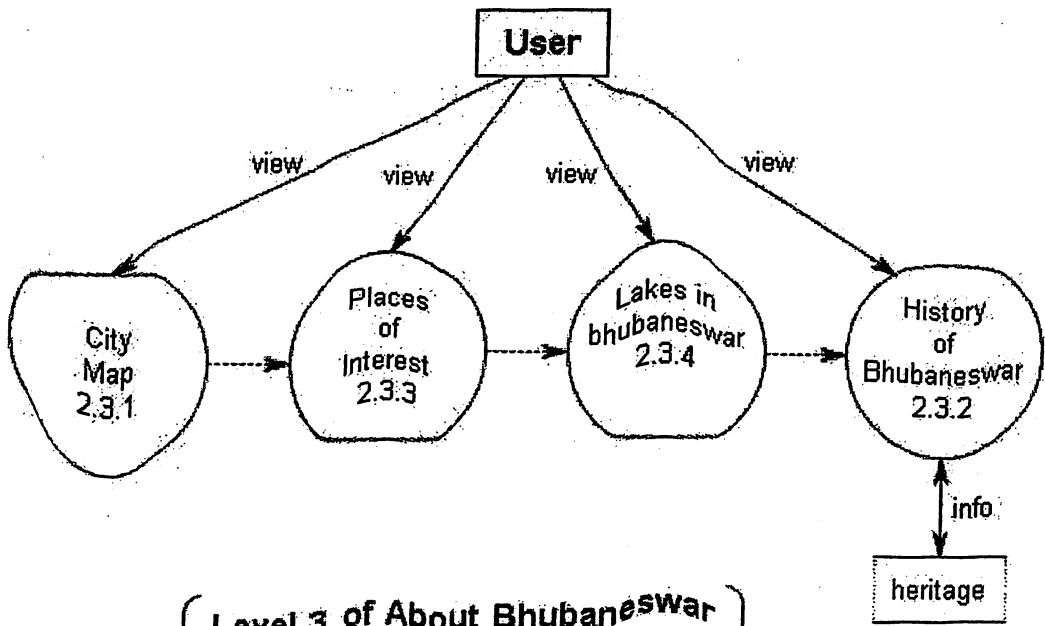


15.3rd level DFD For Photo Upload:



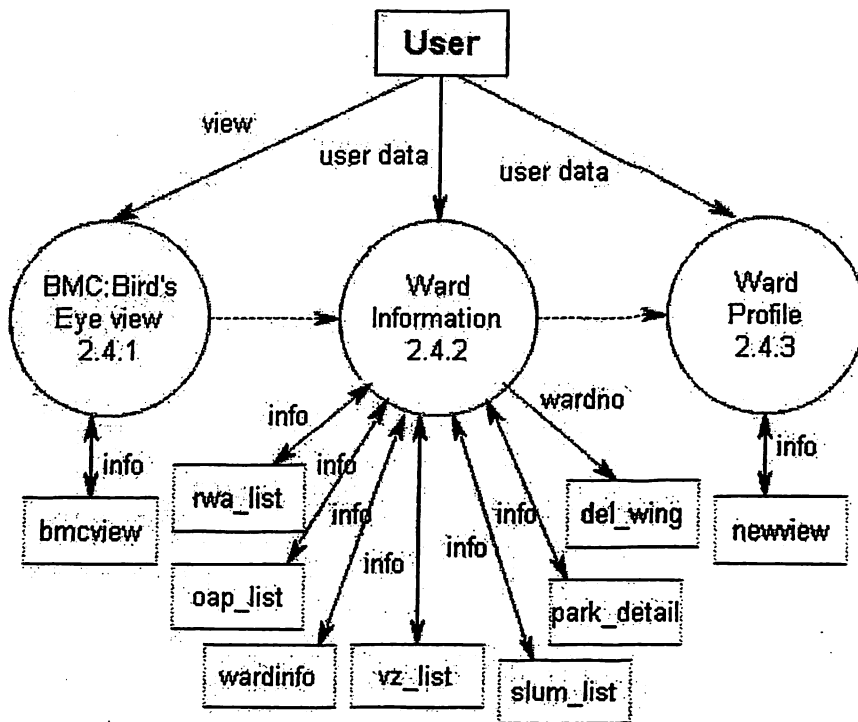
(Level 3 of Photo Upload)

16.3rd level DFD For About Bhubaneswar:



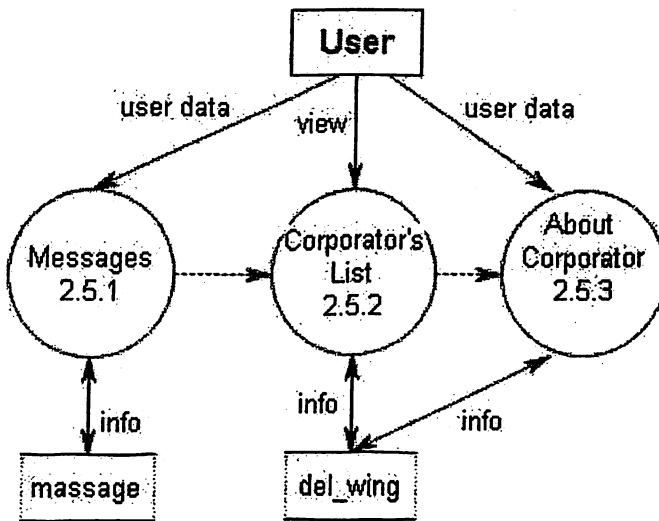
(Level 3 of About Bhubaneswar)

17.3rd level DFD For Ward Information:



