

# **Madhav Institute of Technology & Science, Gwalior**

(A Govt. Aided UGC Autonomous Institute Affiliated to RGPV, Bhopal)



Project Report  
On  
**“INDIAN DRONE SERVICES”**

Submitted by~  
**ISHAN KHAN**  
(0901CA201022)

**Mentor:**

**AJEET SINGH, DIRECTOR, CYBER ROUTE INFOTECH PVT. LTD.**

**Dr. R.S. JADON, PROJECT COORDINATOR, M.C.A.**

**DEPARTMENT OF COMPUTER SCIENCE&ENGINEERING**

**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE**

**GWALIOR – 474020 (MP) est. 1957**

MAY – JUNE 2022

# **Madhav Institute of Technology & Science, Gwalior**

(A Govt. Aided UGC Autonomous Institute Affiliated to RGPV, Bhopal)



Project Report

On

## **“INDIAN DRONE SERVICES”**

A project report submitted in partial fulfilment of the requirement for the degree  
of

**“Master of Computer application”**

in

**CSE**

Submitted by~

**ISHAN KHAN**

**(0901CA201022)**

**Mentor:**

**AJEET SINGH, DIRECTOR, CYBER ROUTE INFOTECH PVT. LTD.**

**Dr. R.S. JADON, PROJECT COORDINATOR, M.C.A.**

Submitted to:

**DEPARTMENT OF COMPUTER SCIENCE&ENGINEERING**

**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE**

**GWALIOR - 474005 (MP) est. 1957**

MAY-JUNE 2022



*A Unit of Sergeant Infotech Pvt. Ltd.*

135-E Mayur Market Behind Sbi Bank Thatipur Gwalior M.P.(india)

TO WHOM SO EVER IT MAY CONCERN

## CERTIFICATE OF COMPLETION

Ref.: CRIPL/IT/2022-071

Date: May 25, 2022

This is to certify that **Mr. Ishan Khan** MCA from **Madhav Institute of Technology and Science** successfully completed four months (Jan 15,2022 to May 15,2022) long Project Training at this Organization.

During the period of this program with us he had been exposed to different technologies like Python, Html5, CSS, jQuery, JavaScript, Php and Sql and make project “**Indian Drone Services**”. This training program includes training, orientation and focuses primarily on learning and developing new skills and gaining a deeper understanding of concepts

We wish his every success in his life and career.

With best wishes,

**Thank You**

CYBERROUTE INFOTECH PVT.LTD,

Ajeet Singh (Director)

Place: Gwalior

Date: May 25,2022

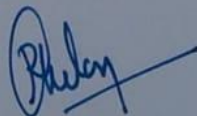


**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

**CERTIFICATE**

This is certified that **ISHAN KHAN** (0901CA101022) has submitted the project report titled (**Indian Drone Services**) under the mentorship of **Ajeet Singh, Cyber Route Infotech PVT. LTD.**, in partial fulfilment of the requirement for the award of degree of Master of Computer Application of Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.




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Professor and Head,

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Professor & HOD

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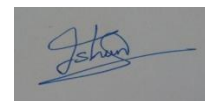
M.I.T.S. Gwalior

# **MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

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## **DECLARATION**

I hereby declare that the work being presented in this project report, for the partial fulfilment of requirement for the award of the degree of Master of Computer Application in Computer Science and Engineering at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Ajeet Singh, Cyber Route Infotech PVT. LTD.** I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.



**ISHAN KHAN**  
**0901CA201022**

**Final Year,**  
**Master of Computer Application,**  
**Computer Science & Engineering**

# **MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

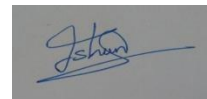
## **ACKNOWLEDGEMENT**

The full semester project has proved to be pivotal to my career. I am thankful to my institute, **Madhav Institute of Technology and Science** to allow me to continue my disciplinary project. I extend my gratitude to the Director of the institute, **Dr. R. K. Pandit** and Dean Academics, **Dr. Manjaree Pandit** for this.

I would sincerely like to thank my department, **Department of Computer Science and Engineering**, for allowing me to explore this project. I humbly thank **Dr. Manish Dixit**, Professor and Head, Department of Computer Science and Engineering, for his continued support during the course of this engagement, which eased the process and formalities involved.

It is my great pleasure that, I present this project report on "**Indian Drone Services**". I am extremely thankful to "**Cyber Route Infotech Pvt. Ltd**", for giving an opportunity to undertake this project in this esteemed organization and supporting me to complete this Internship project. I am very thankful to **Ajeet Singh** and all the colleague of "**Cyber Route Infotech Pvt. Ltd**", Gwalior for their valuable guidance, encouragement, inspiration and working devotion for the completion of the Internship project.

I am sincerely thankful to my faculty coordinator. I am grateful to the guidance of **Dr. Anshu Chaturvedi**, (Project Coordinator), **Dr. R.S. Jadon** (M.C.A., Program Coordinator), **Prof. Parul Saxena** (M.C.A., Professor), for his continued support and guidance throughout the project. I am also very thankful to the faculty and staff of the department.



**ISHAN KHAN**  
**0901CA201022**

**Final Year,**  
**Master of Computer Application,**  
**Computer Science & Engineering**

## ABSTRACT

An Indian Drone Services is an online website platform that provides the different Services of drones like Purchasing, Sale, Maintenance Rental and blogging. Indian Drone Services is a broadly adopted platform that offers several on-demand operations to help corporates scale and grow as well as give detail about participation of different drones in our life. It is software, and internet capabilities that helps an enterprise manage customer relationship effectively and systematically. The goal of Indian Drone Services is to understand and anticipate the needs of current and potential customer to increase customer retention and loyalty while optimizing the way drone and services are sold.

Nowadays, there is a growing need for flying drones with diverse capabilities for both civilian and military applications. There is also a significant interest in the development of novel drones which can autonomously fly in different environments and locations and can perform various missions. In the past decade, the broad spectrum of applications of these drones has received most attention which led to the invention of various types of drones with different sizes and weights.

It is a strategy used to learn more about customers' needs and behaviours in order to develop stronger relationships with them. After all, good customer relationships are at the heart of business success. There are many technological components to Indian Drone Services but thinking about Indian Drone Services in primarily technological terms is a mistake. The more useful way to think about Indian Drone Services is as a process that will help bring together lots of pieces of information about customers, rental, marketing effectiveness, responsiveness and market trends

The objective is to deliver a customer need through every channel and store it in the Indian Drone Services system to enable the company to truly understand customer action. Indian Drone Services software helps an organization build a database about its customer that management, rent to people, customer service provider and even customer can access information to access customer needs with product and offering.

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# CHAPTER -1

# **1. Introduction: -**

## **About Project: -**

An Indian Drone Services is an online website platform that provides the different Services of drones like Purchasing, Sale, Maintenance Rental and blogging. Indian Drone Services is a broadly adopted platform that offers several on-demand operations to help corporates scale and grow as well as give detail about participation of different drones in our life. It is software, and internet capabilities that helps an enterprise manage customer relationship effectively and systematically. The goal of Indian Drone Services is to understand and anticipate the needs of current and potential customer to increase customer retention and loyalty while optimizing the way drone and services are sold.

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The objective is to deliver a customer need through every channel and store it in the Indian Drone Services system to enable the company to truly understand customer action. Indian Drone Services software helps an organization build a database about its customer that management, RENTAL people, customer service provider and even customer can access information to access customer needs with product and offering.

The technical name of drones is “Unmanned Aerial Vehicles” (UAVs). •They are aerial vehicles which come in wide varieties of sizes, shapes and functions, which are controlled either by remote or control systems from the ground. • They are generally used to carry out tasks in which manned flight is considered to be risky. •Drones mostly find use in military services, but are now days finding use in various civilian operations such as search and rescue, weather analysis etc.

