#### CAB BOOKING SYSTEM IN ASP.NET

Submitted in partial fulfillment of the requirements for the award of the degree of

Bachelor of Computer Application (BCA)

TO

Guru Gobind Singh Indraprastha University, Delhi

Guide

Submitted By: NITIN CHANANA Roll No:07121102009



Institute of Information Technology Management NewDelhi-110058 Batch (2009-2012)



## **INTRODUCTION**

#### **1.1 Organization Description**

**Book a cab** is the first site in India, which provides reliable online(web based) cab(car) booking facility to people in various cities in India, free of cost. Book a cab acts like a bridge between the cab operators and the customers/users/people who book a cab. This is the online cab booking service provided to customers. This brings together the registered travel agencies/ cab operators/cab owners and the customers.

www.bookyourcab.co.in provides this service for free of cost i.e. we provide free registration for the cab owners, and free service to the travelers/customers/users who go for booking a cab or car or taxi.

Here the customers can book a cab /taxi/car by viewing all the cab details and pricing details available, according to selected city and area. It is the reliable service provided to both customers and Travel agencies. This provides service with well-conditioned new vehicles, with experienced drivers for a happy journey of the customers.

#### **1.2 About the Proposed System**

#### 1.2.1 <u>Aim</u>

Along with the main theme of offering an e-place to search for the nearest travels around your living place and book a cab for your safe and happy journey the www.bookyourcab.co.in is providing features like online shopping for used cars.

Through this site we can also be up to date with the revolutions that are occurring in the

automobile industry in India or throughout the world like the news about the latest releases of the 4-wheeler (cars/taxies).

This is the best place to increase their (the travel agencies /cab owners /tourisms) publicity with zero cost. This site also provides premier account for travel agents. This is done with the feedback they get from the people who used their travels. So users please find time to give your valuable feed back to the travels/cab operators whose service you have used, which in turn may help you in getting cheaper, reliable, fast, facilitated and Secure service.

#### 1.2.2 Objective of Study

To Standardize business process and information entity of cross-online Cab Booking.

#### 1.2.3 System Scope

Though the system still contains lot of scope of improvement in it, but its overall look gives rough picture of an existing record keeping system. There are four main tasks to be carried out when identifying the scope for improvement:

- 1) Identification of potential improvements and then, in respect of each of those identified.
- Prediction of the likely impact in terms of at least two criteria (increase in net profit, change in the quality of service).
- 3) Prediction of the probability of adoption of the newer application.
- 4) The rapidity with which the improvement will bear fruit if adopted. Case-specific analysis will be required which will use predictive models of varying. Because the predictions are being made in advance, they cannot be precise but can only be estimates of probabilities concerning the balance between benefits and costs or between positive and negative factors.

#### CAB SEARCH -

User can search cab for a particular location here. User required to enter Source, Destination, and Place where he want to go.

#### **LOGIN PROCESS:**

In this the customer has to give out the login details i.e. user id and password and then only he can be logged on. The user id and password given by the customer are checked from the data stored in the database.

#### **REGISTRATION PROCESS:**

User must be registered before booking a cab. Proper validations will be provided to keep only authenticated users i.e. those users who will provide correct information. All the data supplied by the user will be stored in database and it will be used for further validation and authentication. During registration, user has to give login and password of their choice. Login names and passwords will be stored in the database so that the user can directly login without registering again and again.

#### **BOOKING CONFIRMATION –**

After validating the entered information and getting approval from Credit card authorization service the system provides the visitor the notice on successful registration.

#### **ADMINISTRATION PROCESS:**

In this process Administrator will upload the availability of cab information in the database. It includes place, services, and cost of the available cab. Cab availability will be viewed by the customer after he has logged on to the site

#### 1.3 Methodology Data Collection

#### • Data collection through investigation:

In this method we use trained investigators to work as employee for collecting the data. In this method, the researcher will collect the information from asking required questions to the individual.

#### • Personal investigation methods:

The researchers are data collectors who have conduct the survey and collect data. In this method we have to collect more accurate and original data. But this is useful for small data collections only not to big projects.

#### • Data collection through telephones:

The data researches collect the information or data through the telephones and mobiles. It is very quick process for data collection.

Those all are the important methods used in primary data collections.

#### 2. Secondary data methods:

The secondary data is collecting the data from the second hand information. It means the given data is already collected from any other person and for any other purpose, but it is available for the present ues. This data are not relevant and pure data.

The secondary data collection methods also use two important methods and both are explained below:

#### Official:

Data collection from the ministry of finance, agriculture, industry survey and etc...

These data collection methods are official.

#### 1.3.1.2 Secondary Data Collection

Secondary Data is data collected by someone other than the user. Common sources of secondary data for social science include censuses, surveys, organizational records and data collected through qualitative methodologies or qualitative research

For secondary level data collection I gathered other necessary details from

- ✓ www.google.com
- ✓ <a href="http://eventandweddingplannersdelhi.com/">http://eventandweddingplannersdelhi.com/</a>
- ✓ http://www.tantraa.net/index.html
- ✓ http://www.lotusconferences.com/
- ✓ http://www.youcanevent.co.uk/about.html
- ✓ <a href="http://yellowpages.sulekha.com/delhi/sembigbang2/business-services/event-organisers/birthday-party-organisers/604.htm">http://yellowpages.sulekha.com/delhi/sembigbang2/business-services/event-organisers/birthday-party-organisers/604.htm</a>

#### 1.4 Methodology For System Design - Object Oriented Design Methodology

- Object Oriented Methodology closely represents the problem domain. Because of this, it is easier to produce and understand designs.
- The objects in the system are immune to requirement changes. Therefore, allows changes more easily.
- Object Oriented Methodology designs encourage more re-use. New applications can use the existing modules, thereby reduces the development cost and cycle time.
- Object Oriented Methodology approach is more natural. It provides nice structures for thinking and abstracting and leads to modular design.

#### 1.4 Methodology for System Design

#### PRELIMINARY ANALYSIS

The main objectives of preliminary analysis is to identify the user's needs, evaluate system concept for feasibility, perform economic and technical analysis, perform cost benefit analysis and create system definition that forms the foundation for all subsequent engineering works. There should be enough expertise available for hardware and software for doing analysis.

While performing analysis, the following questions arise.

How much time should be spent on it?