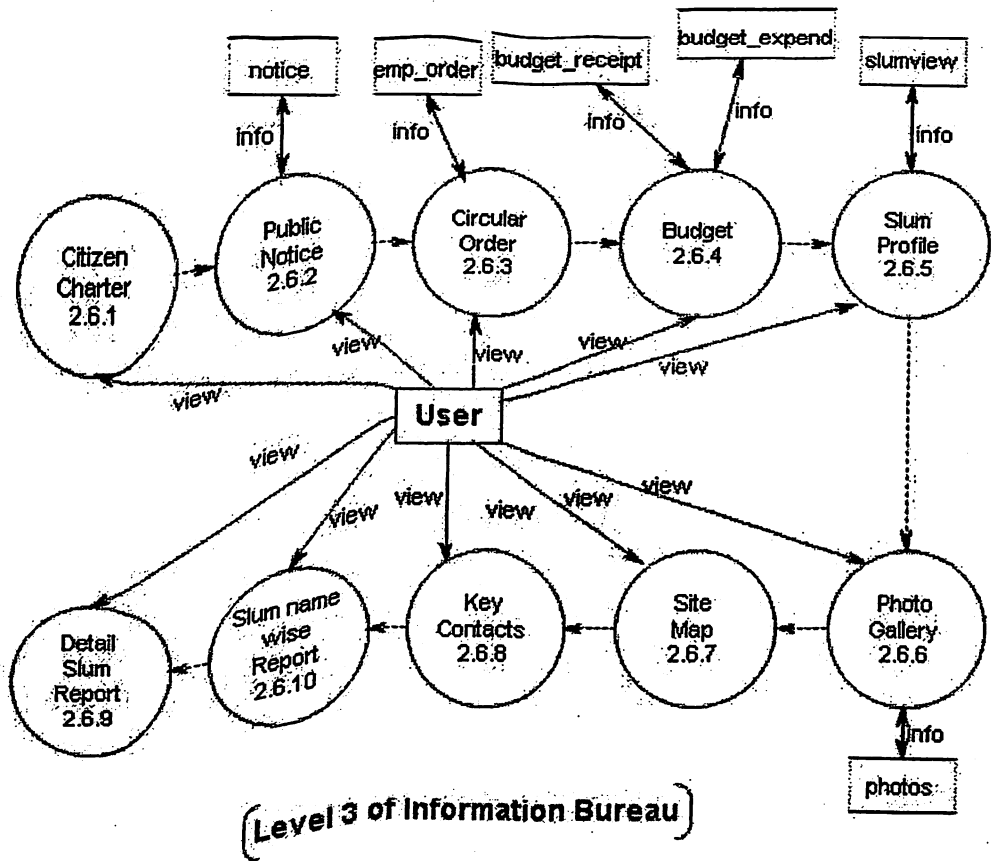
(Level 3 of Ward Information)

18.3rd level DFD For Deliberative Wings:



(Level 3 of Deliberative Wings)


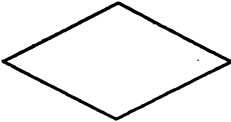

19.3rd level DFD For Information Bureau:



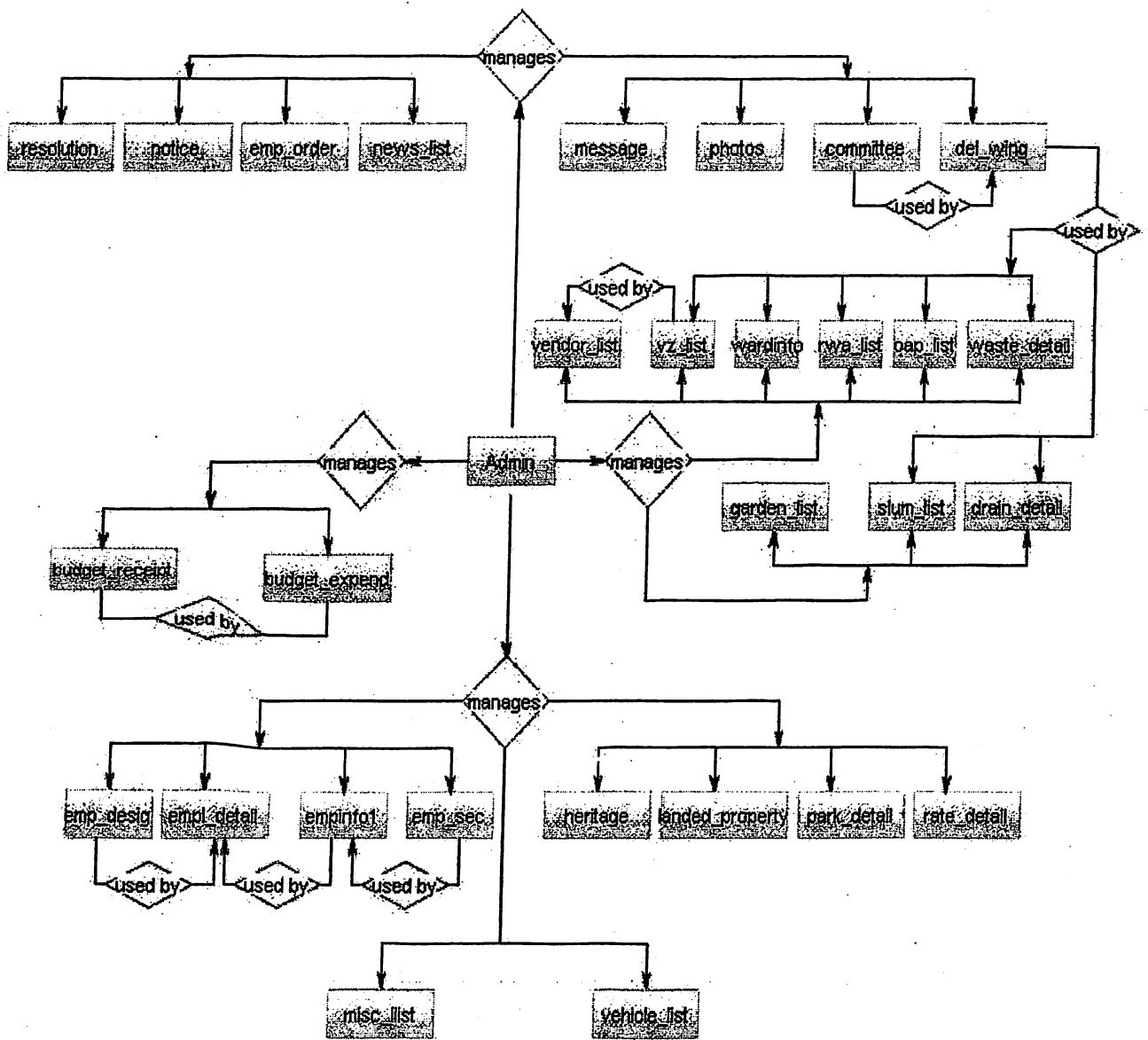
ENTITY RELATIONSHIP DIAGRAM(ER-DIAGRAM):

The Entity Relationship(ER) data model is based on a perception of a real world that consists of a real world that consists of a set of objects called ENTITY/ENTITIES., and of relationships among these objects. There are the three basic notations that ER data model employs: Entity Set, Relationship Set and Attributes.

