Chapter 1: Introduction

1.1 Purpose of Software:

FCI (FOOD CORPORATION OF INDIA) is a organization which stores grain in different Type of Godown . It also moves (in word / out word) grain from different state. FCI allots grain to different scheme through different allotment type.

With the help of this application we try to achieve that these all above work done easily and properly. We provide the online booking facility to the client.

1.2 Brief Description of System:

FOOD CORPORATION OF INDIA, This software firstly maintains the employee record of FOOD CORPORATION OF INDIA. We can view all information of employee in different format like category wise, sc/st wise etc.

Online booking Form is available on net, client send request for book their land for FCI and get a request Id. And with the help of this Id they can get their Response given by FCI.

This application is also manage the record of Godown and their capacity. When we want to store the grain in a godown we check the capacity firstly.

Same As in allocation and Movement we also check the stock and capacity of godown.

In this System we also put information of procured grain.

1.3 PROJECT OVERVIEW

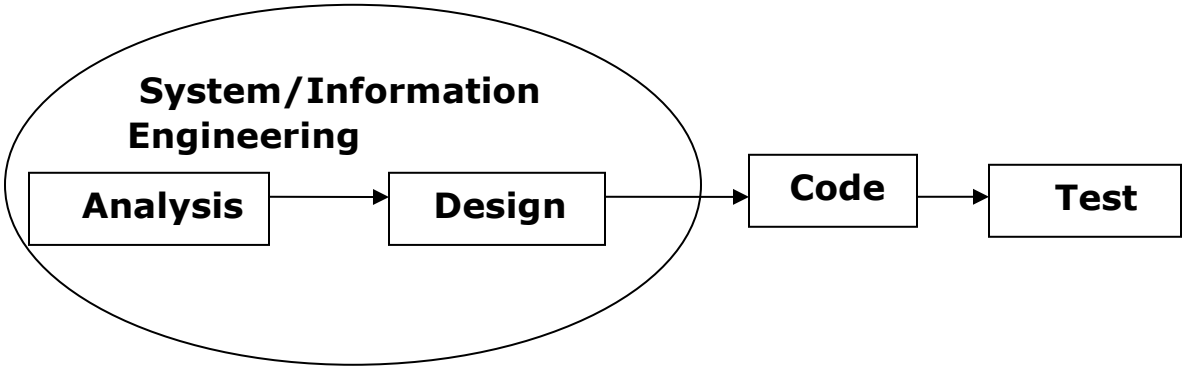
Project title	Food Corporation of India
Type of project	Website
Technology	ASP.Net C# Language VS2010
Database	SQL-Server 2008 as Back End Database Server
Supporting tools	Microsoft word for document

Project development approach and planning

Software Engineering Paradigm refers to a development strategy that encompasses a hierarchy of process, methods, and tool layers of Software Engineering and is selected based upon the nature of project and application, the methods, tools, controls and deliverables that are required.

The Linear Sequential suggests a systematic, sequential approach to software development that begins at the system level and progresses through analysis, design, coding, testing, and support phases. As Iterative approach is always better we have used incremental model keeping the same stages of the linear sequential model intact.

Diagrammatically it may be shown as above:



All software development can be characterized as a problem-solving loop in which four distinct stages are encountered:

- Problem definition
- Technical development
- Solution integration

Status Quo represents the current state of affairs.

Problem Definition identifies the specific problem to be solved.

Technical Development solves the problem through the application of some technology.

Solution Integration delivers the result (e.g. Documents, programs, data, and new product) to those who requested the solution in the first place.

Evolutionary Prototyping.

Evolutionary prototyping is based on the idea of developing an initial implementation, exposing this to user comment and refining this through many stages until an adequate system has been developed.

Evolutionary prototyping objective.

- The objective of evolutionary prototyping is to deliver a working system to end-users. The development starts with those requirements which are best understood.

Evolutionary prototyping advantages.

- Accelerated delivery of the system
    - Rapid delivery and deployment are sometimes more important than functionality or long-term software maintainability
- User engagement with the system
    - Not only is the system more likely to meet user requirements, they are more likely to commit to the use of the system.

SOFTWARE REQUIREMENT SPECIFICATION

The introduction of the Software requirements specification states the goals and objectives of the Software.

Information description

Now days all the work is done by the computer, in any field we will use computers. Now we can reserved our ticket from internet, we can show movie in it, hole share market is work on computers, so by making an inquiry online it saves one trip of customer going to the shopping malls.

It's a web-based application, and it is about marketing of the various day to day life products.

The main purpose of Business Planning System is managing the generated inquires. The details of clients and employees is available here to admin. Through the inquires administrator

here selects suitable employees for particular clients and for particular products. Administrator can then make the area wise comparisons of products. Thus the whole project is about the generated inquires and then maintenance of all these things and in the end the integration of the admin, employees and the clients.

This web application is very useful for marketing. Customers not need to be members of the site for making an inquiry. They can get information of various products. With the help of this inquiry management system company can get the information of other areas, Administrator can choose employees for selling of particular products.

Validation criteria

Validation is a set of rules that apply to the data you collect. These rules can be many or few and enforced either strictly or in a lax manner. It really depends on you. Here we use different types of validation to check whether user has input valid data or not.

We use different types of validation control which is given by VB studio 2010 here we have readymade validation server controls like Required Field Validator to ensures that the user does not skip a form entry field Required Field Validator is here useful when we are not allowing user to null value for particular field if user can provide value for the text box than only user can work further.

We also use Compare Validator allows for comparisons between the user's input and another item using a comparison operator (equals, greater than, less than, and so on) for example to compare user enter password and confirm password are both match each other.

Range Validator is use to checks the user's input based upon a lower and upper level range of numbers and characters for example to check length of particular field(mob no not cross 10 digit in India).

Regular Expression Validator checks that user's entry matches a pattern defined by a regular expression. This is a good control to use to check e-mail address and phone numbers.

Custom Validator check's the user's entry using custom-coded validation logic.

Validation Summary which is also use to displays the entire error message from the validators in one specific spot on the page.