As such, there are no rules or formulas available to decide on this. However, size, complexity, application field, end-use, contractual obligation are few parameters on which it should be decided.

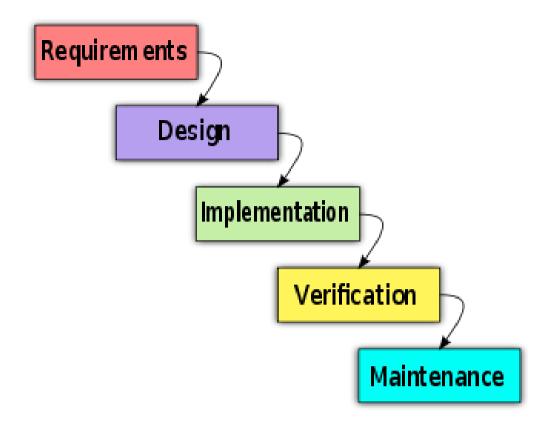
• Other major question that arises is who should do it.

Well an experienced well-trained analyst should do it. For large project, there can be an analysis team.

# 1.5 <u>Methodology For System Development - SDLC Methodology (Suitable For Object Oriented Development)</u>

#### Waterfall Model for Design and Development

The **waterfall model** is a sequential design process, often used in software development processes, in which progress is seen as flowing steadily downwards (like a waterfall) through the phases of Conception, Initiation, Analysis, Design, Construction, Testing, Production/Implementation and Maintenance.



The waterfall development model originates in the manufacturing and construction industries: highly structured physical environments in which after-the-fact changes are prohibitively costly, if not impossible. Since no formal software development methodologies existed at the time, this hardware-oriented model was simply adapted for software development.

The first known presentation describing use of similar phases in software engineering was held by Herbert D. Benington at Symposium on advanced programming methods for digital computers on 29 June 1956. This presentation was about the development of software for SAGE. In 1983 the paper was republished with a foreword by Benington pointing out that the process was not in fact performed in strict top-down, but depended on a prototype.

The first formal description of the waterfall model is often cited as a 1970 article by Winston W. Royce, though Royce did not use the term "waterfall" in this article. Royce presented this model as an example of a flawed, non-working model. This, in fact, is how the term is

generally used in writing about software development—to describe a critical view of a commonly used software practice.

#### 1.6 System Tool Requirements

2 Operating System : Windows XP, Window7

3 Front end : ASP.net

4 Back end : SQL server

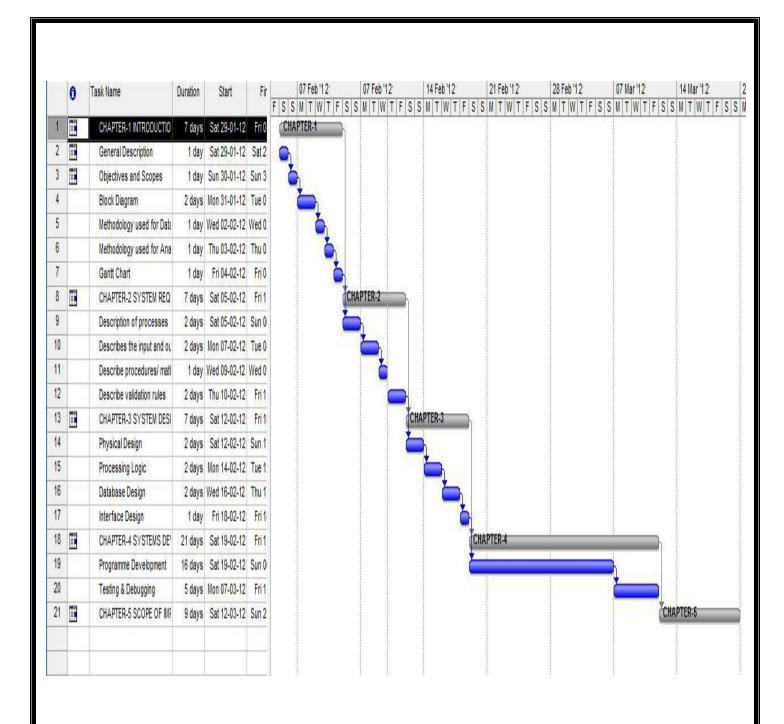
5 Scripting language : VB Script

6 RAM : 512 MB

#### 1.7 Project Planning Gantt Chart

A Gantt chart is a type of bar chart that illustrates a project schedule. A Gantt chart illustrates the start and finish dates of the terminal elements and summary elements of a project. Some Gantt Charts also show the dependency (i.e. precedence network) relationships between activities. Gantt Charts can be used to show current schedule status using percent-complete shadings and a vertical "TODAY" line as shown here.

Gantt chart for Event Management is shown below:



# Chapter-2 System Requirement analysis

#### What is System Analysis?

Systems analysis is a process of collecting factual data, understand the processes involved, identifying problems and recommending feasible suggestions for improving the system functioning. This involves studying the business processes, gathering operational data, understand the information flow, finding out bottlenecks and evolving solutions for overcoming the weaknesses of the system so as to achieve the organizational goals. System Analysis also includes sub-dividing of complex process involving the entire system, identification of data store and manual processes. The major objectives of systems analysis are to find answers for each business process: What is being done, How is it being done, Who is doing it, When is he doing it, Why is it being done and How can it be improved? It is more of a thinking process and involves the creative skills of the System Analyst. It attempts to give birth to a new efficient system that satisfies the current needs of the user and has scope for future growth within the organizational constraints. The result of this process is a logical system design. Systems analysis is an iterative process that continues until a preferred and acceptable solution emerges.

#### 2.1 System Overview

Book a cab is the first site in India, which provides reliable online(web based) cab(car)

booking facility to people in various cities in India, free of cost. Book a cab acts like a bridge between the cab operators and the customers/users/people who book a cab. This is the online cab booking service provided to customers. This brings together the registered travel agencies/ cab operators/cab owners and the customers.

www.bookyourcab.co.in provides this service for free of cost i.e. we provide free registration for the cab owners, and free service to the travelers/customers/users who go for booking a cab or car or taxi.

Here the customers can book a cab /taxi/car by viewing all the cab details and pricing details available, according to selected city and area. It is the reliable service provided to both customers and Travel agencies. This provides service with well-conditioned new vehicles, with experienced drivers for a happy journey of the customers.