NOTATIONS:

Entity	
Relationship Set	
Attributes	

ER-Diagram For Web Portal of Bhubaneswar Municipal Corporation:



ER Diagram of Web Portal of Bhubaneswar Municipal Corporation

2) DESIGN OF PHYSICAL DATABASE:

The physical database design is considered based on the logical database design with existing database setup in the organization (includes, database type, current version, licensing policy, storage space etc.).

Database Design

The details of each table including the structure, data type and different constraints (i.e. Primary key and foreign key) are as follows:

1. committee

Primary key: comid

Purpose: This table keeps all the records of the standing committees of Bhubaneswar Municipal Corporation.

Field Name	Data Type	Data Length	Description
comid	numeric	5	Code of the committee
comname	Varchar	100	Name of the committee

2. emplogin

Primary key: uid,pwd

Purpose: This table keeps the user id & password of the Administrator.

Field Name	Data Type	Data Length	Description
uid	Varchar	15	User id
pwd	Varchar	15	Password of the user

3. emp_desig

Primary key: dcode

Purpose: This table keeps all the designations of the corporation employees.

Field Name	Data Type	Data Length	Description
dcode	Varchar	5	Designation code
dname	Varchar	40	designation

4. emp_section

Primary key: scode

Purpose This table keeps all the sections of the Municipal Corporation.

Field Name	Data Type	Data Length	Description
scode	Varchar	5	Section code
sname	Varchar	30	section

5. land

Primary key: slno

Purpose: This table keeps all the records of the revenue villages of Bhubaneswar.

Field Name	Data Type	Data Length	Description
Slno	int	4	Code of the village
village	Varchar	30	Name of the village
area	Varchar	15	Area covered

6. photos

Primary key: slno

Purpose: This table keeps all the records of the photo galleries of Bhubaneswar with description.

Field Name	Data Type	Data Length	Description
slno	numeric	2	Code of the photo
photo	Varchar	10	Name of the photo
descrip	Varchar	500	Description about the photo

7. message

Primary key: empid

Purpose: This table keeps the following data of the Mayor & Municipal Commissioner of BMC.

Field Name	Data Type	Data Length	Description
empid	Varchar	20	Employee code
photo	Varchar	20	Photo of the employee
msg	Varchar	5000	Message of the employee
bio	Varchar	20	Biodata of the employee

8. rate_detail

Primary key: type,duration

Purpose: This table keeps information about the parking fee of Municipal Corporation.

Field Name	Data Type	Data Length	Description
type	Varchar	30	Type of vehicle
duration	30	20	Time period of prking
fee	numeric	5	Fee for parking

9. empinfo2

Primary key: ecode,wardno,sname

Purpose: This table keeps all the record of the employees with their corresponding code and section name.

Field Name	Data Type	Data Length	Description
ecode	Varchar	10	Code of the employee
wardno	numeric	5	Ward number
sname	Varchar	30	Section name

10. empl_detail

Primary key: empcode

Purpose: This table keeps all the detail information of the municipal employees.

Field Name	Data Type	Data Length	Description
empcode	nvarchar	10	Code of the employee
category	varchar	10	Category of the employee
name	nvarchar	50	Name of the employee
dname	nvarchar	40	Designation of the employee
phres	numeric	13	Phone no(res) of the employee
phone	numeric	13	Phone no(off) of the employee
Mobile	numeric	13	Mobile no of the employee
sex	nvarchar	2	Sex of the employee
dob	smalldatetime	4	Date of birth of the employee
doj	smalldatetime	4	Date of joining of the employee
dos	smalldatetime	4	Date of retirement of the employee

11. drain_detail

Primary key: wardno,loc

Purpose: This table keeps all the information about the drainage system of Bhubaneswar.

Field Name	Data Type	Data Length	Description
wardno	number	2	Ward number
loc	number	2	Location of the drain
spt	vchar	10	Starting point of the drain
opt	vchar	5	Outfall point of the drain
len	vchar	2	Length of the drain
darea	vchar	50	Drainage area covered

12. garden_list

Primary key: wardno,loc,name

Purpose: This table keeps all the information about the parks & gardens of Bhubaneswar.

Field Name	Data Type	Data Length	Description
wardno	numeric	5	Ward number
loc	vchar	30	Location of the park
name	vchar	30	Name of the park
area	vchar	20	Area covered
time	vchar	10	Entry timing of the park
fee	numeric	5	Entry fee
photo	vchar	10	Photo of the park

13. heritage

Primary key: wardno,loc

Purpose: This table keeps all the information about the lakes in Bhubaneswar.

Field Name	Data Type	Data Length	Description
slno	int	4	Ward number
type	vchar	30	Type of lake
name	vchar	30	Name of the lake
loc	vchar	20	Location of the lake
area	float	8	Area covered by the lake
peri	float	8	Perimeter of the lake
photo	vchar	10	Photo of the lake

14. news_list

Primary key: issue,dt

Purpose: This table keeps all the information about the daily news flashed by Bhubaneswar Municipal Corporation.

Field Name	Data Type	Data Length	Description
issue	numeric	5	Issue number
dt	smalldatetime	4	Date of issue
descrip	varchar	30	News description
detail	varchar	30	News file
advertise	varchar	10	News photo
status	varchar	5	Status of the news
yr	varchar	10	Issuing year

15. notice

Primary key: date,noticeid

Purpose: This table keeps all the notices published to the public by Municipal Corporation.

Field Name	Data Type	Data Length	Description
date	smalldatetime	4	Issue date of the notice
noticeid	numeric	5	Code of the notice
sub	varchar	50	Subject of the notice
detail	varchar	30	Notice file
by	varchar	30	Notice issued by whom
year	numeric	9	Year of the published notice

16. resolution

Purpose: This table keeps all the notices information about the Corporation's resolution.