Chapter 2: System Analysis

2.1 FEASIBILITY STUDY

A feasibility study is undertaken to determine the possibility or probability of either improving the existing system or developing a completely new system.

It helps to obtain an overview of the problem and to get rough assessment of whether feasible solution exists.

This is essential to avoid committing large resources to a project and then repent on it later. There are three aspects in feasibility study portion of the preliminary investigation.

1. Technical Feasibility
2. Economic Feasibility, and
3. Operational Feasibility of the project

1. Technical Feasibility

Technical Feasibility determines whether the work for the project be done with the present equipment, current procedures, existing software's technology and available personnel

If new technology is needed then what alternatives will be needed in the present structure and work those?

A. The system going to developed on ASP.NET as front end tool and SQL Server as Back-end tools.

B. So the software can easily use in any system working on the windows operating system.

C. Minimum requirement of the system should be as follows.

i. Processor : PIV and above

ii. Operating system: Windows XP and above.

iii. Minimum ran required: 256 MB and above.

iv. Hardware required: Keyboard, Mouse, Printer, Other updated peripherals.

Technical feasibility determines whether the technology needed for the proposed system is available and how it can be integrated within the Classes System. Technical evaluation must also assess whether the existing system can be upgraded to use the new technology and whether the Tuition System has the expertise to use it.

The technical feasibility in the proposed system deals with the technology used in the system. It deals with the hardware and software used in the system whether they are of latest technology or not. It happens that after a system is prepared a new technology arises and the user wants the system based on that technology. Thus it is important to check the system to be technically feasible.

2. Economic feasibility

"GODOWN AND GRAIN MONITORIN SYSTEM, FCI" reduces the time thus money. Ultimately we can say that it acts as catalyst in the growth of the organization. Through this application we save the amount for manage the paper which are used for saving information of whole Godawn and grain. So we can Say that our application is economically feasible.

3. Operational feasibility

Operational feasibility covers two aspects. One is the technical performance aspect and other is the acceptance within the Costing System. Operational feasibility determines how the proposed system will fit in the current operations and what, if any job restructuring and retraining may be needed to implement the system.

In the system operational feasibility checks, whether the user who is going to use the system is able to work with the software's with which the system is coded and also the mind of the user going to use the system. If the user does not understand or is able to work on the system further development is of waste. So in the Operational Feasibility the Costing System Should be User Friendly.

➢ SOFTWARE REQUIREMENTS ANALYSIS

The requirements gathering process has been intensively focused specifically on software. To understand the nature of the programs to be built, Information domain has been clearly defined for the software, besides the required function, behavior, performance, and interface. Requirements for both the system and the software are well documented (in this project) and also reviewed with the customer.

➢ DESIGN

Design has carried out in multiple steps focusing on four distinct attributes of a program: data structure, software architecture, interface representations, and procedural (algorithmic) detail in an ideal manner thereby translating the requirements into a representation of the software that are assessed for quality before coding began. Like requirements, the design is documented and it is a part of the software configuration.

We have design 3 layer as a part of code separation

1) Presentation layer, in which GUI (Graphical User Interface) part is covered.
2) Business logic layer, in which all the logic/code for functionality is written.
3) Data layer, in which I have written code for interaction with data base.

➢ CODING

As design is perfectly done coding is done almost mechanistically. As far as this project is concerned, coding is done in ASP.NET (code Behind C#), because of the flexibility provided by this language.

➢ TESTING

With the coding completely and properly done the program has been tested focusing on logical internals of the software, ensuring that all statements have been thoroughly tested; and also

focused on the functional externals of the software i.e., tests have been conducted to uncover errors which have been subsequently rectified which surely will produce the desired results.

As we have used incremental approach for the whole application we have been creating one module then completing its work and moving ahead with other module and merging it to that module and on the whole at last the whole application collaboration is done

2.2 TOOLS & TECHNOLOGY

- **Tools**

  Microsoft visual studio 2010 (3.5 .NET Framework)

  It is the foundation on which you design, develop and deploy application. Its consistent and simplified programming model makes it easier to build robust applications. The core of the .NET infrastructure is the .NET Framework, which is a collection of services and classes. It exists as a layer between .NET application and the underlying operating system. It means .NET Framework encapsulates much of the basic functionality that was earlier built into various programming languages, such as debugging and security services.

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The .NET Framework consists of web Forms, Windows Forms and Console applications that pertain to presentation layer of an applications for providing an interactive user interface. The .NET Framework consists of two other components, the .NET Framework Base Classes and Common Language Runtime (CLR).

Advantages of .NET framework

- Consistent Programming model
- Multi-platform application
- Automatic resource management
- Ease of deployment

- **Technology**

ASP.NET

ASP.NET is a unified Web platform that provides all the services necessary to build enterprise-class applications. ASP.NET is built on the .NET Framework, so all .NET Framework features are available to ASP.NET applications. Applications can be written in any language compatible with the common language runtime, including Visual Basic, C#, and Jscript etc.

Files in ASP.NET Application

Main files on ASP.NET application are as per below.

Files	Purpose
.aspx	Contain all web controls in flat or grid layout. For designing the web form.
.aspx.cs	Code behind file. For C# code for event, functions, classes etc for .aspx file.
Web.config	Configuration setting for particular application. It is written in XML file with special tags.
.js	JavaScript file. File may be class file may contain functions etc.
.css	Cascading Style Sheet. Provides the same style foe whole site's controls by declaring once.
Global.asax	Record for every event in the application & inaccessible to the user. It resides in the root folder of the application.

In ASP.NET we can do coding in the .cs file either in Visual Basic or Visual C# or Visual J#. In this SMS (Skill Management System) we have used Visual C# for coding In .cs file. There is one more thing in code that is client side script that is the code that will be executed in client machine. That script can be write in two scripting language either VBScript or JavaScript.

A script that is interpreted by the browser is called a client-side script. A **client-side script** is also an instruction set, but it is not processed by the web server. Instead, it is sent to the browser

and is processed by the browser; the browser on the computer then displays the result. Client side script is most of use for the validation purposes. Every Code behind (.cs) file is start with namespaces included for the application. There are some basic namespaces uses for the ASP.NET applications are given below:

Basic namespace uses for the ASP.NET application.