Basically, drone is a flying robot. Working in combination with GPS, the flying machine may be remotely controlled or can fly autonomously by software controlled flight plans in their embedded systems. Drones are most often used in military services. However, it is also used for weather monitoring, firefighting, search and rescue, surveillance and traffic monitoring

[2] etc. In recent years, the drone have come into attention for a number of commercial uses. In late 2013, Amazon announced a plan to use unmanned aerial vehicles for delivery in the nearby areas future [1]. It is known as Amazon Prime Air, it is estimated to deliver the orders within 30 minutes inside 10 miles of distance [1]. So it is clear that domestic usage of UAV has vast future possibility in different fields rather than military usage. Drones for military use were started in the mid-1990s with the High-Altitude Endurance Unmanned Aerial Vehicle Advanced Concept Technology Demonstrator (HAE UAV ACTD) program managed by the Défense Advanced Research Projects Agency (DARPA) and defense Airborne Reconnaissance Office (DARO)

### **Modules of RENTAL: -**

- **CUSTOMER DATA MAINTENANCE MODULE**

This module is responsible for the updating of CUSTOMER master database. If any new CUSTOMER joins the organization or leave the organization or there is any change in the CUSTOMER data, then it can be done with the help of this module. Addition, deletion and updating of CUSTOMER data are done by this module.

- **PRODUCT DATA MAINTENANCE MODULE**

This module is responsible for the management of data of different product available in the database. Addition, deletion and updating of the product data is done by this module. At the time of adding product this module also add data in inventory and discount\_allowed table.

- **ORDER PROCESSING MODULE**

This module is responsible for taking order by the customer and updating of different tables such as bill\_details, transaction , inventory and CUSTOMER performance. Whenever any customer place order for any product firstly the CUSTOMER checks whether the product is available in the inventory or not. If there is sufficient amount of product in the inventory then a unique bill no. is generated and record is saved in bill\_details and transaction table. This module also generates bill.

- **STOCK PROCESSING MODULE**

Time to time updating of stock is necessary for the proper functioning of RENTAL. Stock should be greater than reorder level, if stock is less than reorder level than addition of stock in the inventory is required. Time to time report of stock is generated and administrator and

Customer will get the information that which product is in stock and which one is not. If there is need of adding in the inventory than it can be done with the help of this module.

- **PRODUCT DATA MAINTENANCE**

This module is called whenever any new product is added , updated or deleted from the database. If any new record is added in the database than this module then user have to input details of product, inventory and price details. These details are saved in different table after performing validation checks. If there is any change in the features of the product than it also provide facility of editing. This is also responsible for providing information related to different product on demand.

- **QUOTA ASSIGNMENT**

This module is responsible for assigning quota of different CUSTOMER for different products. Quota is assigned for one year. Quota assignment is very important for estimating performance of the company and comparing actual performance with standard performance.

- **ANALYSIS MODULE**

Analysis module is responsible for performing analysis on different RENTAL, customer, product data to analyse RENTAL performance, customer RENTAL behaviour and RENTAL trend .

Different modules responsible for performing analysis are

- **RENTAL DATA ANALYSIS**

This Module is responsible for analysing RENTAL data of the basis of territory, product and CUSTOMER. This module compares quota with sale. Also tells with the help of ratios that whether actual sale is above standards or below.

- **CUSTOMER DATA ANALYSIS AND MAINTENANCE**

This module analyses data of customer on the basis of territory, occupation and incomer group. This module uses customer master, city details, transaction, bill details and complaint. It gives information related to customer satisfaction about particular product. If compares actual sale with complaint and gives ratio between sale and complaint. High ratios mean low customer satisfaction. This module is responsible for management of customer data. This data is accessed and maintained by the CUSTOMER. If product is sold to ant new customer

than data of new customer can be added in the database. If there is any change in the customer record such as change of address etc then the Customer can edit their records with the help of this module.

### **Parent Organization: -**

#### **CYBER ROUTE INFOTECH PVT. LTD.**

Cyberroute Infotech Pvt Ltd was incorporated in 2009 and is a complete IT solutions company. It is big corporate to small businesses and even entrepreneurial start-ups. We have a team of technically capable and devoted people, state-of-the-art facilities and infrastructure to back up offshore development. We offer a virtual expansion of client's development environment and dependable services. Our highly qualified and experienced IT professionals give your business a global perspective as well as profitability by delivering turnkey IT solutions. The group's top-notch analysts, designers, application developers and support specialists strive to provide most effective solutions to the customers. Recognized as one of the top web designing and development companies of India, Cyberroute Infotech Pvt Ltd has a business experience of 4 years and serves a diverse list of clients spread globally. As an integrated IT services providing firm we offer a cross-fertilization of strategic ideas in branding, websites & online marketing solutions.

#### **COMPANY SERVICES**

Cyber Route Infotech Gwalior offers best IT Software, Hardware, Networking training and placement in technologies like CCNA Training in Gwalior, Web Designing Training in Gwalior, Java Training in Gwalior, Python Training in Gwalior, Android Training in Gwalior, CPCT Training in Gwalior, DCA Training in Gwalior , AutoCAD Training in Gwalior, PHP Training in Gwalior, Short hand steno Training in Gwalior , Tally Training in Gwalior , , Linux Training in Gwalior, Ethical Hacking Training in Gwalior, Digital Marketing Training in Gwalior, Hardware and Networking Training in Gwalior , Software Development Training in Gwalior, C, C++ Training in Gwalior and more to the students. Summer Training in Gwalior and more to the students.

#### **COMPANY MISSION**

Certified Education is our Aim. Your Training is our aim. We focus on offering you the best class-room / virtual experience along with the best customer service, to ensure that you will

come back class-after-class. Our customer satisfaction and quality measurement process is monitored by the vendors and we win awards year-after-year demonstrating that we are among the best.

Our certification from our technology partners also extends to our facilities. When you enter an Cyberoute Infotech training facility, you will be equipped with everything you need for a successful and comfortable learning experience. Our dedication to your success is reflected in our friendly staff, enthusiastic instructors and progressive classroom settings and equipment.

## **About Technologies: -**

### **Tool's Information-**

#### **Software Requirements: -**

Basic software requirements to Implement this Project –

Frontend – HTML5, CSS, JavaScript, Bootstrap, jQuery

Backend – PHP, SQL

Database – MySQL

Tools – Visual Studio Code and Xampp Soft.

Basic software requirements to run this project –

- Any web browser with HTML5.
- Any windows-based operating system.

#### **Hardware Requirement (Minimum): -**

Basic hardware requirements to Implement this Project –

- Disk Space: 20 GB
- Database: MySQL server
- RAM: GB+
- Processor: 1.0GHz+

Basic hardware requirements to run this Project

- Stable internet connection with speed up to 512 kbps for every

Individual system.

- And installation of any web browser these are minimum hardware

# CHAPTER -2

## **2. System Analysis: -**

It is a process of collecting and interpreting facts, identifying the problems, and decomposition of a system into its components.

### **REQUIREMENT SPECIFICATION: -**

For identifying the need of the System, we consider the following:

#### **The performance of the System**

The performance of the System basically depends on the System Design, tools used in the system, coding, etc. The performance of the system should be fast, accurate & reliable.

#### **The information being supplied and its form**

- The information being supplied should be very precise, correct and updated. All the information regarding project should be collected from the reliable source. In Project “Customer Relationship Management and RENTAL Force Automation”, all the information regarding
- Customer
- Product
- Transactions
- Complaint
- Offering
- Schedule
- Customer feedbacks

#### **Study of existing System**

The existing System is not well efficient which provokes to develop the new System with some modifications in the older system wherever required. If the existing System is not that much efficient, as required for better results & performance, then it should be converted into the new advanced & more efficient System. The new System should be well efficient, fast as compared with the older one to show better results than previous one.