Field Name	Data Type	Data Length	Description
date	smalldatetime	4	Issue date of the resolution
descrip	varchar	50	Description about the resolution
file	varchar	40	Resolution file format

17. oap_list

Primary key: wardno

Purpose: This table keeps all the information about the OAP,ODP,WP beneficiaries of the Bhubaneswar benefitted by Corporation.

Field Name	Data Type	Data Length	Description
wardno	numeric	5	Ward number
oap	numeric	5	No. of OAP beneficiaries
odp	numeric	5	No. of ODP beneficiaries
wp	numeric	5	No. of WP beneficiaries
total	numeric	5	Total no. of OAP,ODP,WP beneficiaries
name	varchar	50	Name of the Tax Collector
dp	varchar	100	Place of distribution point
dt	smalldatetime	4	Date of distribution

18. officer_list

Primary key: date,noticeid

Purpose: This table keeps all the information about the employee's of Municipal Corporation.

Field Name	Data Type	Data Length	Description
emrcode	numeric	9	Code of the employee
name	varchar	30	Name of the employee
member	varchar	10	Employee is a staff/officer
desig	varchar	50	Designation of the employee
office	numeric	13	Phone no(off) of the employee
res	numeric	13	Phone no(res) of the employee
mobile	numeric	13	Mobile no of the employee
joining	smalldatetime	4	Joining date of the employee
transfer	smalldatetime	4	Retired/Transferred date of the employee
sec	varchar	30	Section of the employee
ward	varchar	200	Ward allotted to the employee

19. park_detail

Primary key: wardno,loc,parea

Purpose: This table keeps all the informations about the paking places of Bhubaneswar.

Field Name	Data Type	Data Length	Description
wardno	numeric	5	Ward number
loc	varchar	200	Location of the parking place
parea	varchar	50	Parking area
purpose	varchar	20	Type of vehicle for parking
partyname	varchar	30	Parking assigned to private party
partyadd	varchar	30	Address of the private party
issuefrom	smalldatetime	4	Fromdate issued to the private party
issueto	smalldatetime	4	Upto date issued to the private party
security	numeric	9	Security deposit of the party to BMC

20. rwa_list

Purpose: This table keeps informations about all the residenatial welfare associations of Bhubaneswar.

Field Name	Data Type	Data Length	Description
wardno	numeric	5	Ward number
nrwa	varchar	100	Name of the residential welfare association
regd	varchar	50	Registered number
memb	numeric	5	No. of members
npres	varchar	30	Name of the president
presadd	varchar	30	Address of the president
presphone	numeric	13	Phone no. of the president
nsec	varchar	30	Name of the secretary
secadd	varchar	30	Address of the secretary
secphone	numeric	13	Phone no. of the secretary

21. slum_list

Primary key: slno

Purpose: This table keeps all the informations about the slums of Bhubaneswar.

Field Name	Data Type	Data Length	Description
slno	varchar	5	Code of the slum
wardno	numeric	5	Ward number
sname	varchar	30	Name of the slum
thouse	numeric	9	Total household in the slum
ppl	numeric	9	Population of the slum

22. str_light

Primary key: wardno

Purpose: This table keeps all the informations about the slums of Bhubaneswar.

Field Name	Data Type	Data Length	Description
wardno	numeric	5	Ward number
fl	numeric	5	No. of F.L fittings
ld1	float	8	Load of the F.L fittings
dt1	smalldatetime	4	Date of the F.L fittings joined
sv	numeric	5	No. of S.V fittings
ld2	float	8	Load of the S.V fittings
dt2	smalldatetime	4	Date of the S.V fittings joined
high	numeric	5	No. of High Mast Lights
ld3	float	8	Load of the High Mast lights
dt3	smalldatetime	4	Date of the High mast lights joined
armed	numeric	5	No. of 3-armed lights
ld4	float	8	Load of 3-armed lights
dt4	smalldatetime	4	Date of 3-armed lights joined
sachi	numeric	5	No. of Sachibalaya marga (S.V fittings)
ld5	float	8	Load of Sachibalaya marga (S.V fittings)
dt5	smalldatetime	4	Date. of Sachibalaya marga (S.V fittings) joined
cal	float	8	Total amount of load

23. vehicle_list

Purpose: This table keeps all the informations about vehicles used for cleaning of Bhubaneswar.

Field Name	Data Type	Data Length	Description
wardno	numeric	5	Ward number
owner	vchar	15	Owner of the vehicle
type	vchar	15	Type of vehicle
number	numeric	5	Number of vehicle

24. vendor_list

Primary key: icard

Purpose: This table keeps all the informations about vendors of the assigned vending zones of Bhubaneswar.

Field Name	Data Type	Data Length	Description
icard	numeric	5	Icard number
nvendor	vchar	30	Name of the vendor
nvz	nvarchar	50	Name of the vending zone
fname	vchar	30	Father's name
address	vchar	30	Address of the vendor
type	vchar	15	Type of business
photo	vchar	10	Photo of the vendor

25. vz_list

Primary key: name

Purpose: This table keeps all the informations about the vending zones of Bhubaneswar.

Field Name	Data Type	Data Length	Description
name	vchar	50	Name of the vending zone
loc	vchar	50	Area of the vending zone
wardno	numeric	5	Ward number
nos	numeric	5	Number of vendors
remarks	vchar	50	Remarks

26. wardinfo

Primary key: wardno

Purpose: This table keeps all the informations about the wards of Bhubaneswar.

Field Name	Data Type	Data Length	Description
wardno	numeric	9	Ward number
wardname	numeric	9	Name of the ward
area	numeric	9	Ar ea covered by the ward
popdensity	numeric	9	Population density of the ward
houshold	numeric	9	No. of household in the ward
park	numeric	9	No. of parks in the ward
popmale	numeric	9	Male population of the ward
popfemale	numeric	9	Female population of the ward
poptotal	numeric	9	Total population of the ward
scmale	numeric	9	No. of SC male population
scfemale	numeric	9	No. of SC female population
sctotal	numeric	9	No. of total SC population
obc	numeric	9	No. of OBC category
stmale	numeric	9	No. of ST male population
stfemale	numeric	9	No. of ST female population
sttotal	numeric	9	No. of total ST population
general	numeric	9	No. of general category
mliter	numeric	9	No. of male literacy
mfliter	numeric	9	No. of female literacy
tliter	numeric	9	No. of total literacy
mworker	numeric	9	No. of male worker
fworker	numeric	9	No. of female worker
tworker	numeric	9	No. of total worker
photo	varchar	10	Ward map

27. waste_detail

Primary key: wardno,loc,darea

Purpose: This table keeps all the informations about the solid waste management of Bhubanswar Municipal Corporation.