Namespace	**Used for**
System	For Declaration of general Variables
System. Data	For Datasets, Data views
System.Data.OleDb	For Databases other then SQL Server
System.Data.SqlClient	For SQL Server Database
System. Collections	For array lists, hash tables, sorted lists
System.Web.UI.WebControls	For Declaration of Web Controls
System.Web.UI.HTMLControls	For Declaration of HTMLControls
Microsoft.VisualBasic	For using Visual Basic Functions
System.Web.Mail	For E-Mail Applications

- **Advantages of using ASP.NET**

- ASP.NET drastically reduces the amount of code required to build large applications
- ASP.NET makes development simpler and easier to maintain with an event-driven, server-side programming model.

- ASP.NET pages are easy to write and maintain because the source code and HTML are together
- The source code is executed on the server. The pages have lots of power and flexibility by this approach.
- The source code is compiled the first time the page is requested. Execution is fast as the Web server compiles the page the first time it is requested. The server saves the compiled version of the page for use next time the page is requested
- The HTML produced by the ASP.NET page is sent back to the browser. The application source code you write is not sent and is not easily stolen
- ASP.NET makes for easy deployment. There is no need to register components because the configuration information is built-in
- The Web server continuously monitors the pages, components and applications running on it. If it notices memory leaks, infinite loops, other illegal software or activities, it seamlessly kills those activities and restarts itself.

➢ **Microsoft SQL server 2008**

- **Faster Results**

  Microsoft SQL Server 2008 provides a new Enterprise Manager, integration with Visual Studio 2010 and the Microsoft .NET common language runtime - all of which help build, debug, and operate applications faster and more efficiently.

- **Better Decisions**

  SQL Server 2008 provides a comprehensive business intelligence platform for data integration, analysis, and reporting that helps turn insight into action and make better decisions, faster.

- **Trusted Platform**

  SQL Server 2008 supports the highest performance, availability and security to run most demanding applications with native data encryption, secure default settings, and password policy enforcement.

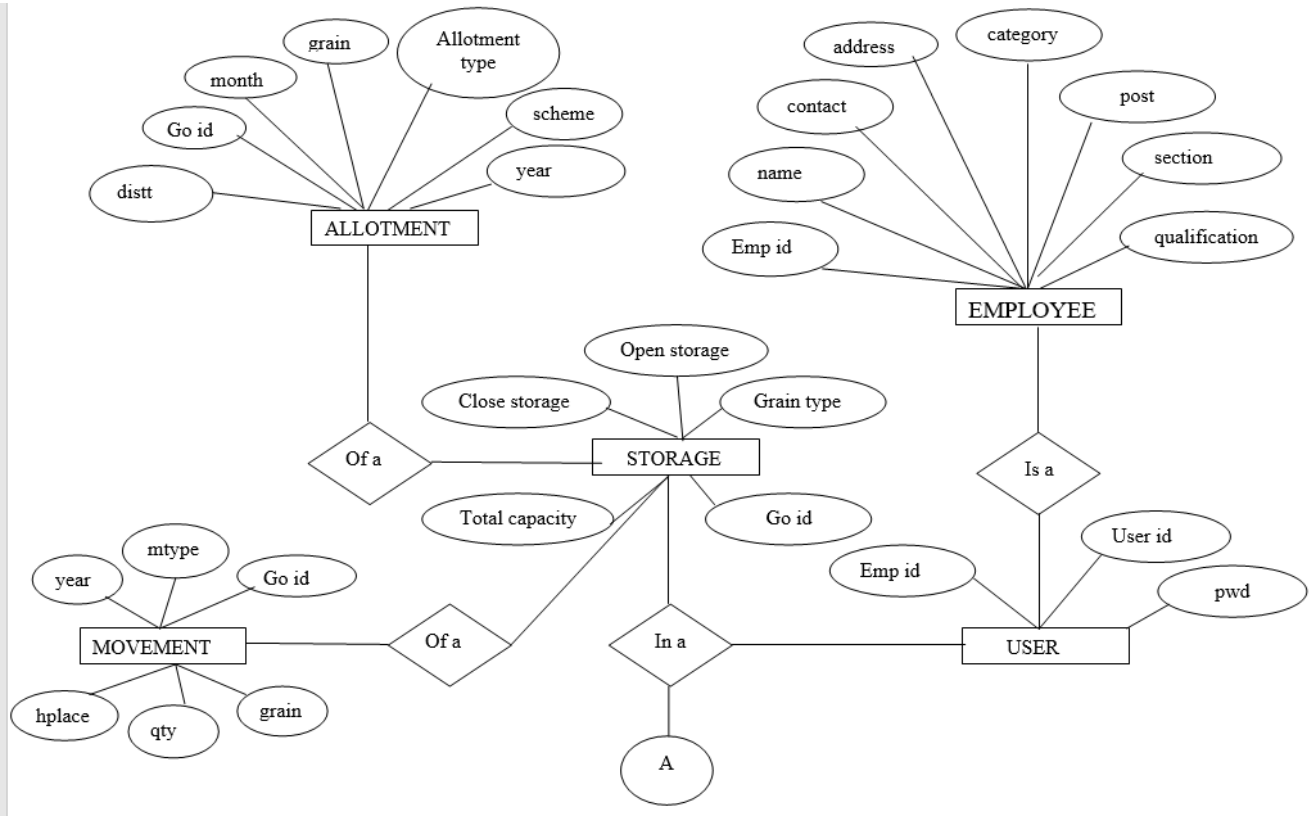
Chapter 3: System Design

3 SYSTEM DESIGN

3.1 FLOW OF SYSTEM

The system flow diagram is a visual representation of all processed in sequential order.

The system flow chart diagram is a graphical representation of the relation between all the major parts or step of the system. Flow chart cannot include minor part of the project.



3.2 DATA FLOW DIAGRAM

A. The system model is termed as dataflow diagram (DFD). A full disruption of a system actually consist set of data flow diagrams.