Through this www.bookyourcab.co.in website you can book a taxi from anywhere in India. It has registered travels or cab operators from all famous cities throughout India like Hyderabad, Bhubaneswar, Bilaspur, Calcutta, Chandigarh, Chennai, Chitradurga, Cochin, Coimbatore, Dehra Dun, Delhi, Dhanbad, Durg, Erode, Goa, Gurgaon, Guwahati, Gwalior, Haldwani, Haridwar, Hubli-Dharwad, Indore, Jabalpur, Jamshedpur, Kharagpur, Kolhapur, Kanpur, Jaipur, Jamnagar, Raipur, Kandivli, Kanpur, Udaipur, Kozhikode, Kota, Lucknow, Ludhiana, Madurai, Mahape, Mangalore, Mathura, Mumbai, Mysore, Nagpur, Nanded, Nellore, New Delhi, Noida, Panipat, Patna, Pondicherry, Pune, Rajkot, Vadodara, Varanasi, Vellore, Vijayawada, Vishakhapatnam, Warangal, Sangli, Sangrur, Shillong, Shimoga, Silchar, Sivakasi, Solapur, Srinagar, Surat, Thanjayur, Trivandrum, Tumkur.

# 2.2 Block Diagram of System PAYMENT CUSTOMER CAB SEARCH CAB DETAILS PRICE LIST ADMINISTRATOR DRIVER DETAILS BILL PROCESS CAB BOOKING PROCESS 15

vstem Processes and Inn	out Output Identification
Registration of the users  Required Input	Output
User Name	userid
Password	userid
Fassword	
	'
	,
Booking for Cab	
Booking for Cab  Required Input	Output
	Output Booking ID
Required Input	
Required Input  Cab Detail	
Required Input  Cab Detail  Cab Timings	
Required Input  Cab Detail  Cab Timings  Select Date	

Booking ID	Receipt ID
Cost	
Cash Payment	

#### 2.3.1 System Processes

The cab booking consists of following processes:-

#### > CAB SEARCH -

User can search cab for a particular location here. User required to enter Source, Destination, and Place where he want to go.

#### **LOGIN PROCESS:**

In this the customer has to give out the login details i.e. user id and password and then only he can be logged on. The user id and password given by the customer are checked from the data stored in the database.

#### > REGISTRATION PROCESS:

A user can register him into NET so that he can book online event.

#### **BOOKING CONFIRMATION –**

After validating the entered information and getting approval from Credit card authorization service the system provides the visitor the notice on successful registration.

#### > ADMINISTRATION PROCESS:

In this process Administrator will upload the availability of cab information in the database. It includes place, services, and cost of the available cab. Cab availability will be viewed by the customer after he has logged on to the site

#### 2.4 Identification of Various Actors & Their Roles in the System

- 1. Admin
- 2. Users

#### Admin:

**General Responsibilities** 

- 1. Maintaining the distribution lists for the project concerned
- 2. Setting up and maintaining the project network space (provide for project-specific information,
- e.g. history, project management information)
- 3. Maintaining electronic copies of project files
- 4. Coordinating the logistical needs and needs of new staff members
- 5. Scheduling meetings and workshops on request
- 6. Consolidating information for project meetings, as requested by the project manager
- 7. Distributing information to nominated persons
- 8. Arranging social functions
- 9. Liaising with the project support office regarding the standardization of information, guidelines, etc.

#### **USER:**

**Checking availability** – visitor enters the dates of travel and the system provides the information on packages (with pictures and services included in the package, as well as the cost), available for the period indicated.

**Booking Process** – visitor chooses the booking procedure (clicking booking button).

**Booking confirmation** – after validating the entered information and getting approval from Credit card authorization service the system provides the visitor the notice on successful of registration.

#### **USE CASE DIAGRAM**

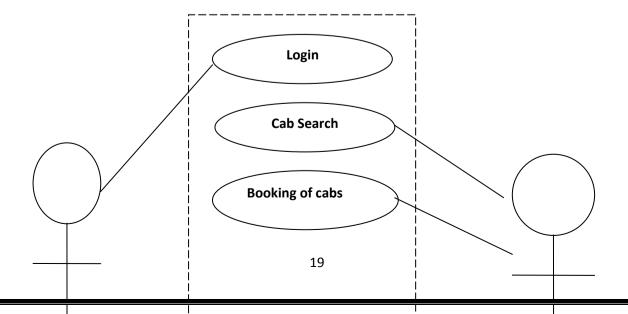
A Use Case Diagram visually represents what happens when an actor interacts with a system. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases.

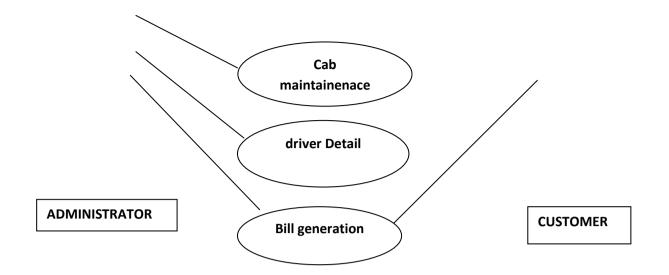
The main purpose of a use case diagram is to show what system functions are performed for which actor.

**Actor:** An actor may be a person, machine or an information system that is external to the system model but interacts with it in some way.

**Use Case:** It describes the sequence of interactions between the actors and the system.

**Arrow:** Shows relationship between actors and use case and/or between the use cases.





#### 2.5 Identification & Description of mathematical Procedures.

Cab Bill = Total K.M \* K.M Rate

# 2.6 Identification & Description various Security checks & Validations checks in the system.

#### **Login Page**

Field	Validation
Username	Required
Password	Atleast 8 Characters and must contain
	one non alphanumeric character.