## **The security of the data and software**

The Security of both Data & Software is the most important and prime thing in the System Analysis & Design. Data & Software should be kept secured from the unreliable sources otherwise it leads to the Piracy of both data & Software. For proper security username and password is provided to every user of the system. They can access the system as per their authority.

The security of the equipment and personnel, etc is also very important in the System design. Proper measures are to be taken for the security of Equipment's, Personnel, etc for the proper functioning of the System.

### **2.1.1 Study of existing System –**

In the existing system, each task is carried out manually and processing is also a tedious job. In previous system travellers were maintaining time table details manually in pen and paper, which was time taking and costly. The travellers are not able to achieve its need in time and also the results may not accurate. Because of the manual maintenance there are number of difficulties and drawbacks exist in the system. Some of them are

Drawbacks of the Existing System:

- Increased transaction leads to increased source document and hence maintenance becomes difficult.
- If any admin, user entry is wrongly made then the maintenance becomes very difficult.

**2** A feasibility study is a preliminary study undertaken before the real work of a project starts to ascertain the likelihood of the project's success. It is an analysis of all possible solutions to a problem and a recommendation on the best solution to use. It involves evaluating how the solution will fit into the corporation. It, for example, can decide whether an order processing be carried out by a new system more efficiently than the previous one.

### **Technical Feasibility -**

- Technical feasibility refers to the ability of the process to take advantage of the current state of the technology in pursuing further improvement. The technical

capability of the personnel as well as the capability of the available technology should be considered. Number of technical issues which are generally realized during the feasibility stage of investigations-

- Present technology, which is in case of this system is manual data management which is highly inefficient and inconsistent,
- Technical capacity of proposed equipment to hold data required using the system.
- Upgradeability of system if developed.
- Technical guarantee of accuracy, reliability, ease of access and data security.

- **Economic feasibility**

- one of the most frequently used technique for evaluating effectiveness of the system is economic analysis. The procedure is to determine the benefits and saving that are expected with the proposed system and compare it with cost. This involves the feasibility of the proposed project to generate economic benefits. The analyst can conduct analysis of economic feasibility by considering following issues-
- The cost to conduct a full systems investigation.
- The cost of hardware and software for class of application being consider.
- The benefits in the form of reduced cost or fewer costly errors.
- In case of “Indian Drone Services and RENTAL Force Automation System” the company has to maintain large amount of manpower, money and time resources. Huge amount of money can be saved if this system is automated.

- **Operational Feasibility**

- This feasibility is related to human organizational and political aspects. This feasibility is carried out by a small group of people who are familiar with information system technique and understand the parts of the business that are relevant to the project and are skilled in system analysis and design process. Issues involve in testing operational feasibility-
- Support of management
- Acceptability of current business method
- Need of change in existing system

- Involvement of user in planning and development of the project
- Effect of implementation of the proposed system.

## **SOFTWARE ENGINEERING PARADIGM APPLIED**

- Software Engineering is the establishment and use of sound engineering principles in order to obtain economically software that is both reliable and works efficiently on real systems.
- To solve actual problems in an industry / organizations setting, such as Central or State Govt. Sectors, Public / private Sectors, Colleges, Schools, etc., a Software Engineer or a team of engineers must incorporate a development strategy that encompasses the process, methods, tools layers, and the generic phases. This strategy is referred to as a Process Model or a Software Engineering Paradigm.

Models used for system development in project “Indian Drone Services and RENTAL Force Automation” , is Prototyping. Descriptions of these models are as following-

## **PROTOTYPE MODEL**

Prototyping is the process of building a model of a system. In terms of an information system, prototypes are employed to help system designers build an information system that intuitive and easy to manipulate for end users. Prototyping is an iterative process that is part of the analysis phase of the systems development life cycle.

During the requirements determination portion of the systems analysis phase, system analysts gather information about the organization's current procedures and business processes related the proposed information system. In addition, they study the current information system, if there is one, and conduct user interviews and collect documentation. This helps the analysts develop an initial set of system requirements.

Prototyping can augment this process because it converts these basic, yet sometimes intangible, specifications into a tangible but limited working model of the desired information system. The user feedback gained from developing a physical system that the users can touch and see facilitates an evaluative response that the analyst can employ to modify existing requirements as well as developing new ones. The prototyping model is a software development process that begins with requirements collection, followed by prototyping and

user evaluation. Often the end users may not be able to provide a complete set of application objectives, detailed input, processing, or output requirements in the initial stage. After the user evaluation, another prototype will be built based on feedback from users, and again the cycle returns to customer evaluation. The cycle starts by listening to the user, followed by building or revising a mock-up, and letting the user test the mock-up, then back.

Some Advantages of Prototyping:

- ◆ Reduces development time.
- ◆ Reduces development costs.
- ◆ Requires user involvement.
- ◆ Developers receive quantifiable user feedback.
- ◆ Facilitates system implementation since users know what to expect.
- ◆ Results in higher user satisfaction.
- ◆ Exposes developers to potential future system enhancements.
- ◆

## **SOFTWARE REQUIREMENT SPECIFICATIONS**

The Software Requirements Specification is produced at the culmination of the analysis task. The function and performance allocated to software as part of System Engineering are refined by:

- ◆ Establishing a complete information description of the System.
- ◆ A detailed functional description.
- ◆ A representation of System behavior .
- ◆ An indication of performance requirements and design constraints.
- ◆ Appropriate validation criteria, &
- ◆ Other information pertinent to requirements.
- ◆ User classes of the system are as following

**1. Administrator**- administrator is responsible for following activities-

- ◆ Assignment of Quota to customer
- ◆ Assignment of territory to Customer
- ◆ Adding and modifying Product Data
- ◆ Adding and modifying CUSTOMER data
- ◆ Adding stock to the inventory
- ◆ Performing different analysis on transaction, complaint, RENTAL and other data.
- ◆ Generating different reports
- ◆ Making user account and assigning authorities to them.

**RENTAL MODULE-** The Customer is responsible for greeting customers, helping them find items in the store, and ringing up purchases. To be successful as a Customer you must have excellent communication skills. A good Customer meets RENTAL objectives while remaining polite and helpful to customers.