Field Name	Data Type	Data Length	Description
wardno	numeric	5	Ward number
loc	varchar	50	Location
darea	varchar	50	Dumping area
area	numeric	5	Area covered
dist	numeric	5	Distance from BMC

28. del_wing

Primary key: ward

Purpose: This table keeps all the informations about the Corporator's of Bhubanswar Municipal Corporation.

Field Name	Data Type	Data Length	Description
ward	numeric	5	Ward number
name	varchar	40	Name of the corporator
addr	varchar	40	Address of the corporator
phone1	numeric	13	Phone no(off) of the corporator
phone2	numeric	13	Phone no(res) of the corporator
mobile	numeric	13	Mobile no of the corporator
voter	numeric	9	Number of voters
category	varchar	30	Category of the corporator
dob	smalldatetime	4	Date of birth of the corporator
mailid	varchar	50	E-mail id of the corporator
desig	varchar	15	Designation of the corporator
qualif	varchar	40	Qualification of the corporator
hobbies	varchar	40	Hobbies of the corporator
party	varchar	20	Name of the party
fname	varchar	40	Father's or Husband's name
photo	varchar	10	Photo of the corporator
mstone	varchar	500	Milestone
member	varchar	15	Member of the committee
comname	varchar	200	Name of the committee

29. budget-receipt

Primary key: ward

Purpose: This table keeps all the informations about the Corporator's of Bhubanswar Municipal Corporation.

Field Name	Data Type	Data Length	Description
fy	vchar	30	Financial year
tax	vchar	30	Tax Revenue
arc	vchar	30	Assigned Revenue and Compensation
rimp	vchar	30	Rental Income from Municipal Properties
fuc	vchar	30	Fees and user charges
shr	vchar	30	Sale and Hire charges
rgcs	vchar	30	Revenue Grant Contribution and Subsidies
ifi	vchar	30	Income from investment(Fixed Deposit)
ie	vchar	30	Interest earned
io	vchar	30	Other Income
loan	vchar	30	Loan
dr	vchar	30	Deposit Received
gcs	vchar	30	Grant and Contribution for specific purpose
spa	vchar	30	Sale proceed of assets
dw	vchar	30	Deposit Work
rlas	vchar	30	Recoveries of Loan and Advance from staff
itstrd	vchar	30	IncomeTax,Sales Tax,royalty deduction
gajnnurm	vchar	30	Grant-in-Aid through JNNURM
other1	vchar	30	Others
other2	vchar	30	Others
total	vchar	30	Total
ob	vchar	30	Opening Balance
gt	vchar	30	Grand Total

30. budget_expend

Primary key: ward

Purpose: This table keeps all the informations about the Corporator's of Bhubaneswar Municipal Corporation.

Field Name	Data Type	Data Length	Description
fy	varchar	30	Financial year
general	varchar	30	General Administration and Other Establishment
admin	varchar	30	Administrative Expensive
solid	varchar	30	Solid Waste Management
repair	varchar	30	Repair and maintenance
interest	varchar	30	Interest and Finance Charges
program	varchar	30	Programme Expenses(Urban Poor)
revenue	varchar	30	Revenue Grants, Contribution and Subsidies
misc	varchar	30	Misc/Contingency
repay	varchar	30	Repayment of Loan
refund	varchar	30	Refund of Deposit
acquisit	varchar	30	Acquisition and Purchase of Fixed Asset
capital	varchar	30	Capital Work
deposit	varchar	30	Deposit Work
invest	varchar	30	Investment General Fund
loan	varchar	30	Loan and Advances
purchase	varchar	30	Purchase of Store Materials
other1	varchar	30	Others
other2	varchar	30	Others
total	varchar	30	Total
cb	varchar	30	Closing Balance
gt	varchar	30	Grand Total