B. Dataflow diagram is a graphical or pictorial tool used to describe the movement of data through system. It consists of flows, processes, sources, destinations and stores all described through the use of easily understood symbols.

C. An entire system can be described from the viewpoint of the data; it processes with only four symbols. The symbols, which mention bellow, are according to the method of YOURDON

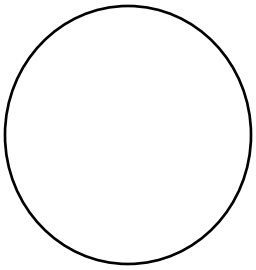
- **DATA FLOW**

Data flow: - Data flow are pipelines through the packets of information flow.

Symbol:

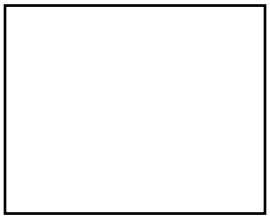
Process: - A process or task performed by the system.

Symbol:



Entity: - Entity are object of the system. A source or destination data of a system.

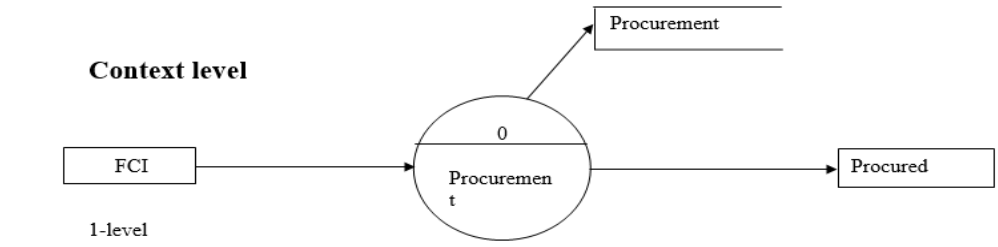
Symbol:

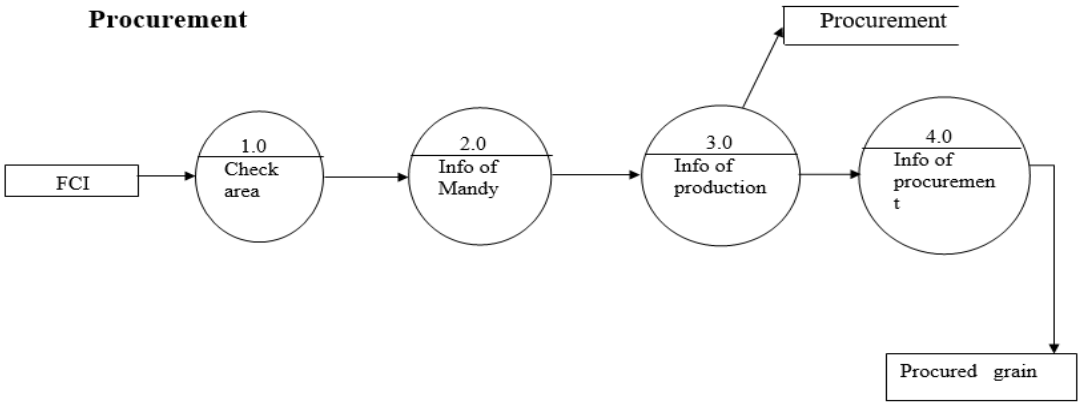


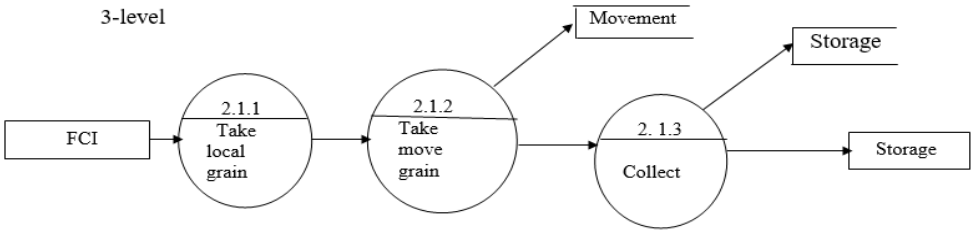
Data Store: - A place where data to be stored.

Symbol:

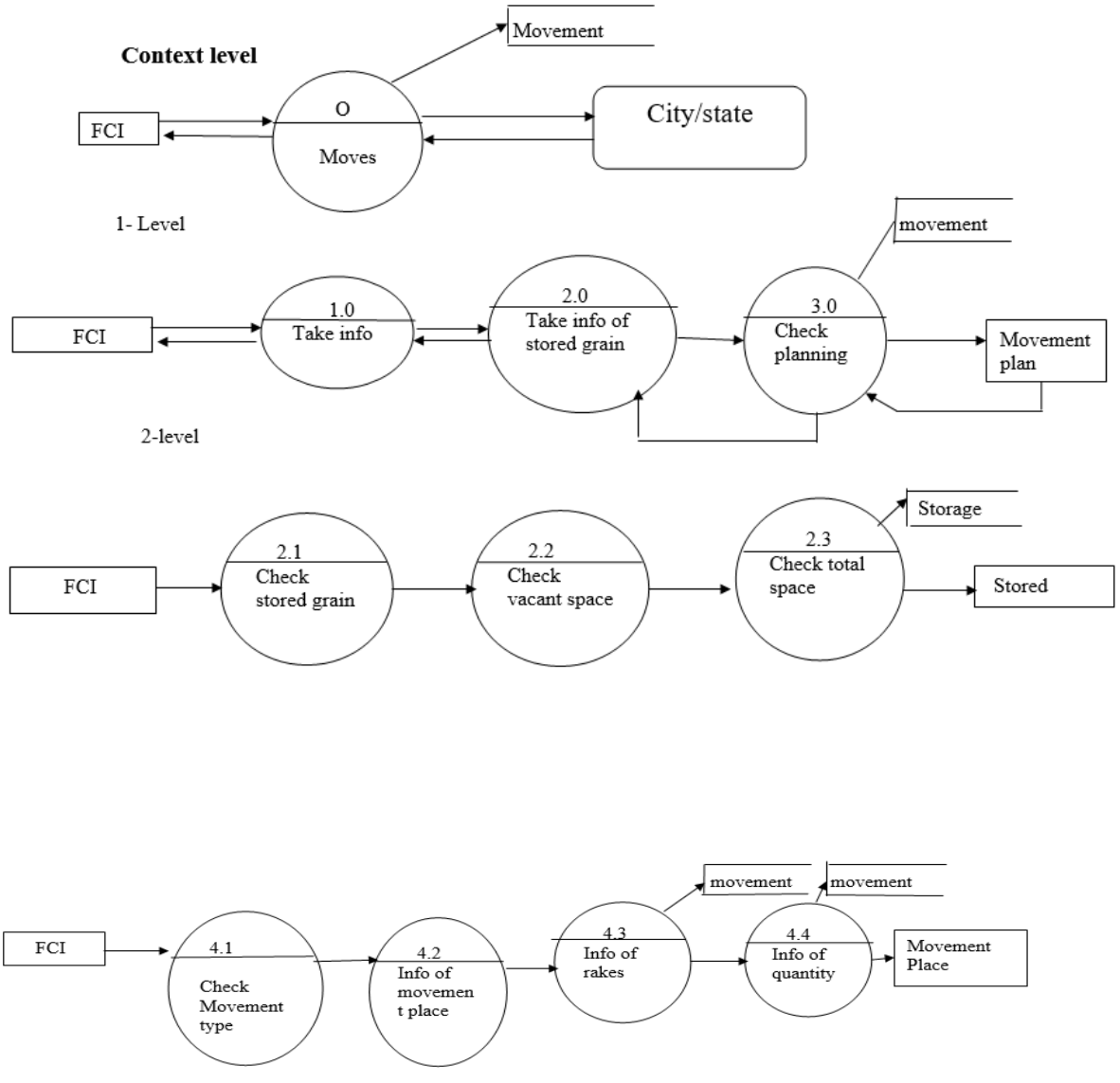
➢ DFD for Storage





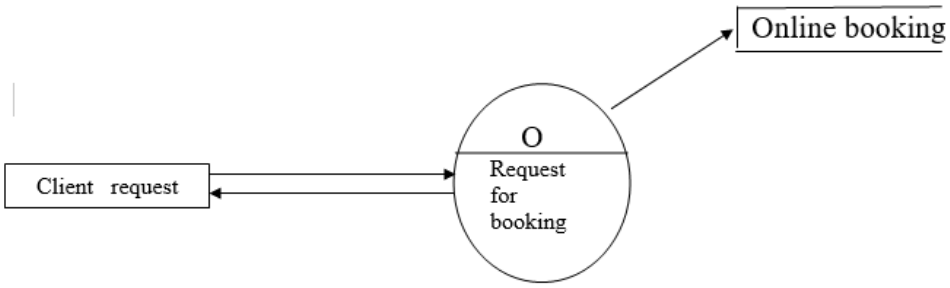


➢ DFD for Movement

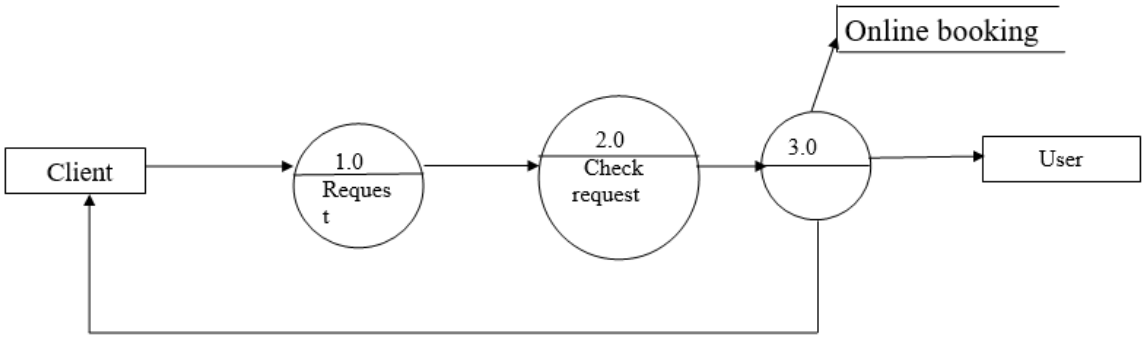


- **DFD for online booking**

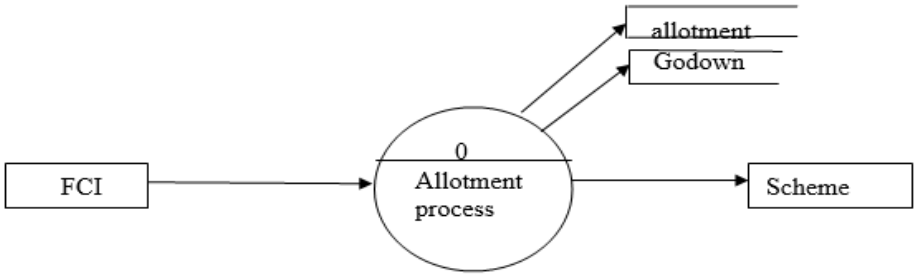
Context level



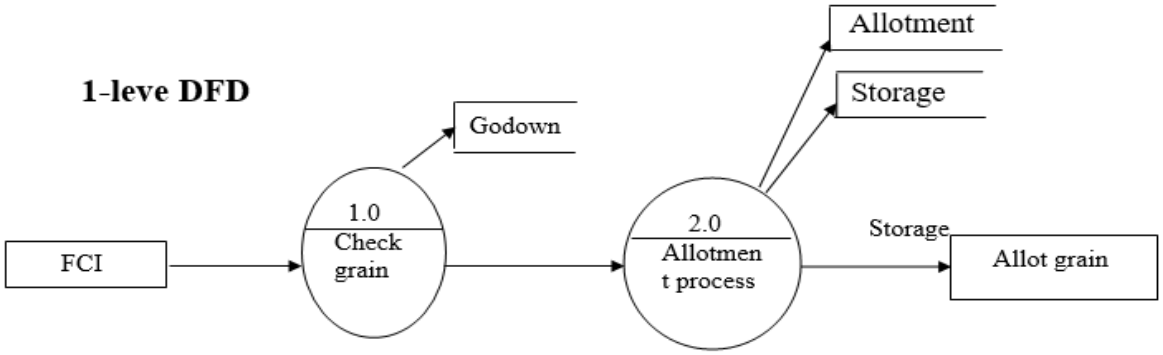
1-level



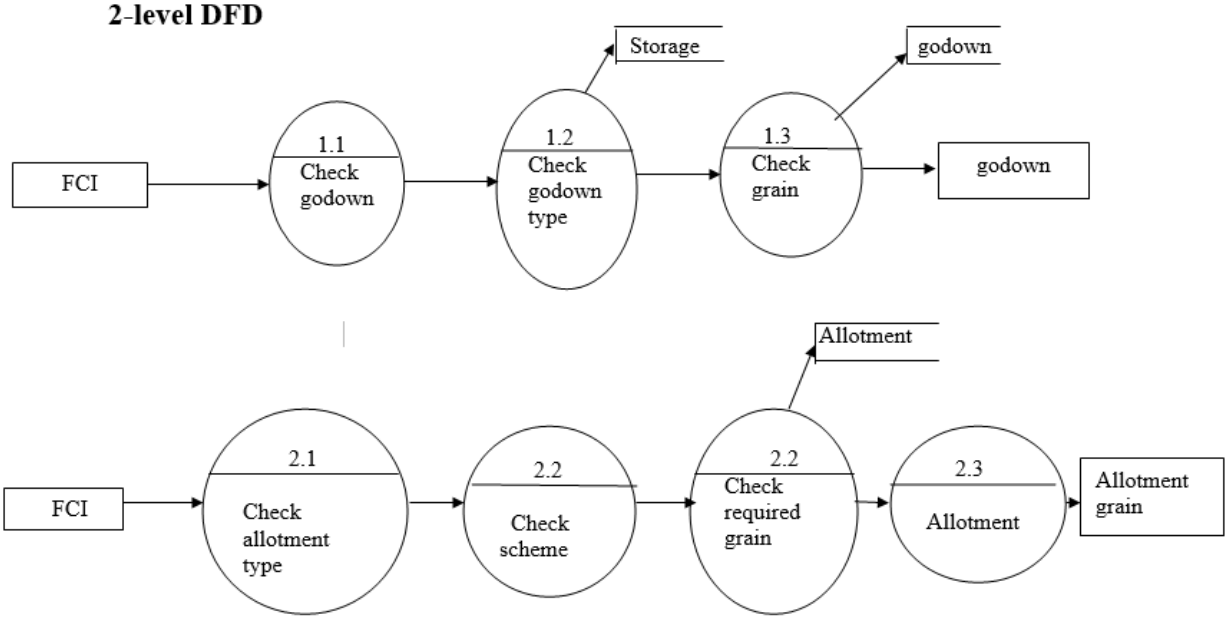
- **DFD for Allotment**



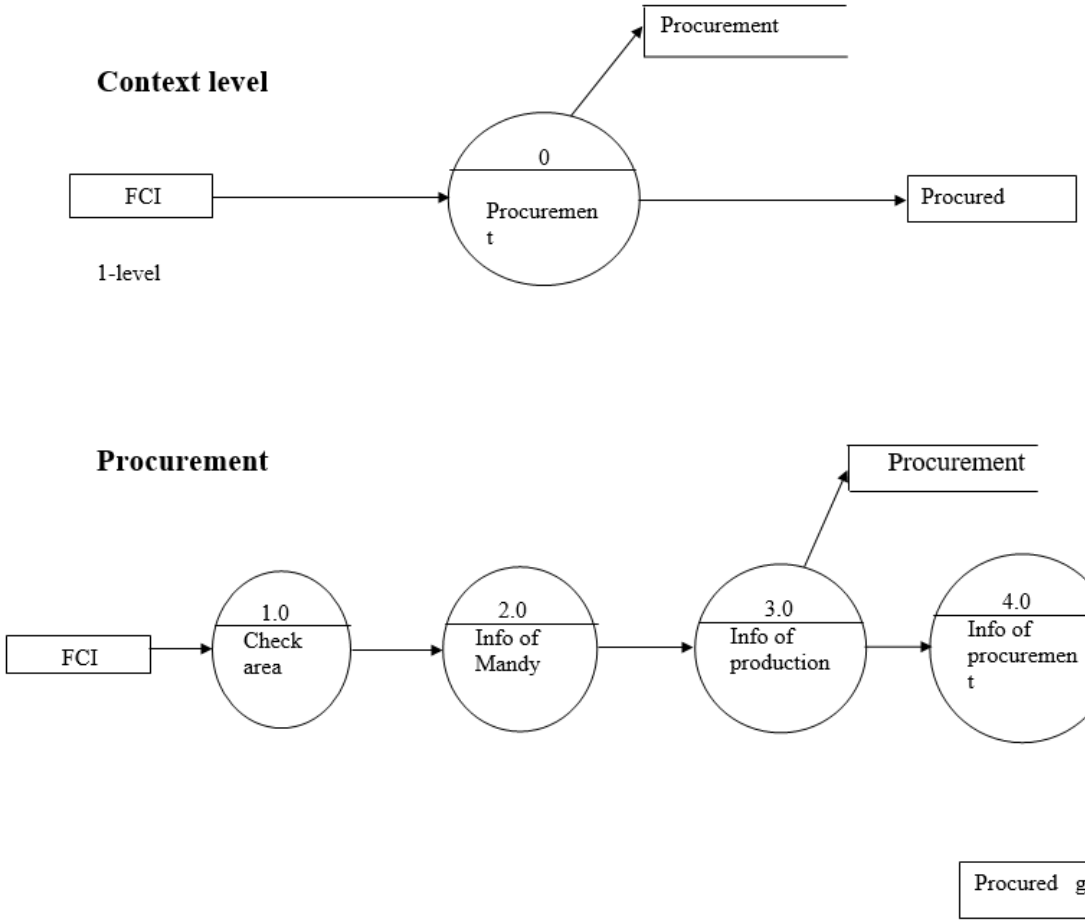
1-leve DFD



2-level DFD



- **DFD for Procurement**



3.3 DATA DICTONARY

A data dictionary is a catalog-a repository-of the elements in a system. As the name suggests, these elements are structured around data in a way to meet the user and the organization requirements. A data dictionary is a list of elements that composes all the data flow process through a system. It stores details and description of the data flows, data stores and processes.