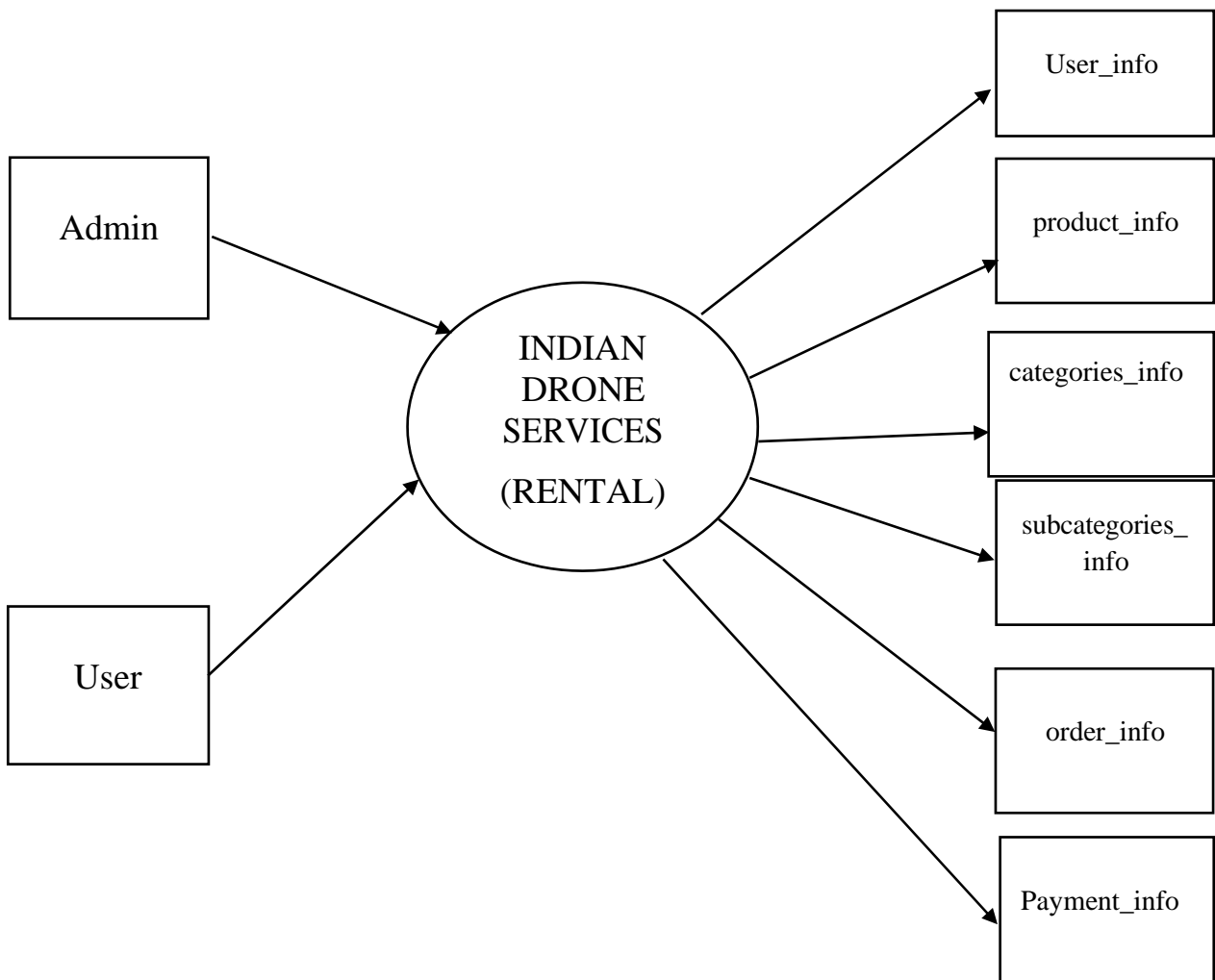
RENTAL is responsible for following activities

- ◆ Order processing
- ◆ Maintaining customer data
- ◆ RENTAL call management

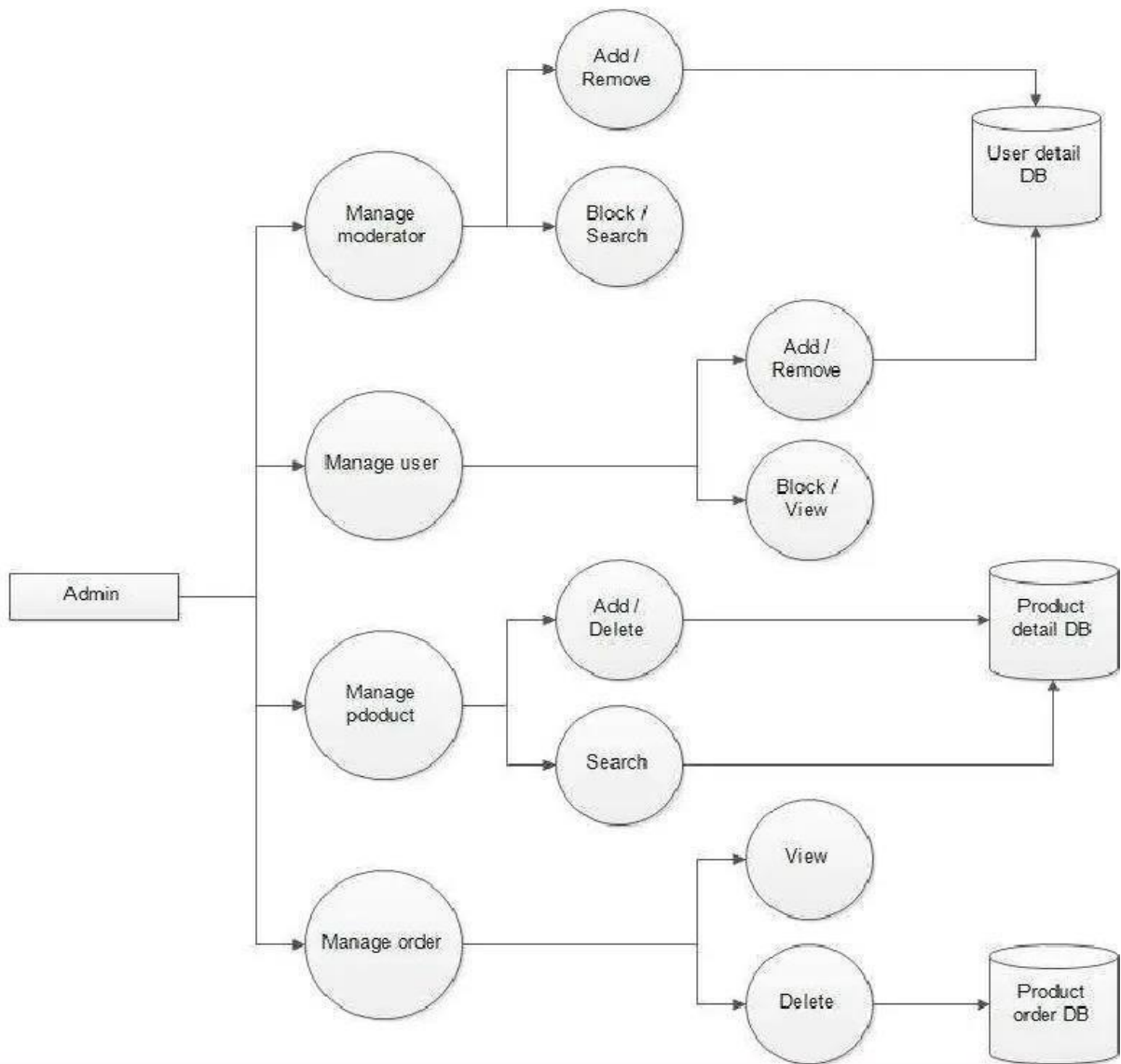
### **DATA FLOW DIAGRAM: -**

A data-flow diagram is a way of representing a flow of data through a process or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself

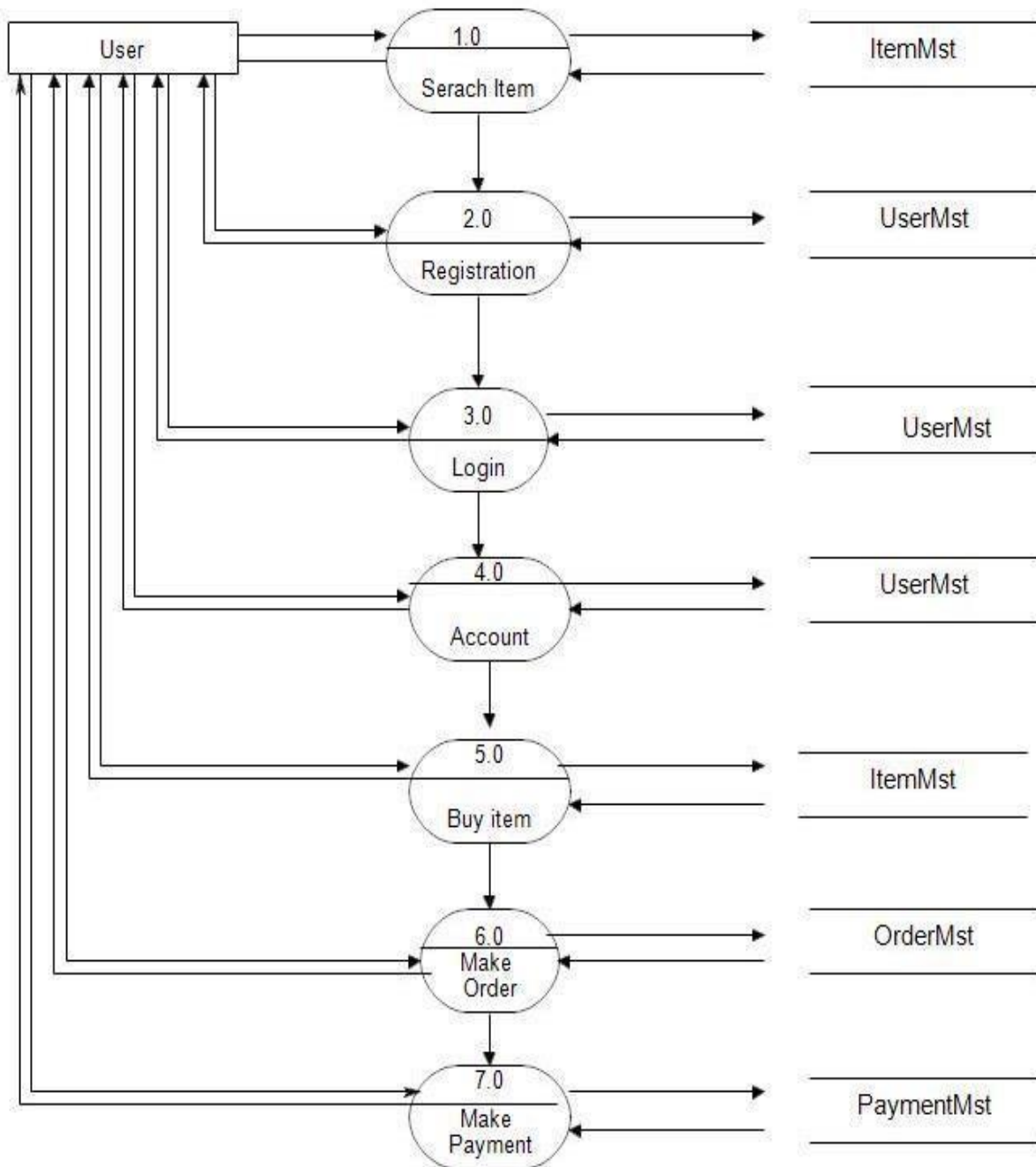
➤ **DFD Context level diagram (0 level DFD): -**



➤ **ADMIN (LEVEL 1) DFD DIAGRAM -**



➤ USER (LEVEL 1) DFD DIAGRAM -



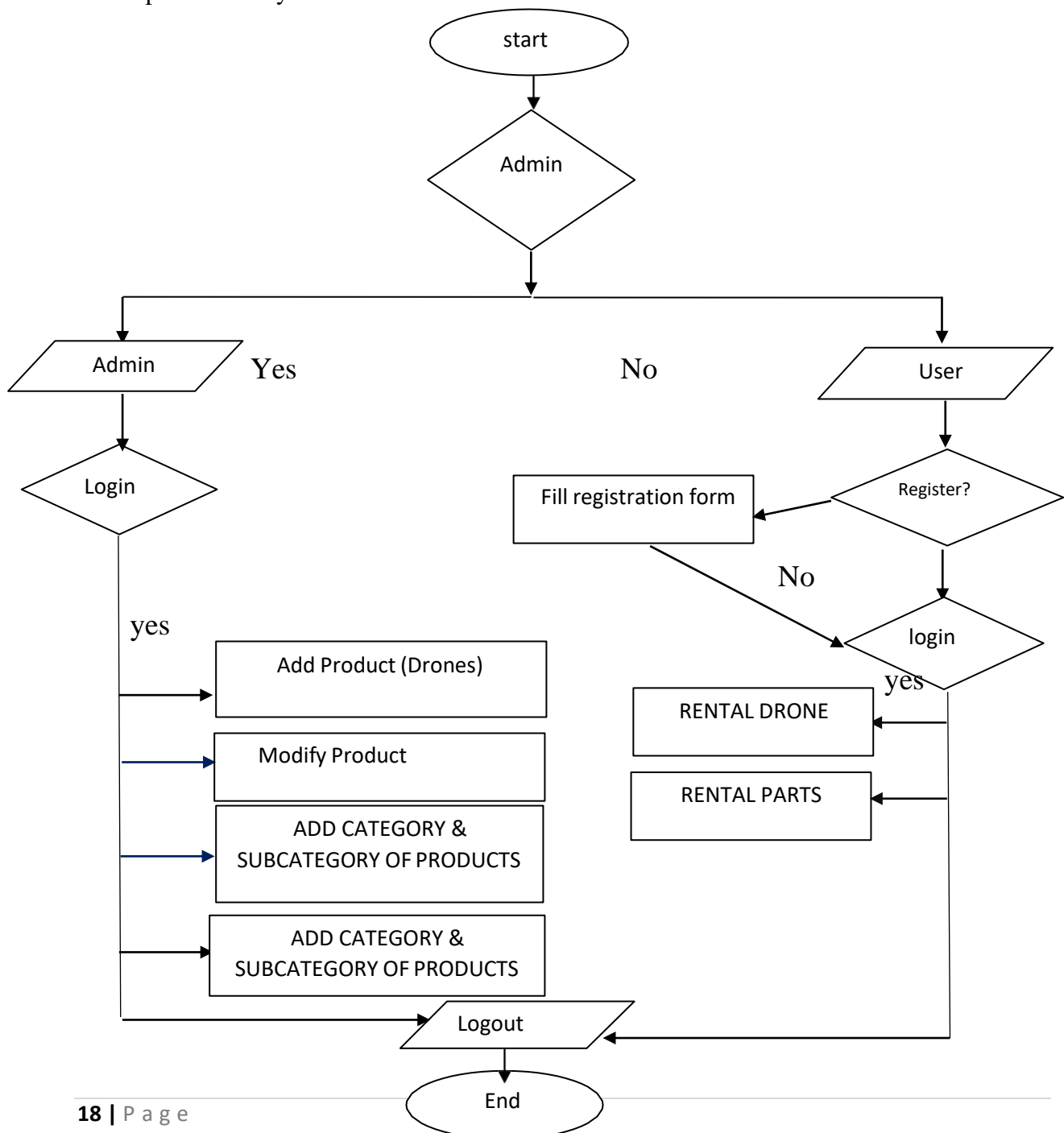
# CHAPTER -3

### **3. System Design: -**

It is a process of planning a new business system or replacing an existing system by defining its components or modules to satisfy the specific requirements.