LAYOUT DESIGN

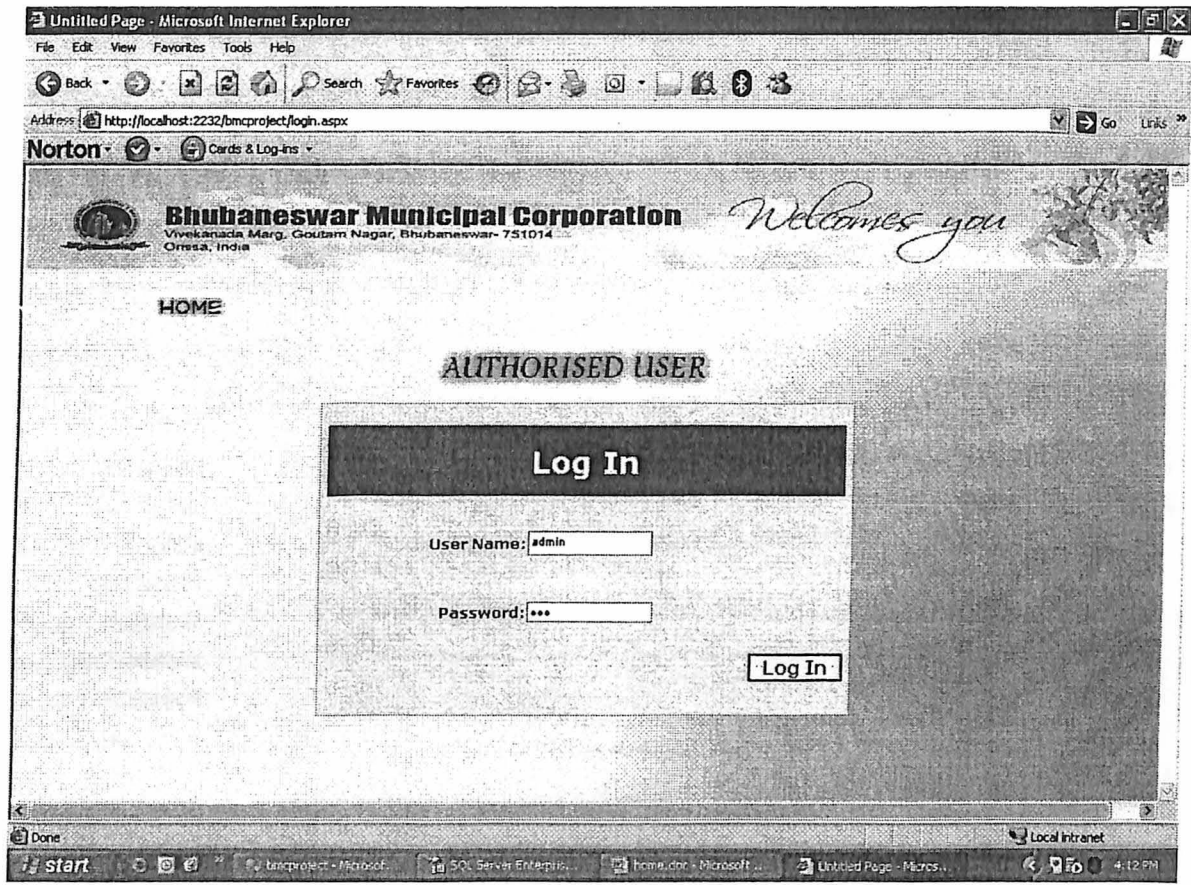
HOME PAGE



1) Page Name :- homepage.aspx

Page Description: This is the Home Page of “Web Portal Of Bhubaneswar Municipal Corporation”. This is the first screen user will view when he /she wants to access the system. The System has only administrative user.

LOGIN PAGE.



2) Page Name : - login.aspx

Page Description: This is the "Login Page" which allows only a valid Municipality user to get through the application and undertake the necessary actions. A User name with the combination of Password is taken by the Municipality user and is checked for its authentication and if the combination is valid, then "Administrator Menu" of the System opens.

CIRCULAR ORDER

Bhubaneswar Municipal Corporation
Vivekananda Marg, Goutam Nagar, Bhubaneswar, Orissa, India

File Download

Do you want to open or save this file?

Name: 3.2008-2009.doc
Type: Microsoft Word Document, 19.5 KB
From: localhost

Open Save Cancel

Always ask before opening this type of file

While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. What's the risk?

Select Year: 2008-2009 Order No: 3 Order Date: 26/06/2009 Search

Financial Year	Order No	Order Date	Section	Subject
2008-2009	3	26/06/2009	License	license

3) Page Name : - Showorder.aspx

Page Description: This page will appear when the user select the Financial Year or Order No. or Order Date or combination of the three will get output as well as PDF-File of the circular order.

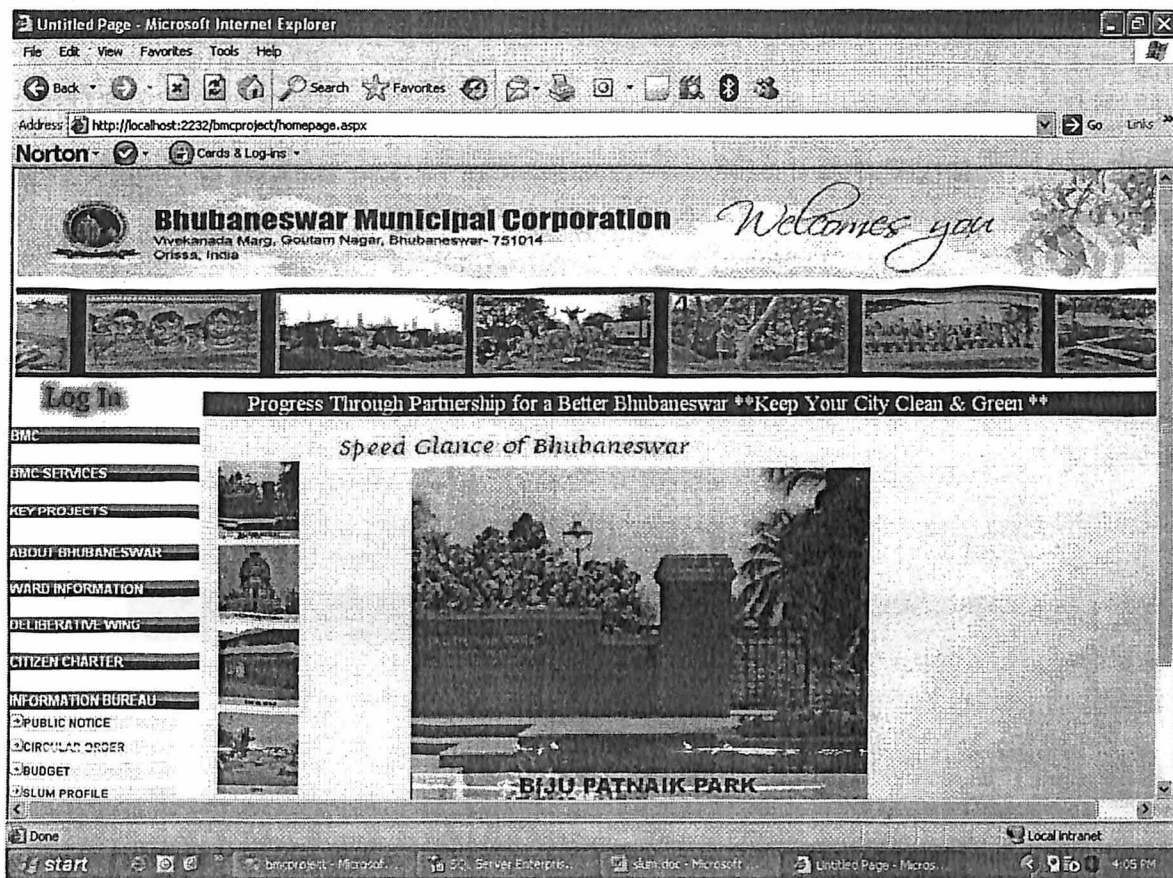
WALL PAINTING



4) Page Name : - wallpainting.aspx

Page Description: This page gives detail information and pictures of the wall paintings made in the roadside of Bhubaneswar .