If analyst wants to know by what other names is a table or a data item referenced in a system, or where it is being used the answers are properly developed in data dictionary. The dictionary is developed during data flow analysis and assists the analysts involved in determining system requirements. However its content is used during system design as well

- **Why is a Data dictionary Important?**

  Analyst use data dictionary for important reasons.

  A. To manage the details in large systems.

  B. To communicate a common meaning for all system elements.

  C. To facilitate analysis in order to determine where the changes are to be made.

Godown table:

Column Name	Data Type	Allow Nulls
goId	varchar(40)	☐
year	int	☐
distt	varchar(20)	☐
center	varchar(20)	☐
centerNo	int	☐
godawnType	varchar(15)	☐
coverCapecity	int	☐
openCapecity	int	☐
godawnNo	int	☐

Godown contact table:

Column Name	Data Type	Allow Nulls
goId	varchar(40)	☐
ghead	varchar(30)	☐
gaddr	varchar(50)	☐
gcontact	int	☐
distt	varchar(15)	☑

Allotment table:

Column Name	Data Type	Allow Nulls
goId	varchar(40)	☐
allotmentType	varchar(30)	☐
month	varchar(20)	☐
distt	varchar(20)	☐
year	int	☐
scheme	varchar(20)	☐
grain	varchar(20)	☐
grainL	varchar(50)	☐
allotement	int	☐
offtake	int	☐

Employee table:

Column Name	Data Type	Allow Nulls
EMPID	int	☐
NAME	varchar(30)	☐
CONTNO	numeric(18, 0)	☐
ADDR	varchar(50)	☐
QUALI	varchar(20)	☐
SC	varchar(50)	☐
SECTION	varchar(15)	☐
POST	varchar(20)	☐
CATEGORY	varchar(10)	☐
DOPPP	varchar(20)	☐
DOPOST	varchar(20)	☐
DORETI	varchar(20)	☑
DOB	varchar(20)	☑

Movement table:

Column Name	Data Type	Allow Nulls
goId	varchar(40)	☐
mType	varchar(15)	☐
hplace	varchar(15)	☐
gplace	varchar(15)	☐
year	int	☐
month	varchar(15)	☐
grain	varchar(50)	☐
grainType	varchar(50)	☐
planAct	varchar(15)	☐
rakesNo	int	☐
qty	int	☐
		☐

Online booking table:

Column Name	Data Type	Allow Nulls
Id	int	☐
name	varchar(30)	☐
distt	varchar(30)	☐
city	varchar(30)	☐
capacity	int	☐
responce	varchar(200)	☐
email	varchar(25)	☐
contact	int	☐
date	varchar(20)	☐

Procurement table:

Column Name	Data Type	Allow Nulls
year	int	☑
season	varchar(50)	☑
area	float	☑
production	float	☑
mandi	float	☑
procurement	float	☑

Storage table:

Column Name	Data Type	Allow Nulls
goId	varchar(40)	☐
grainType	varchar(50)	☑
grainlevel	varchar(20)	☑
openStorage	int	☐
coveredStorage	int	☐
totalC	int	☐
vacantspaceO	int	☐
vacentspaceC	int	☐
totalVc	int	☐
totalStock	int	☐

User table:

Column Name	Data Type	Allow Nulls
EMPID	int	☐
🔑 userId	varchar(30)	☐
pwd	varchar(15)	☐

Chapter 4: Implementation

4.1 IMPLEMENTATION ENVIREMENT

Hardware/Software Interface:

This section list the minimum hardware and software requirement needed to run the system efficiently.