## **Payment Process**

Field	Validation

Cash	Must be number, not Null

#### **Booking Process**

Field	Validation
Booking ID	Unique
Booking Date	RequiredFieldValidator
Tour Name	RequiredFieldValidator

# **Chapter-3**

# **System Design**

The purpose of System Design is to create a technical solution that satisfies the functional requirements for the system. At this point in the project lifecycle there should be a Functional Specification, written primarily in business terminology, containing a complete description of the operational needs of the various organizational entities that will use the new system. The challenge is to translate all of this information into Technical Specifications that accurately describe the design of the system, and that can be used as input to System Construction. The Functional Specification produced during System Require- ments Analysis is transformed into a physical architecture. System components are distributed across the physical architecture, usable interfaces are designed and prototyped, and Technical Specifications are created for the Application Developers, enabling them to build and test the system. Many organizations look at System Design primarily as the preparation of the system component specifications; however, constructing the various system components is only one

of a set of major steps in successfully building a system. The preparation of the environment needed to build the system, the testing of the system, and the migration and preparation of the data that will ultimately be used by the system are equally important. In addition to designing the technical solution, System Design is the time to initiate focused planning efforts for both the testing and data preparation activities.

#### 3.1 Overview Of System Design Phase

The design phase may also be known as *conceptual design* or *architectural design*. During this phase, the high-level design concept is created, which will implement the complex electronics requirements. This design concept may be expressed as functional block diagrams, design and architecture descriptions, sketches, and/or behavioral HDL (hardware description language).

The objective of the design phases (preliminary and detailed) is to create a design that will correctly and completely implement the requirements. For the preliminary phase, the main goal is to map out how the complex electronics will perform the functions specified in the requirements, within the constraints of the device, the defined interfaces, and the environment the device will operate within. At this phase, the designer needs to maintain a systems perspective and look at the complex electronics operations in concert with the rest of the system. Now is the time to identify inconsistencies, misunderstandings, and ambiguities.

The objective of design assurance is to verify that the design does implement all the requirements, and that it implements nothing but the requirements. Any deviations (such as

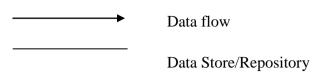
additional functionality that may indicate a missed requirement) are fed back to the requirements engineering process.

The main design activities for the preliminary design phase are:

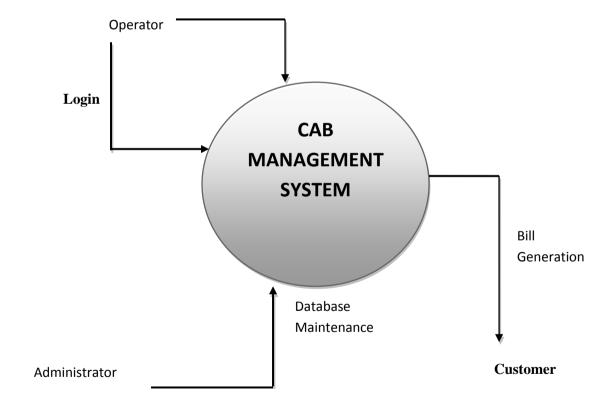
- 1. Create the high-level design description.
- 2. Identify major components, including third-party IP modules or cores.
- 3. Any derived requirements that result from the process are fed back to the requirements engineering process
- 4. Any omissions or errors are resolved
- 5. Include reliability, maintenance, and test features that are necessary to meet performance and quality requirements, and to ensure that testing can be performed to verify the requirements.
- 6. Identify constraints on other system elements that are a result of this high-level design.

This assurance process for complex electronics assumes that complex electronics requirements have been developed, assessed, and baselined (formalized). In reality, these requirements may be included in a higher-level assembly requirements specification, such as a circuit board or sub-system. The requirements for complex electronics are likely to be a work in progress, as design decisions in other areas of the system influence the functions the CE device will perform. Requirements management will be an important process throughout the design, implementation, and test phases.

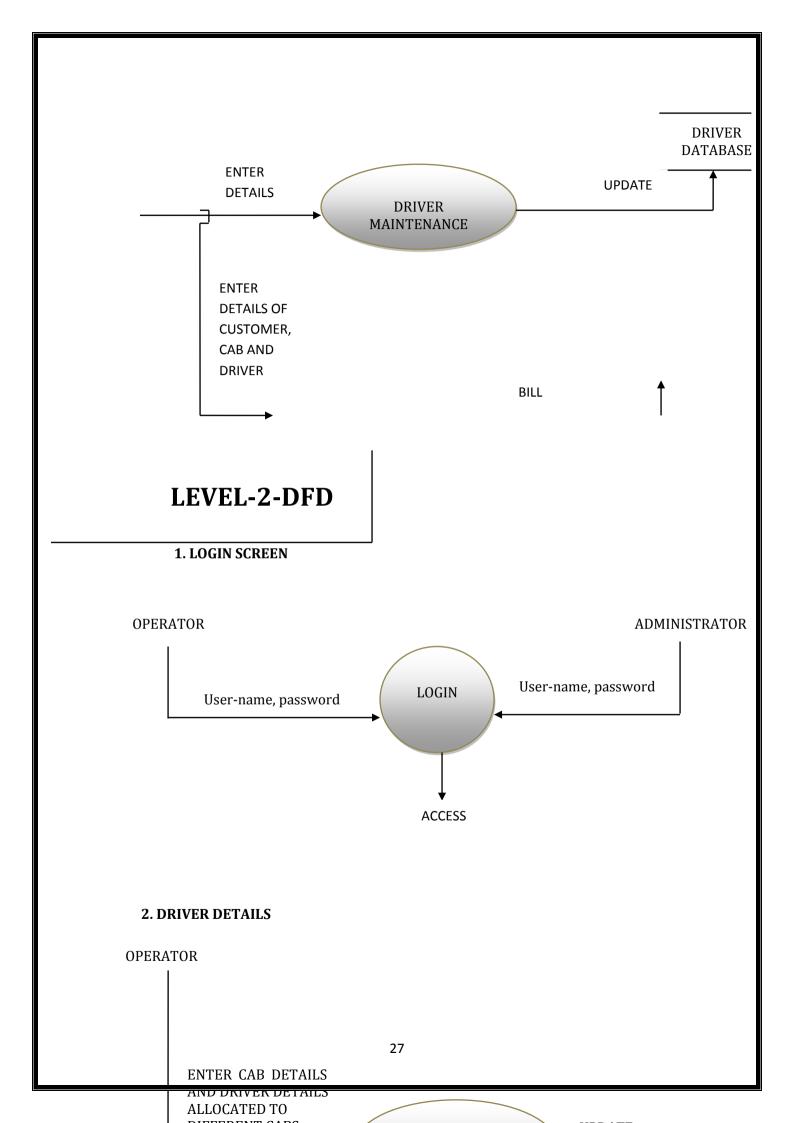
# 3.2 <u>Data Flow Diagram (DFD's)</u> A data-flow diagram (DFD) is a graphical representation of the "flow" of data through an information system. DFDs can also be used for the visualization of data processing (structured design). The DFD is also known as a Data Flow Graph or a Bubble Chart. On a DFD, data items flow from an external data source or an internal data store to an internal data store or an external data sink, via an internal process. A DFD provides no information about the timing of processes, or about whether processes will operate in sequence or in parallel. It is therefore quite different from a flowchart, which shows the flow of control through an algorithm, allowing a reader to determine what operations will be performed, in what order, and under what circumstances, but not what kinds of data will be input to and output from the system, nor where the data will come from and go to, nor where the data will be stored. Process that transforms data flow Source or Destination of data