PHOTO GALLERY OF BHUBANESWAR



5) Page Name : - showphoto.aspx

Page Description: Here you can see the enlarged image by mouse-hover on the small image that are uploaded by Municipal corporation

RESIDENTIAL WELFARE ORGANISATION

RESIDENTIAL WELFARE ASSOCIATION EXIT

Ward No:

Name of R.W.A:

Regd. No:

Total No. of Members:

Name of President: Address: Phone No:

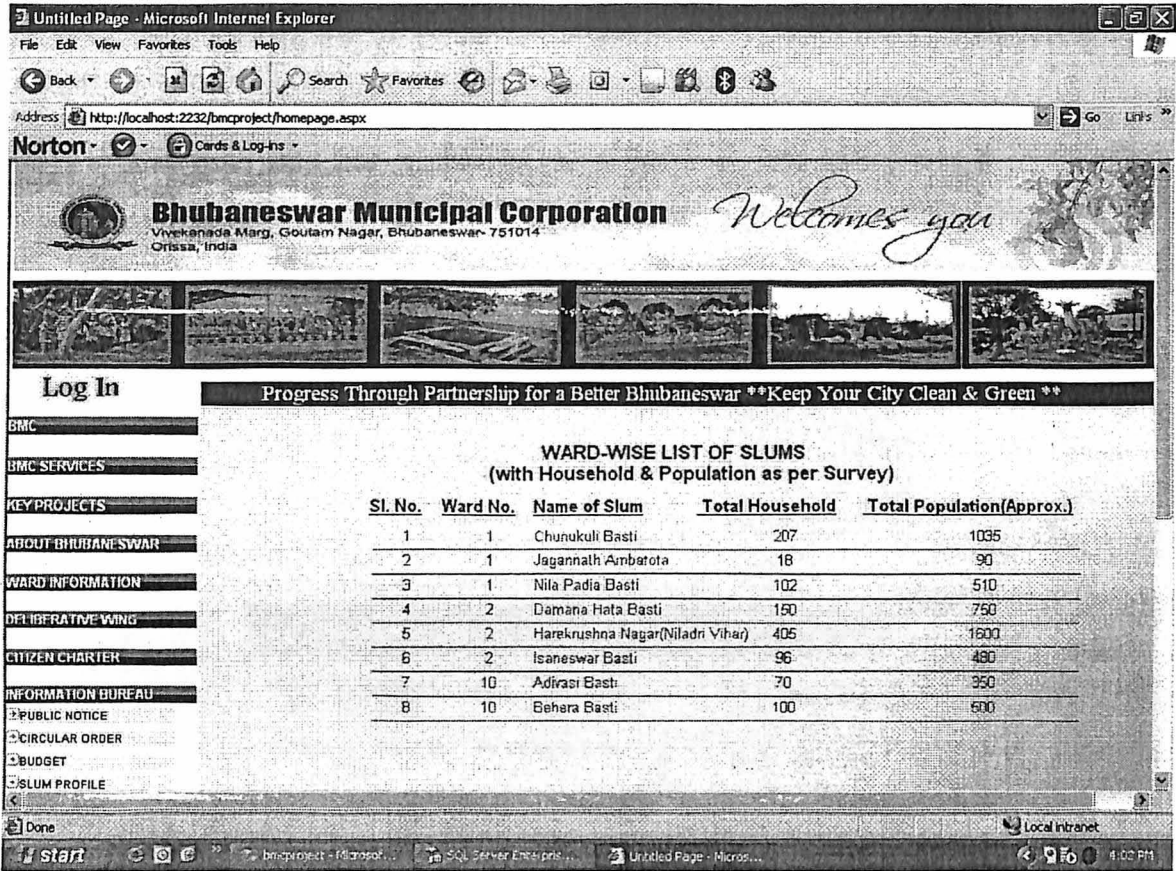
Name of Secretary: Address: Phone No:

Ward No	Name of R.W.A	Regd.No	Member	President Detail	Secretary Detail	Edit	Delete
1	Sailashree Vihar Residents' Association.			Name:Sri Trilochan Bhatta Address:364, Sailashree Vihar, BBSR Phone No:2740023	Name: Sri Suresh Ku. Rath Address :VIM-818, Sailashree Vihar, Bhubaneswar Phone No: 9937211896	Edit	Delete

6) Page Name : - rwa.aspx

Page Description: The Municipal Corporation member will enter the residential welfare organisation's data.

WARD-WISE LIST OF SLUMS



Untitled Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://localhost:2232/bmcproject/homepage.aspx

Norton Cards & Log-ins

Bhubaneswar Municipal Corporation
Vivekanada Marg, Goutam Nagar, Bhubaneswar-751014
Orissa, India

Welcomes you

Log In Progress Through Partnership for a Better Bhubaneswar **Keep Your City Clean & Green**

WARD-WISE LIST OF SLUMS
(with Household & Population as per Survey)

Sl. No.	Ward No.	Name of Slum	Total Household	Total Population (Approx.)
1	1	Chunukuli Basti	207	1035
2	1	Jagannath Ambatota	18	90
3	1	Nilia Padia Basti	102	510
4	2	Damana Hata Basti	150	750
5	2	Harekrushna Nagar(Niladri Vihar)	405	1600
6	2	Isaneswar Basti	96	480
7	10	Adiras Basti	70	350
8	10	Behara Basti	100	500

Done Local Internet 4:02 PM

7) Page Name : - slumreport.aspx

Page Description: The user can view the total data of slums found Bhubaneswar that are being updated by Municipal Corporation member.

VENDING ZONE

Vending Zone

EXIT NEXT»

Name Of Vending Zone:

Area:

Ward No:

No Of Vendors:

Remarks:

Name of Vending Zone	Area	Ward No.	No. of Vendors	Edit	Delete
<u>AKHANDALAMANI VENDING ZONE</u>	Near Horticulture Farm-Ekamra Kanan Road	10	27	Edit	Delete
<u>MAHAVIR VENDING ZONE</u>	Ekamra Kanan Road near N-1	10	10	Edit	Delete

App_Web_jb3zc-nt
saved

7) Page Name : - VENDINGZONE.aspx

Page Description: The Municipal Corporation member will enter the Vending Zone data in all wards and on clicking the name of vending zone we can get detail information of the vendors working in that Vending Zone.



SYSTEM TESTING

SYSTEM TESTING:

System testing is an expensive but critical process that takes as much as 50% of the budget for program development. It can be defined as the process of executing a program with the explicit intention of finding errors i.e. making the program fail. A successful test is one that finds error. In the context of our system following testing strategies are use to find out errors.