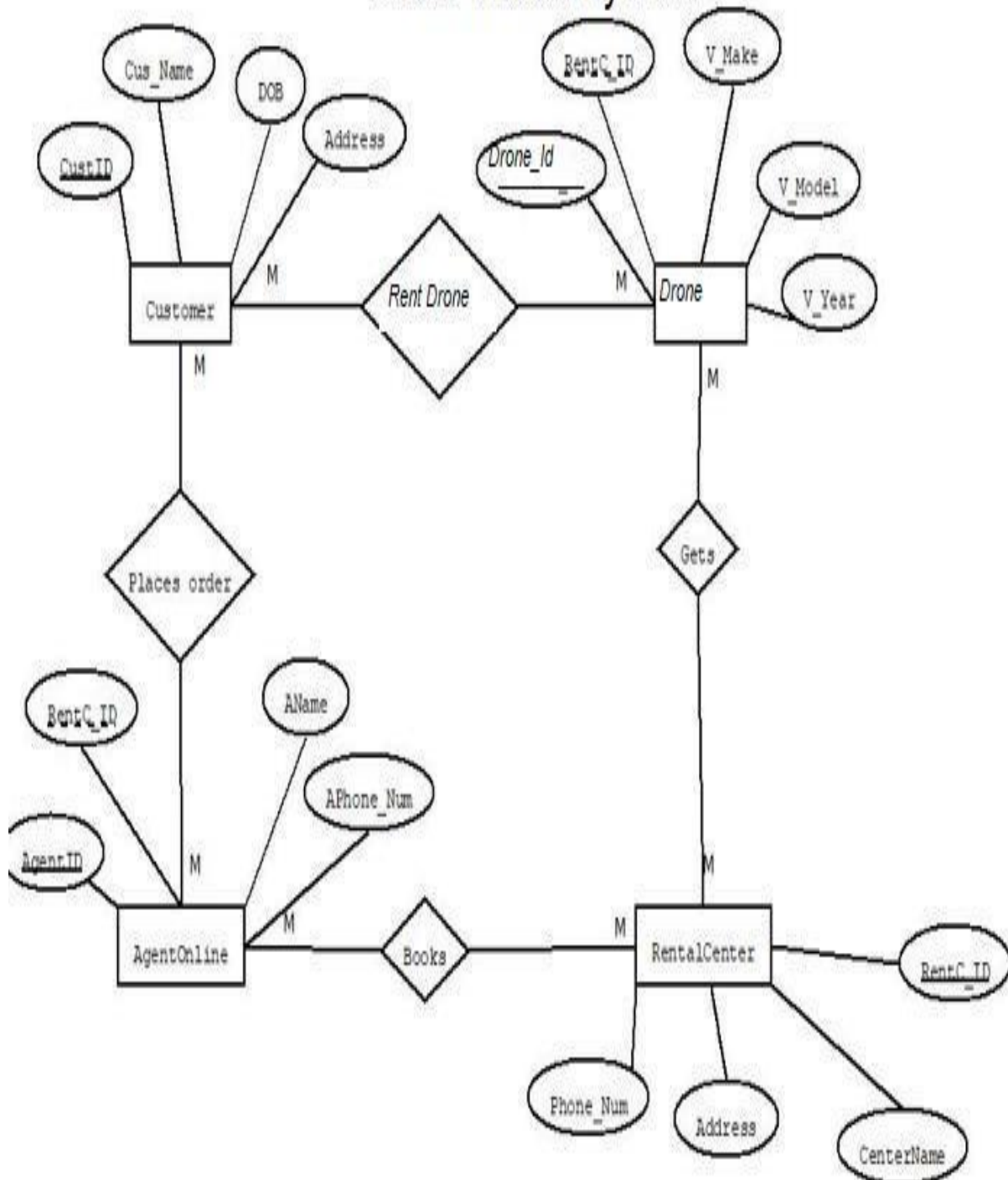
#### **System Flow Chart: -**

The system flow diagram is a visual representation of all processed in 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 diagram can't include minor parts of the system.