#### 3.2.1 Context Level Diagram (Level-0 DFD)

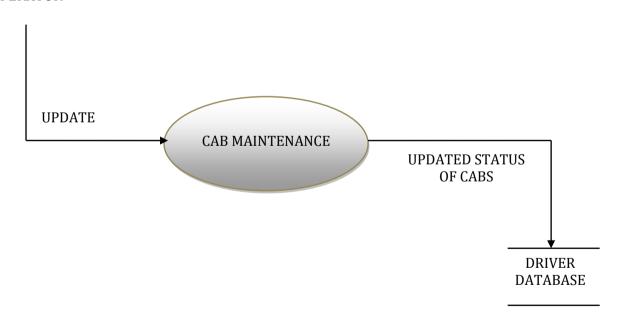


# **LEVEL-1-DFD USERNAME AND PASSWORD OPERATOR** LOGIN DATABASE **LOGIN** BOOKING **DATABAS CUSTOMER AND OTHER** DEATILS BOOKING **NOTIFICATION NOTIFICATION** CUSTOMER CAB DATABASE **UPDATE** UPDATE CAB MAINTENANCE 26



#### 3. CAB DETAILS





#### 3.3 ER Diagram

An entity-relationship model (ERM) is an abstract and conceptual representation of data. Entity-relationship modeling is a database modeling method, used to produce a

type of conceptual schema or semantic data model of a system, often a relational database, and its requirements in a top-down fashion. Diagrams created by this process are called entity-relationship diagrams, ER diagrams, or ERDs. The primary purpose of the ERD is to represent **data objects** and their **relationships**.

Entity Relationship (ER) diagrams are drawn when designing a **database system**, After the systems specification, an ER diagram is drawn showing the conceptual design of the database, this diagram shows the type of information that is to be stored in the system and how these information associate with each other (e.g. one-to-one, one-to-many, etc).

**Entity:** An entity may be defined as a thing which is recognized as being capable of an independent existence and which can be **uniquely identified**. By composite information, we mean something that has a number of different properties or attributes.

**Attributes:** Attributes define the **properties** of a data object and take on one of three different characteristics. They can be used to **name an instance** of the data object, describe the instance, or make **reference** to another instance in another table.

**Relationship:** A relationship captures how two or more entities are related to one another.

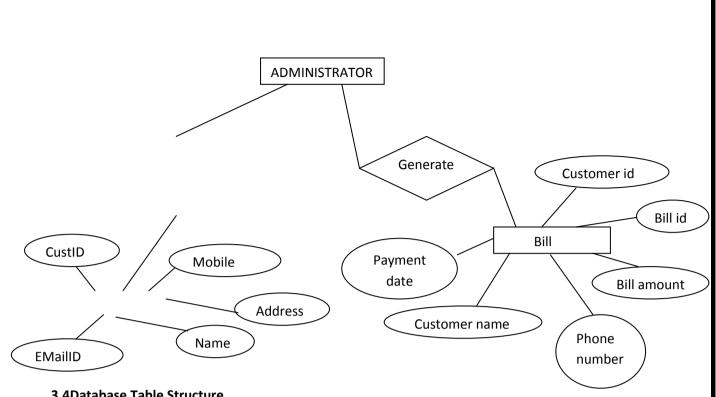
**Cardinality:** The data model must be capable of representing the number of occurrences of objects in a given relationship. The cardinality of an object-relationship pair are:

**One-to-one** (1:1): An occurrence of object 'A' can relate to one and only one occurrence of object 'B' and an occurrence of 'B' can relate to only one occurrence of 'A'.

**One-to-many** (1:N): One occurrence of object 'A' can relate to one or many occurrences of object 'B' but an occurrence of 'B' can relate to only one occurrence of 'A'.

**Many-to-many** (M: N): An occurrence of object 'A' can relate to one or more occurrences of 'B', while an occurrence of 'B' can relate to or more occurrences of 'A'. Cardinality defines "the maximum number of object relationships that can participate in a relationship".

# 3.3 ER Diagram Customer id Bill id Date of booking Booking id Permanent address Kilometers consumed Pick up address CAB Car no Drop off address Model Phone No. Name Cab type Books Name Cab type Car no Address Driver id Cab details Model Driver details **Total cabs** Phone No. Maintain Maintain 30



**3.4Database Table Structure** 

Database Name

PartyZone

### **Sample Tables**

- Cab\_Details
- Bill\_Generation
- Cab\_Booking
- Driver\_Detail
- Customer

## **CAB DETAILS TABLE**

Field	Field code	Field size	Data type	Description	Constraints
Cab type	Id_code	20	varchar	A/c or non a/c	NOT NULL
Cab no	Id_code	20	varchar	No. of car	Primary key

Cab model	Id_code	20	Varchar	Cab model	NOT NULL
				.Ex-Innova	
Total cabs	Id_code	20	varchar	Total cabs available	NOT NULL

# **BILL GENERATION TABLE**

Field	Field code	Field size	Data type	Description	Constraints
Customer id	Id_code	20	varchar	Displays cust id	Not null
Bill id	Id_code	20	varchar	Displays bill id	Primary key
Bill amount	Id_code	20	Varchar	Shows total bill amount	NOT NULL
Payment date	Id_code	20	varchar	Date of payment	NOT NULL
Customer name	Id_code	20	varchar		
Phone number	Id_code	20	varchar		