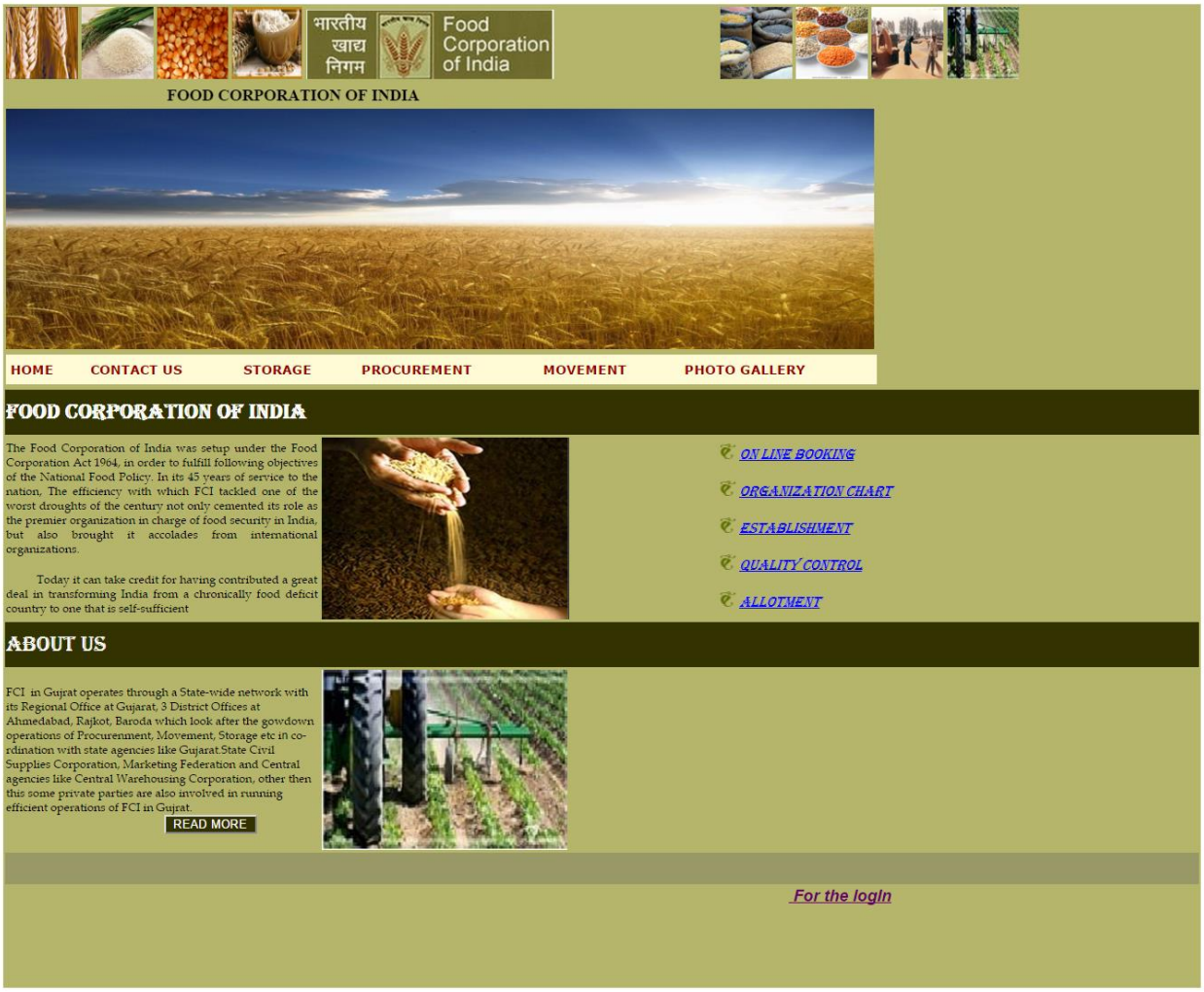
Hardware:

- **Processor :** Pentium Dual –core 2.7 GHz
- **Ram :** 1 GB
- **Secondary Memory (Hard Disk):** 16 GB minimum
- **Video Display Unit:** VGA Monitor.
- **Compact Disk Drives:** 52x CD-ROM.
- **Keyboard:** 101 Key Enhanced Keyboard.
- **Mouse:** Serial Mouse.

Software:

- **Operating system :** windows 7 or above
- **Web browser :** Mozilla FF 31 and above or google chrome
- **IDE :** visual studio 2010

4.2 SNAPSHOT OF PROJECT



भारतीय खाद्य निगम Food Corporation of India

THIS ONLINE BOOKING FOR THOSE PERSON WHO WANT TO GIVE THERE LAND FOR FCI(FOOD CORPORATION OF INDIA) AS A GODAWN(OPEN,COVERED).
FOR THAT YOU HAVE TO SPECIFY YOUR LAND CAPECITY.AND FOLLOWING INFORMATION AS GIVEN BELOW.

ON LINE BOOKING

NAME	
DISTT	
CITY	
CAPACITY	
CONTACT	
EMAIL-ID	
DATE	

SUBMIT

Click Here for Responce

Movement inword

- **ADD**
- **SELECT**
- INWORD
- OUTWORD

Godown Id BHOPAL/ASHOKNAGER/1

Holding Place M.P

Distt DISTT.

Center

INWORD PLACE

OUTWORD PLACE

Year 2008

Month jan

Grain: WHEAT RICE

PH PADDY Label

- PLANNING
- ACTUAL

No.Of Rakes

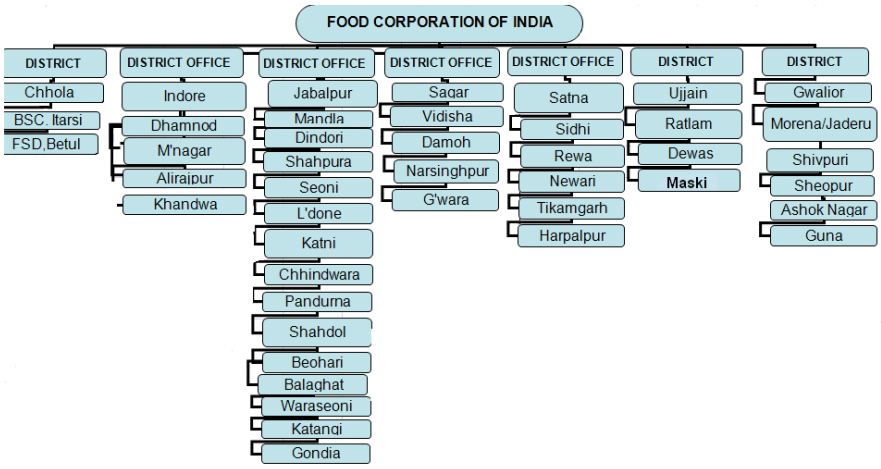
Quantity

ADD UPDATE DELETE BACK

भारतीय खाद्य निगम Food Corporation of India

ORGANIZATION CHART

HOME ABOUT US CONTACT US STORAGE PROCUREMENT MOVEMENT ALLOTEMENT ORGANIZATION CHART MAN POWER PHOTOS IISFM PERFORMENCE



CONTACT OF RESONAL OFFICE | AREA OFFICE | DEPOT CONTACT | ZONE CONTACT

HOME
ABOUT US
CONTACT US
STORAGE
PROCUREMENT
MOVEMENT
ALLOTEMENT
ORGANIZATION CHART
MAN POWER
PHOTOS
IISFM
PERFORMENCE

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Chapter 5: Future Enhancement

FUTURE WORK

1. We keep the information of owner of private godown.
2. We can add the record of transport medium for movement.
3. Above limitations are rectified as per requirement of authority.

Chapter 6: Conclusion

CONCLUSION

We can say that the application is very useful for organization and it helps very much to them in their work. This automated System make for organization, so that they don't put their much effort and time to manage the information of godown and grain and I am sure that this application is very useful for that purpose

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