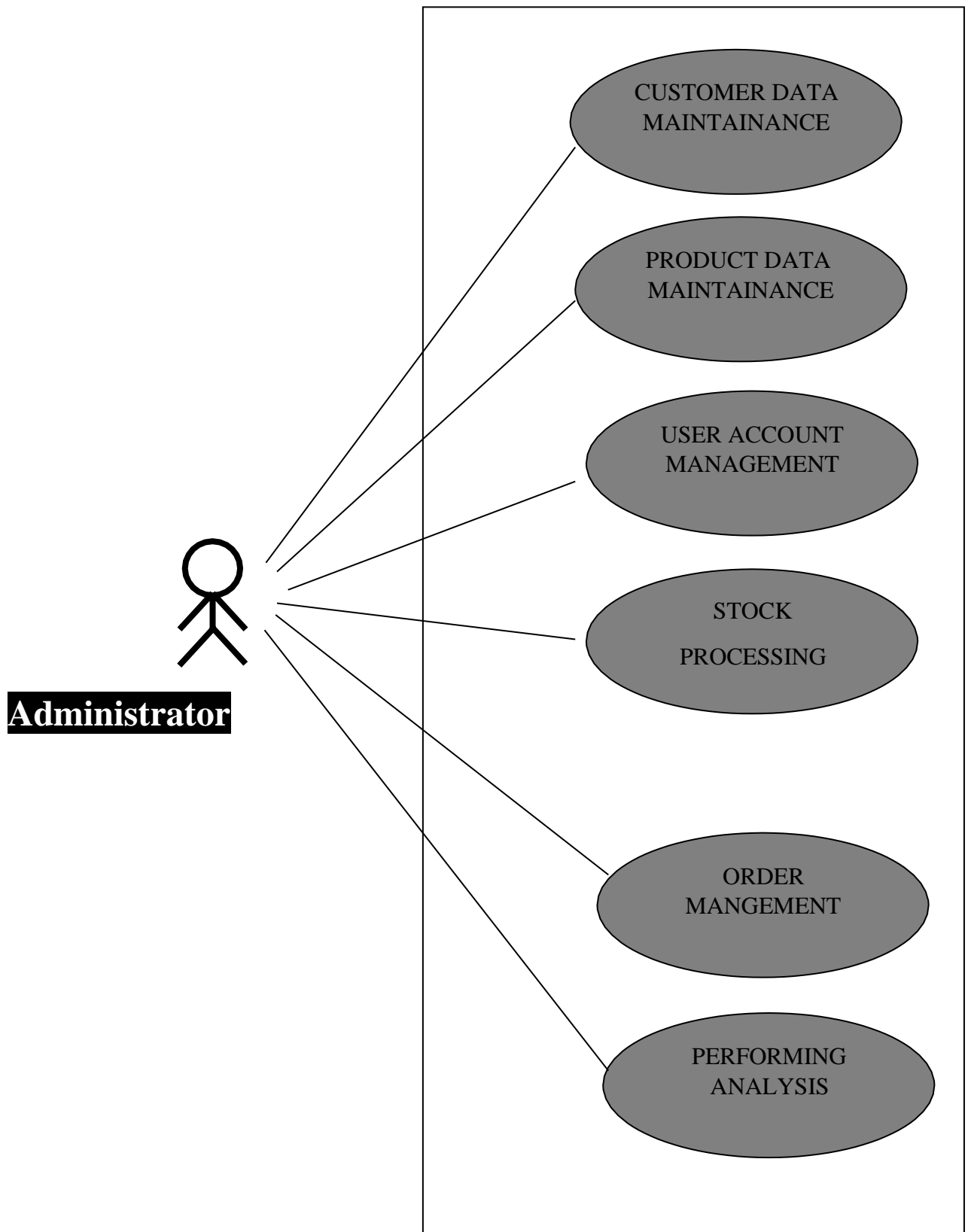


**E.R. Diagram: - (RENTAL Module)**

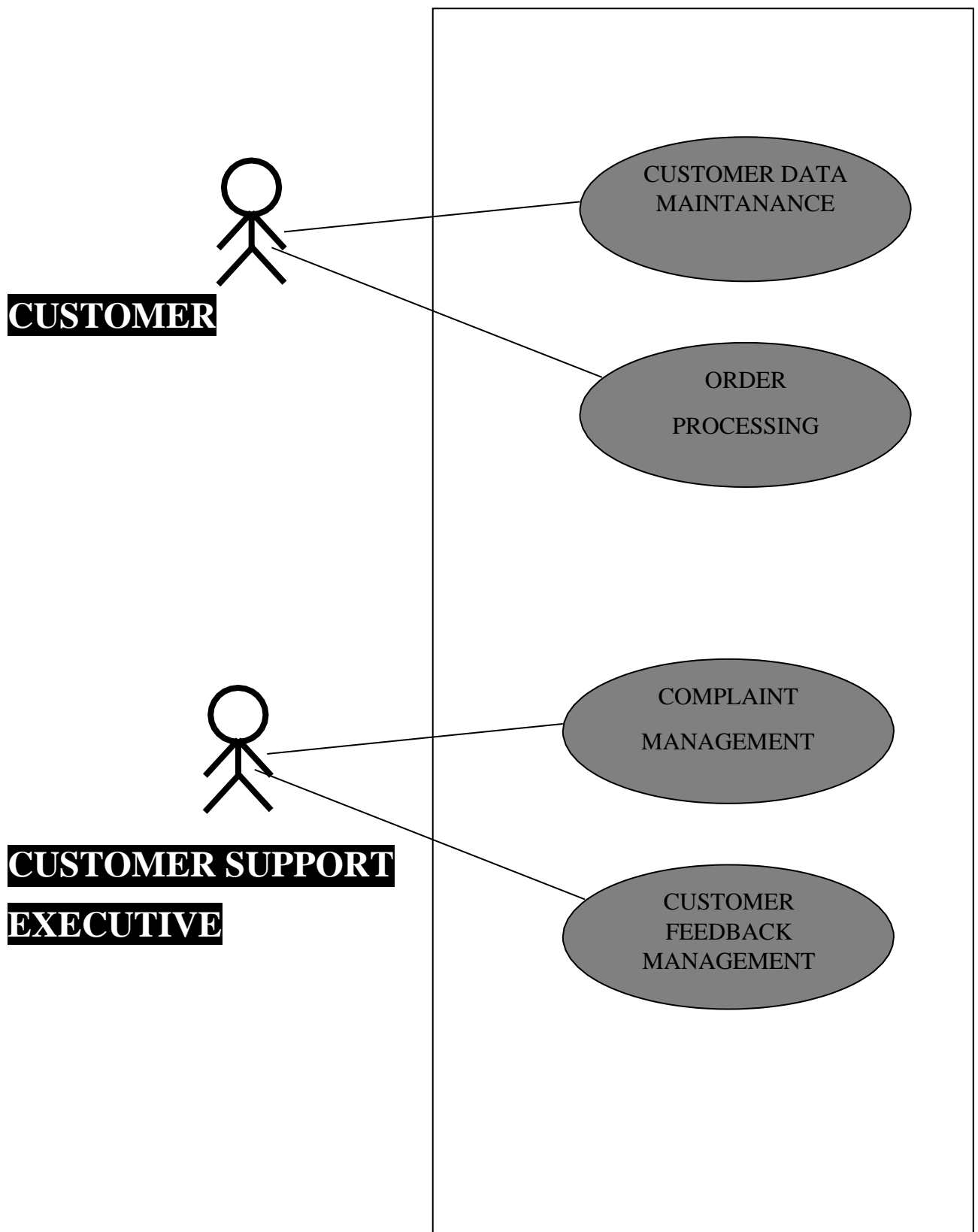
### Drone Rental System



➤ USE CASE DIAGRAM OF INDAIAN DRONE SERVICES-



➤ USE CASE DIAGRAM OF INDAIAN DRONE SERVICES-



Schema of Database: -

### 1. Table Name – user

#	Name	Data-Type	Key
1.	<b>Id</b>	<b>INTEGER</b>	<b>Primary</b>
2.	<b>email</b>	<b>VARCHAR (125)</b>	-
3.	<b>first name</b>	<b>VARCHAR (64)</b>	-
4.	<b>last name</b>	<b>VARCHAR (64)</b>	-
5.	<b>number</b>	<b>INTEGER</b>	-
6.	<b>password_hash</b>	<b>VARCHAR (128)</b>	-

### 2. Table Name - category

#	Name	Data-Type	Key
1.	<b>cid</b>	<b>INTEGER</b>	<b>Primary</b>
2.	<b>categoryName</b>	<b>VARCHAR (20)</b>	-
3.	<b>categoryDescription</b>	<b>VARCHAR (80)</b>	-
4.	<b>creationDate</b>	<b>VARCHAR (10)</b>	-
5.	<b>updationDate</b>	<b>VARCHAR(10)</b>	-

### 3. Table Name – subcategory

#	Name	Data-Type	Key
1.	<b>id</b>	<b>INTEGER</b>	<b>Primary</b>
2.	<b>cid</b>	<b>INTEGER</b>	-
3.	<b>subcategory</b>	<b>VARCHAR (40)</b>	-
4.	<b>creationDate</b>	<b>VARCHAR (10)</b>	-
5.	<b>updationDate</b>	<b>VARCHAR(10)</b>	-

#### 4. Table Name – products

#	Name	Data-Type	Key
1.	id	INTEGER	Primary
2.	cid	INTEGER	-
3.	subcategory	VARCHAR (40)	-
4.	checkout_date	VARCHAR (80)	-
5.	product_Name	VARCHAR (80)	-
6.	product_Company	VARCHAR (80)	-
7.	product_Price	INT (11)	-
8.	product_Price_Before_Discount	INT(11)	-
9.	product_Description	VARCHAR (80)	-
10.	product_image1	VARCHAR (80)	-
11.	product_image2	VARCHAR (80)	-
12.	product_image3	VARCHAR (80)	-
13.	shipping_Charge	INT(80)	-
14.	product_Availability	VARCHAR (70)	-
15.	postingDate	VARCHAR (10)	-

#### 5. Table Name – productreviews

#	Name	Data-Type	Key
1.	id	INTEGER	Primary
2.	Product_id	INTEGER	-
3.	quality	VARCHAR (80)	-
4.	Price	INTEGER	-
5.	value	INTEGER	-
6.	name	VARCHAR (80)	-
7.	summary	VARCHAR (80)	-
8.	review	VARCHAR (80)	-
9.	review_Date	INTEGER	-

#### 6. Table Name – payment

#	Name	Data-Type	Key
1.	<b>id</b>	<b>INTEGER</b>	<b>Primary</b>
2.	<b>email</b>	<b>VARCHAR (80)</b>	-
3.	<b>total_amount</b>	<b>VARCHAR (80)</b>	-
5.	<b>userid</b>	<b>INTEGER</b>	<b>Foreign</b>

### 7. Table Name – order

#	Name	Data-Type	Key
1.	<b>id</b>	<b>INTEGER</b>	<b>Primary</b>
2.	<b>userid</b>	<b>VARCHAR (80)</b>	-
3.	<b>product_id</b>	<b>VARCHAR (12)</b>	-
4.	<b>quantity</b>	<b>VARCHAR (12)</b>	-
5.	<b>order_Date</b>	<b>VARCHAR (320)</b>	-
6.	<b>payment_Method</b>	<b>INTEGER</b>	-
7.	<b>order_Status</b>	<b>VARCHAR(20)</b>	-

### 8. Table Name – ordertrackhistory

#	Name	Data-Type	Key
1.	<b>id</b>	<b>INTEGER</b>	<b>Primary</b>
2.	<b>order_id</b>	<b>VARCHAR (64)</b>	-
3.	<b>status</b>	<b>VARCHAR (80)</b>	-
4.	<b>Remark</b>	<b>VARCHAR (64)</b>	-
5.	<b>posting_Date</b>	<b>VARCHAR (64)</b>	-

### 8. Table Name – wishlist

#	Name	Data-Type	Key
1.	<b>id</b>	<b>INTEGER</b>	<b>Primary</b>
2.	<b>user_id</b>	<b>VARCHAR (64)</b>	-
3.	<b>product_id</b>	<b>VARCHAR (80)</b>	-
5.	<b>posting_Date</b>	<b>VARCHAR (64)</b>	-

**7. Table Name – userlog**

#	Name	Data-Type	Key
1.	<b>Id</b>	<b>INTEGER</b>	<b>Primary</b>
2.	<b>user_email</b>	<b>VARCHAR (80)</b>	-
3.	<b>user_id</b>	<b>INTEGER</b>	-
4.	<b>login_Time</b>	<b>VARCHAR (12)</b>	-
5.	<b>logout</b>	<b>VARCHAR (320)</b>	-
6.	<b>status</b>	<b>VARCHAR(40)</b>	-

# CHAPTER -4

## **4. Implementation: -**

The purpose of System Implementation can be summarized as follows: making the new system available to a prepared set of users (the deployment), and positioning on-going support and maintenance of the system within the Performing Organization (the transition). At a finer level of detail, deploying the system consists of executing all steps necessary to educate the Consumers on the use of the new system, placing the newly developed system into production, confirming that all data required at the start of operations is available and accurate, and validating that business functions that interact with the system are functioning properly. Transitioning the system support responsibilities involves changing from a system development to a system support and maintenance mode of operation, with ownership of the new system moving from the Project Team to the Performing Organization.