# CAB BOOKING TABLE

Field	Field code	Field size	Data type	Description	Constraints
Date of booking	Id_code	20	varchar	Includes date of booking of cab	NOT NULL
Booking id	Id_code	20	varchar	Shows a unique booking id	Primary key
Customer id	Id_code	20	Varchar	Shows cust id	Not null

bill id	Id_code	20	varchar	Shows bill id	Not null
Pick up address	Id_code	20	varchar	Displays pick up address	NOT NULL
Drop down address	Id_code	20	varchar	Displays drop down address	NOT NULL
Kilometers consumed	Id_code	20	Varchar	Calculate total kilometers consumed	NOT NULL
Permanent address	Id_code	20	varchar	Displays permanent address	NOT NULL
Name	Id_code	20	varchar	Displays name of customer	NOT NULL
Phone number	Id_code	20	varchar	Displays number of customer	Not null
Cab type	Id_code	20	varchar	Displays cab type eg. a/c non a/c	Not null
Model	Id_code	20	varchar	Displays model . eg indica	Not null
Car no	Id_code	20	varchar	Displays car no.	Not null

## **DRIVER DETAILS TABLE**

Field	Field code	Field size	Data type	Description	Constraints
Name	Id_code	20	varchar	Displays	NOT NULL
				name of	

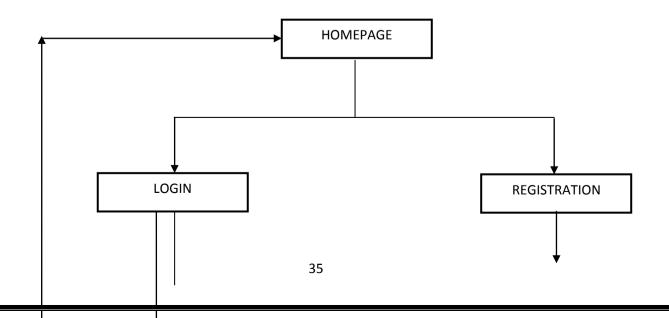
				driver	
Driver id	Id_code	20	varchar	Displays driverl id	Primary key
Phone number	Id_code	20	Varchar	Display phone number	Not null
address	Id_code	20	varchar	Display address of driver	Not null

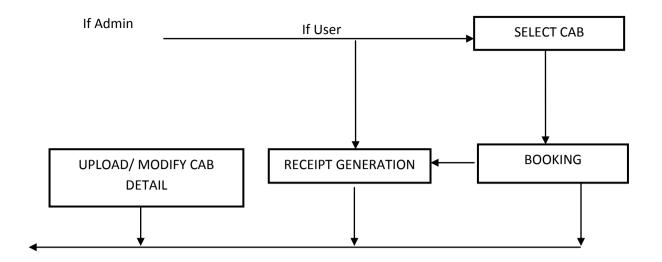
## Customer

Field	Field code	Field size	Data type	Description	Constraints
CustID	Id_code	20	varchar	CustomerID	NOT NULL
Name	Id_code	20	varchar	Nameof Customer	Primary key
Mobile	Id_code	20	number	Mobile Number of customer	
Address	Id_code	20	varchar	Total cabs available	NOT NULL
EMailID	Id_code	50	Varchar	Email ID	

#### 3.5 Site Map w.r.t. Various Users

A site map is a **list of pages** of a web site accessible to crawlers or users. It can be either a document in any form used as a planning tool for **web design**, or a web page that lists the pages on a web site, typically organized in **hierarchical fashion**. This helps visitors and search engine bots find pages on the site. A site map provides a general top-down view of the overall site contents. Sitemaps are an easy way for webmasters to inform search engines about pages on their sites that are available for crawling. In its **simplest form**, a Sitemap is an XML file that lists **URL**s for a site along with **additional metadata** about each URL so that search engines can more intelligently crawl the site.





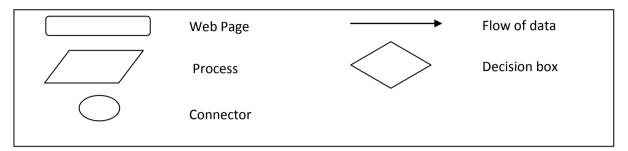
#### 3.6 Activity Diagram w.r.t. major Modules

An activity diagram is a special kind of diagram that shows the flow from activity to activity within a system. Activity diagrams address the dynamic view of a system. They are especially important in modeling the function of a system and emphasize the flow of control among objects. An activity is an ongoing monatomic execution within a state machine. Activities ultimately result in some action that is made up of executable atomic computations that result in a change in state of the system or a return of a value.

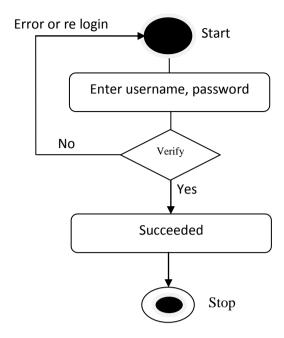
#### 1.1.1 Activity Diagram Components:

- 1) Activity states and action states action states are executable atomic computations. They are the states of a system each representing the execution of an action. Action states are atomic i.e., events may occur but the work of the action state is not interrupted. Activity states are not atomic i.e., they may be interrupted and they take some time to complete. An action state is a special case of an activity state.
- 2) **Transitions** they represent the path from one action or activity state to the next action or activity state. It is denoted by a simple directed line.

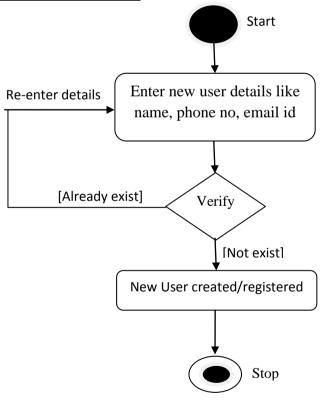
3) Objects – objects can also be involved in the flow of control associated with an activity diagram. Not only the flow of an object through the activity diagram, but how its role, state and attribute values change can also be depicted.