Testing Strategies

Code Testing:

The code testing examines the logic of the program, by testing every path of the program. A path is a specific combination of conditions that is handled by the program in this system each path of the program is tested using a number of message boxes and a number of appropriate test data for each path.

Unit Testing:

Individual components are tested to ensure that they operate correctly. A bottom-up unit strategy is followed for this system. Well-designed driver programs are used in this approach.

Integration Testing:

Integration Testing is a systematic technique for constructing the program structure while at the same time conducting tests to uncover errors associated with interfacing. The objective is to take unit tested components and build a program structure that has been dictated by design. Taking the big bang approach to integration is a lazy strategy that is doomed to failure. Integration testing should be conducted incrementally.

System Testing:

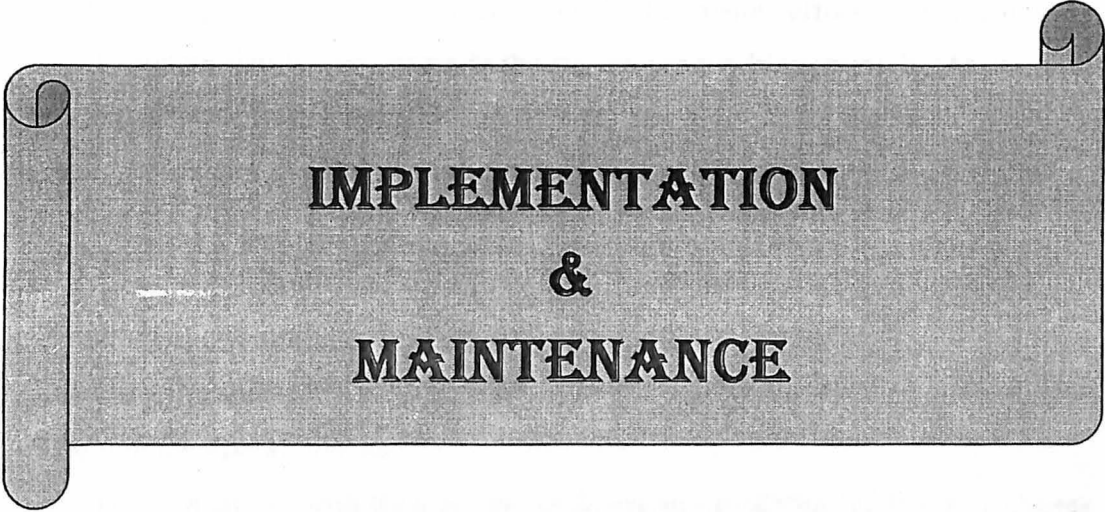
System testing is actually a series of different tests whose primary purpose is to fully exercise the computer-based system. There is some System test, which are worthwhile for software-based system. Under System testing Recovery Testing, Security Testing, Stress Testing and Performance Testing are conducted to validate software once it has been incorporated into a larger system.

Testing with Dummy Data:

This test was done with wrong data, validating them and making the system fail forcefully, and the system finally is found error free.

Testing with Live Data:

Being a live project, each and every data entry and query modules are tested with that live data carefully and perfectly. The user is trained and gets hands on practices with the new modules. Getting feed back from the user, attempt has been made to improve the front- end navigation capabilities.



**IMPLEMENTATION
&
MAINTENANCE**

SYSTEM IMPLEMENTATION:

Implementation is the stage of the project when the theoretical design turned into a working system. At this stage the main workload, the upheaval and the major impact on the existing practices shift to user department. If the implementation stage is not carefully planned and controlled, it can cause chaos. Thus it can be considered to be the most crucial stage in achieving a new successful system and in giving the users confidence that the users confidence that the new system will work and be effective.

Implementation involves careful planning, investigation of current system and constraints on implementation, design of methods to achieve the changeover, training of staff in the changeover procedures and evaluation of changeover methods. The first task is the implementation planning i.e. deciding the methods and time scale to be adopted.

Once the planning has been completed, the major effort in the computer department is to ensure that the programs in the system are working properly. At the same time the user department must concentrate on training user staff. What the staffs have been trained, a full system test can be carried out, involving both the computer and clerical procedures.

The main steps of implementation includes

1. Installing client machine.
2. Installing the software on the server.
3. Training the operational staff.

Requirements keep changing with time so the implementation of this project may change with time hence implementation is an ongoing process, which may change in future.

Maintenance

Web maintenance services by third party can substantially reduce your costs by eliminating the need to hire full time website design professionals or web content programmers. Once your site is online, it will inevitably need to be updated to keep your content fresh. Sometimes it's a simple change, like changing a date or adding an event or you may want to add a new section or functionality to your site involving site-wide modification.

Essential Website maintenance Strategies:

Maintenance of one's website is an absolute necessity if he want to keep it from becoming stagnant and losing visitors. Maintaining one's website means continuously updating it with fresh content, keeping it free from errors, to maintain a high position in the search engines.



CONCLUSION

Conclusion:

The expanded functionality of today's organizations requires an adequate approach towards software development . With this approach in mind this software is developed to fulfill most of the business requirements It plays a key role in the employees of the company.

The development of project like “**Web Portal of Bhubaneswar Municipal Corporation**” is indeed a unique experience. The interaction is due course gave us the privilege of making the user appreciate benefits of computerized system. Participation throughout the development of project left me with a rich experience.

User expectations and requirements keep changing with time; hence this software provides effective manuals for programmers to make any modification in future.

Limitation:

- The user must be comfortable with web based application.
- Since the system is web based, server limitation can affect the system.
- Depending upon the connection speed the system performance is affected.
- Since the system is using a database server, any problem in this server also affects the system.

Future Scope:

In the future version of the software the project entry interface is to be made more users friendly and a new information are to be added depending on the requirement of the client. Many other calculations and beneficial reports can be drawn from this “**Web Portal Of Bhubaneswar Municipal Corporation**” in future.



BIBLIOGRAPHY

Books:

- ❖ Fundamental of Software Engineering, Second Edition, by Rajib Mall
- ❖ ASP .NET Complete Reference
- ❖ ASP .NET ,by Stephen Walther

Online Help:

- ❖ www.Google.com
- ❖ www.dynamicdrive.com
- ❖ www.cooltext.com