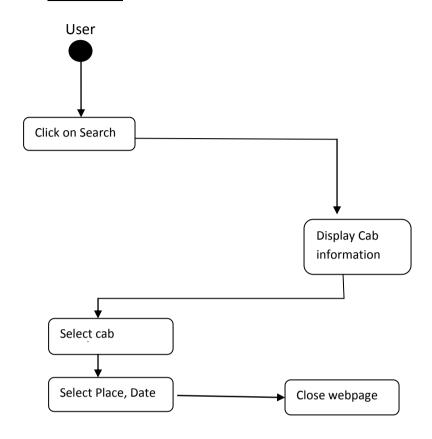
#### 3.6.1 Login Activity Diagram



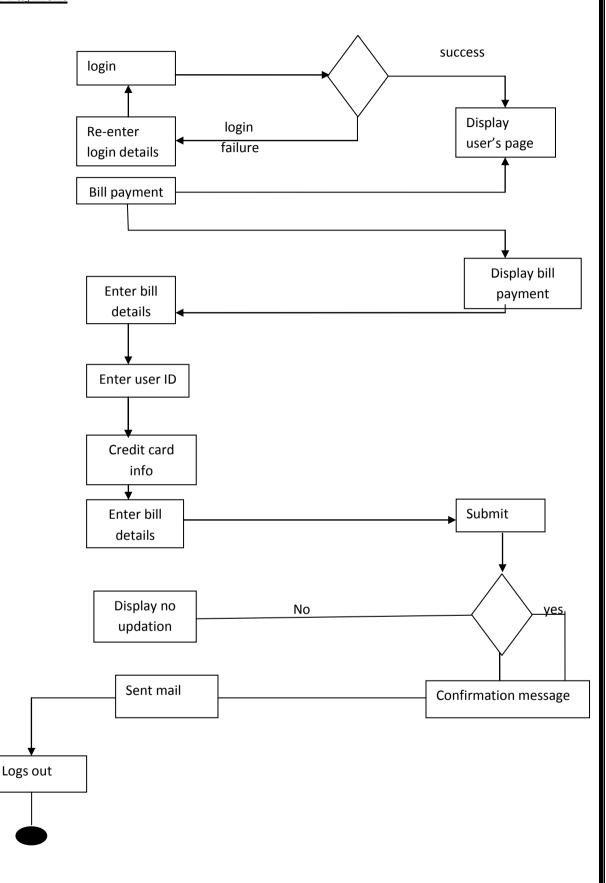
### 3.6.2 Registration Activity Diagram



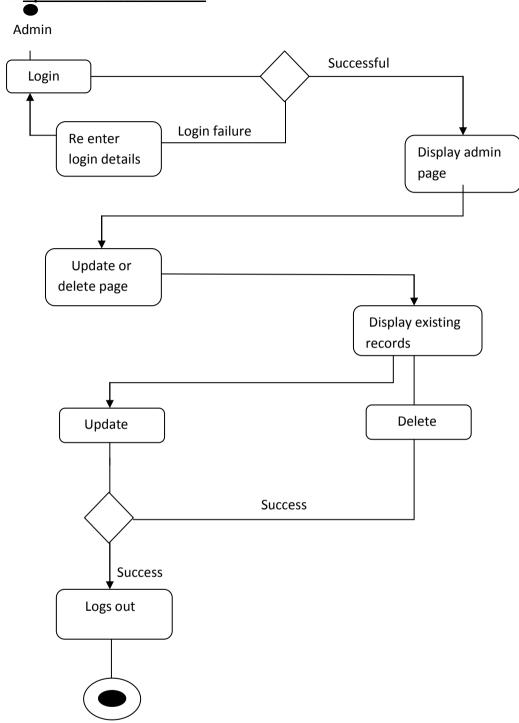
#### 3.6.3 CAB Search



#### 3.6.4 Bill Payment



### 3.6.5 Update or Delete cab detail



#### 3.7 Sequence Diagram's

A sequence diagram in a Unified Modeling Language (UML) is a kind of interaction diagram that shows how processes operate with one another and in what order. It is a construct of a Message Sequence Chart. A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario. Sequence diagrams typically are associated with use case realizations in the Logical View of the system under development.

Sequence diagrams are sometimes called event diagrams, event scenarios, and timing diagrams.

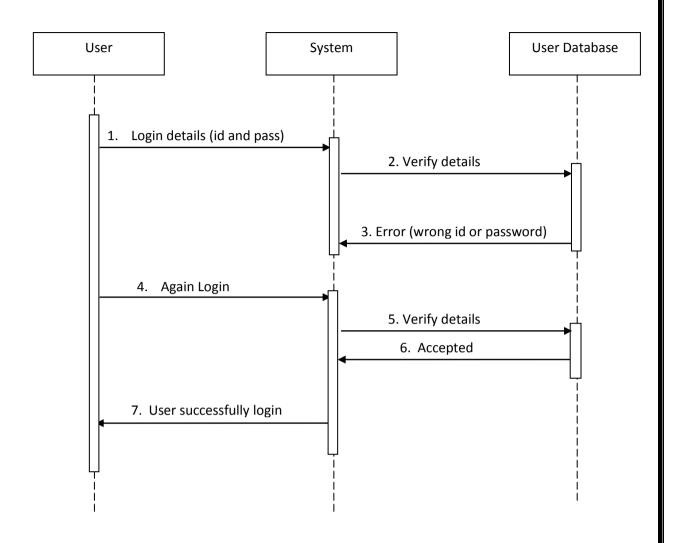
#### The diagram's purpose

The sequence diagram is used primarily to show the interactions between objects in the sequential order that those interactions occur. Much like the class diagram, developers typically think sequence diagrams were meant exclusively for them. However, an organization's business staff can find sequence diagrams useful to communicate how the business currently works by showing how various business objects interact. Besides documenting an organization's current affairs, a business-level sequence diagram can be used as a requirements document to communicate requirements for a future system implementation. During the requirements phase of a project, analysts can take use cases to the next level by providing a more formal level of refinement. When that occurs, use cases are often refined into one or more sequence diagrams.

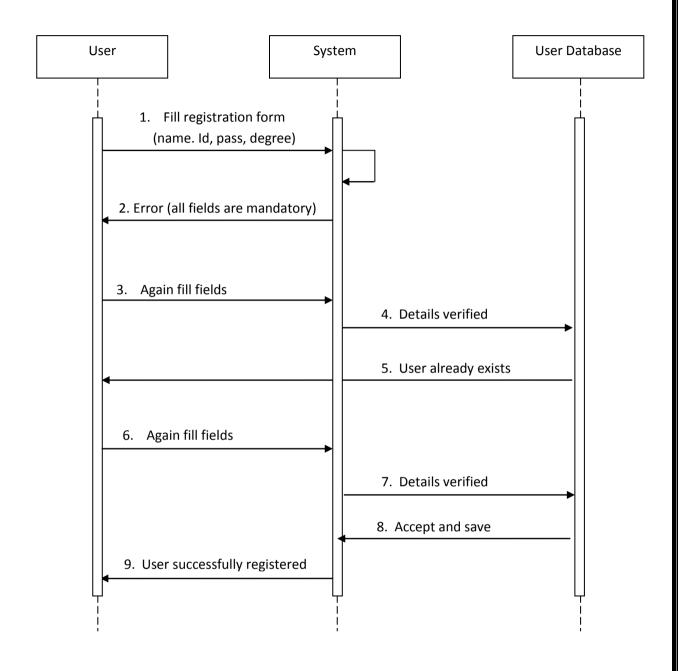
An organization's technical staff can find sequence diagrams useful in documenting how a future system should behave. During the design phase, architects and developers can use the diagram to force out the system's object interactions, thus fleshing out overall system design.

One of the primary uses of sequence diagrams is in the transition from requirements expressed as use cases to the next and more formal level of refinement. Use cases are often refined into one or more sequence diagrams. In addition to their use in designing new systems, sequence diagrams can be used to document how objects in an existing (call it "legacy") system currently interact. This documentation is very useful when transitioning a system to another person or organization.

### 3.7.1 Sequence Diagram for LOGIN

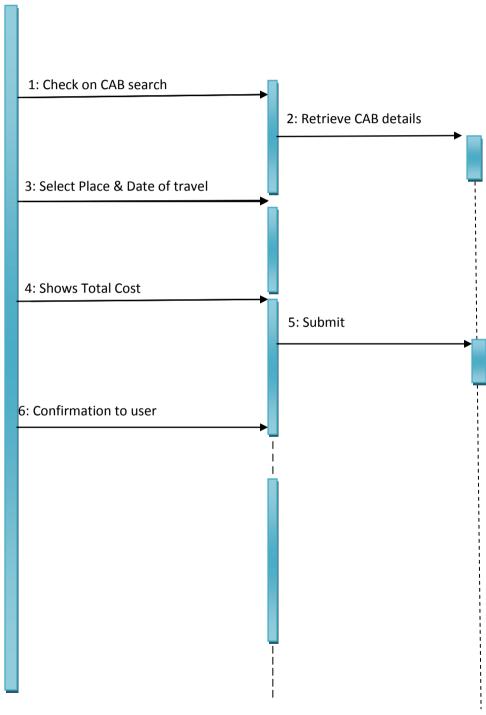


#### 3.7.2 Sequence Diagram for REGISTRATION



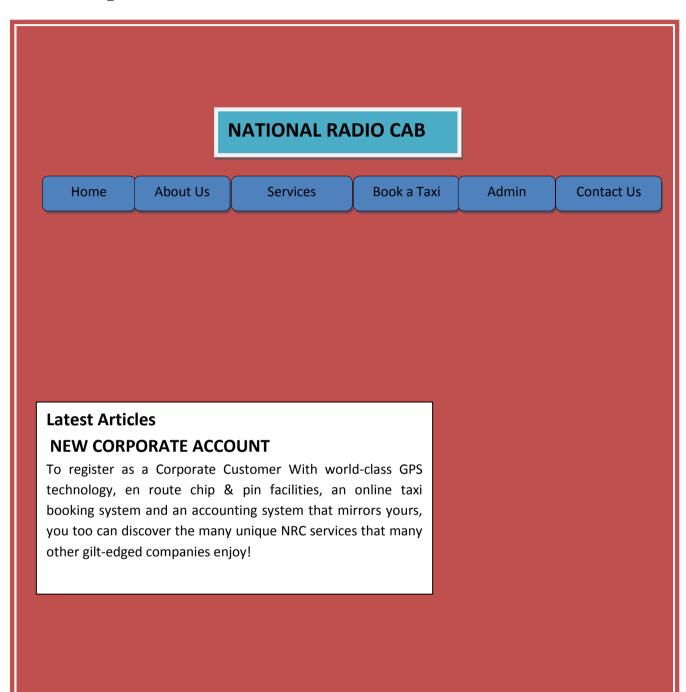
## 3.7.3 Sequence Diagram for CAB Booking



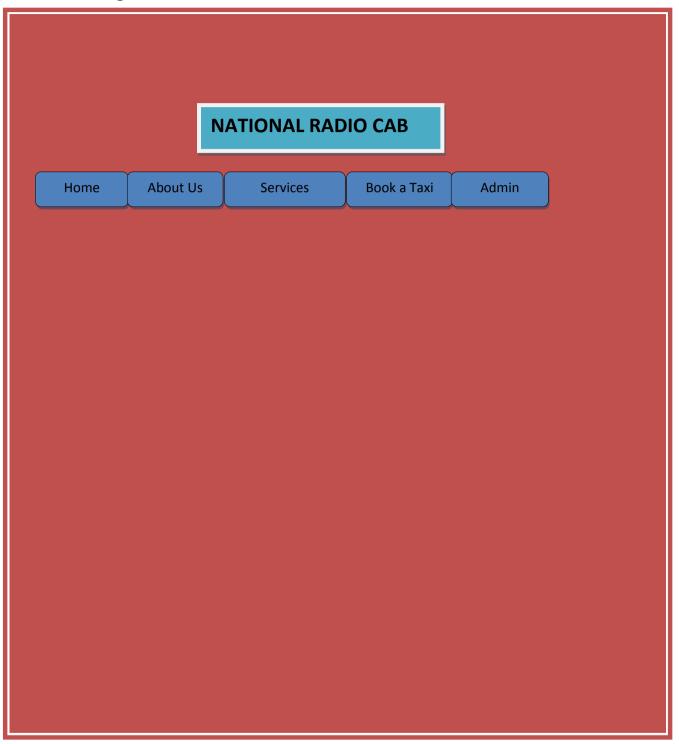


#### 3.8 All Webpages Design Layout with brief descriptions

### **Home Page**



# **CAB Booking**



# **Login Page**



#### **CAB Detail Form**



Administrator Can insert New Cab Detail from this form. Admin can modify or delete record from this form.