Once the design model of “Indian Drone Services: RENTAL Force Automation System” is created, it is implemented as a prototype, examined by end-users and modified by developers, i.e. us, based on their comments. To accommodate this iterative design approach, a broad class of interface design and prototyping tools has evolved.

### **DEPLOY SYSTEM**

Deploying the system is the culmination of all prior efforts where all of the meetings, planning sessions, deliverable reviews, prototypes, development, and testing pay off in the delivery of the final system. It is also the point in the project that often requires the most coordination, due to the breadth and variety of activities that must be performed. Depending upon the complexity of the system being implemented, it may impact technical, operational, and cultural aspects of the organization. A representative sample of high-level activities might include the installation of new hardware, increased network capabilities, deployment and configuration of the new system software, a training and awareness campaign, activation of new job titles and responsibilities, and a completely new operational support structure aimed at providing Consumer-oriented assistance during the hours that the new system is available for use (to name a few).

## **SYSTEM MAINTENANCE**

Software once designed & developed needs to be maintained till end of software / system life. When the system is fully implemented, analyst must take precautions to ensure that the need for maintenance is controlled through design and testing and the ability to perform it is provided through proper design practices.

Maintenance is necessary to eliminate errors in the working system during its working life and to tune the system to any variations in its working environment. Often small system deficiencies are found as a system is brought into operations and changes are made to remove them. System planners must always plan for resource availability to carry out these maintenance functions. The importance of maintenance is to bring the new system to standards.

The term “Software Maintenance” is commonly used to refer to the modification that are made to a software system in its initial release.

Maintenance requirements for information systems

- (a) From 60% to 90% of the overall cost of software during the life of a system is spend on maintenance.
- (b) Often maintenance is not done very efficiently.
- (c) Software demand is growing at a faster rate than supply. Many programmers spending more time on systems maintenance than on new software development.

The keys to reduce the need of maintenance , while making it possible to do essential tasks more efficiently, are as follows :

- ◆ More accurately defining the user’s requirements during systems development.
- ◆ Making better Systems documentation.
- ◆ Using proper methods of designing processing logic and communicating it to project team members.
- ◆ Utilising the existing tools and techniques in an effective way.
- ◆ Managing the systems engineering process in a better and effective way.

# CHAPTER -5

## **5. Testing: -**

Software testing is the process used to help identify the correctness, completeness, security, and quality of developed computer software. Testing is a process of executing a program or application with the intent of finding errors. With that in mind, testing can never completely establish the correctness of arbitrary computer software. In other words, testing is criticism or comparison that is comparing the actual value with an expected one. An important point is that software testing should be distinguished from the separate discipline of software quality assurance, which encompasses all business process areas, not just testing.

### **TESTING OBJECTIVES :**

Testing is a process of executing a program with the intent of finding an error.

A good test case is one that has a high-probability of finding an as-yet-undiscovered error.

A successful test is one that uncovers an as-yet-undiscovered error.

### **Software Testing Techniques**

The importance of software testing and its impact on software cannot be underestimated. Software testing is a fundamental component of software quality assurance and represents a review of specification, design and coding. The greater visibility of software systems and the cost associated with software failure are motivating factors for planning, through testing. It is not uncommon for a software organization to spent 40% of its effort on testing.

## **TESTING**

### **White Box Testing**

White box testing is a test case design approach that employs the control architecture of the procedural design to produce test cases. Using white box testing approaches, the software engineering can produce test cases that

- (1) Guarantee that all independent paths in a module have been exercised at least once
- (2) Exercise all logical decisions
- (3) Execute all loops at their boundaries and in their operational bounds
- (4) Exercise internal data structures to maintain their validity.

## **Various white box techniques**

### **Basis Path Testing**

Basic path testing is a white box testing techniques that allows the test case designer to produce a logical complexity measure of procedural design and use this measure as an approach for outlining a basic set of execution paths. Test cases produced to exercise each statement in the program at least one time during testing.

### **Control Structure Testing**

Although basis path testing is simple and highly effective, it is not enough in itself. Next we consider variations on control structure testing that broaden testing coverage and improve the quality of white box testing. Different control structure techniques are

- a. Condition testing
- b. Data flow testing
- c. Loop testing

### **Black Box Testing**

Black Box Testing is not a type of testing; it instead is a testing strategy, which does not need any knowledge of internal design or code etc. As the name "black box" suggests, no knowledge of internal logic or code structure is required. The types of testing under this strategy are totally based/focused on the testing for requirements and functionality of the work product/software application.

Various black box techniques

### **Functional Testing:**

In this type of testing, the software is tested for the functional requirements. The tests are written in order to check if the application behaves as expected.

Smoke Testing:

This type of testing is also called sanity testing and is done in order to check if the application is ready for further major testing and is working properly without failing up to least expected level.

Recovery Testing:

Recovery testing is basically done in order to check how fast and better the application can recover against any type of crash or hardware failure etc. Type or extent of recovery is specified in the requirement specifications.

Alpha Testing:

In this type of testing, the users are invited at the development center where they use the application and the developers note every particular input or action carried out by the user. Any type of abnormal behavior of the system is noted and rectified by the developers.

**Beta Testing:**

In this type of testing, the software is distributed as a beta version to the users and users test the application at their sites. As the users explore the software, in case if any exception/defect occurs that is reported to the developers.

Software Testing Strategies in used in the project

A strategy for software testing integrates software test case design techniques into a well-planned set of steps that cause the production of software. A software test strategy provides a road map for the software developer, the quality assurance organization, and the customer.

**Unit testing**

Unit testing concentrates verification on the smallest element of the program – the module. Using the detailed design description important control paths are tested to establish errors within the bounds of the module.

Firstly the unit testing on various modules and sub modules is performed in the project. Different modules are tested with different correct and incorrect data. For example in the order processing module order of 0 product is not allowed so in this case different methods

are used to find out whether the modules is performing all processes correctly. All modules are tested to find out that whether they are working properly.

### **Integration testing :-**

Once all the individual units have been tested there is a need to test how they were put together to ensure no data is lost across interface, one module does not have an adverse impact on another and a function is not performed correctly. Integration testing is a systematic approach that produces the program structure while at the same time producing tests to identify errors associated with interfacing.

In this project bottom up integration testing is used. Firstly lower level modules are tested. As modules are integrated bottom up, processing required for modules subordinates to a given level is always available and the need for stubs is eliminated.

### **Validation testing :-**

As a culmination of testing, software is completely assembled as a package, interfacing errors have been identified and corrected, and a final set of software tests validation testing are started. Validation can be defined in various ways, but a basic one is valid succeeds when the software functions in a fashion that can reasonably expected by the customer.

In the first phase of alpha testing, developers test the software using white box techniques. Additional inspection is then performed using black box techniques. This is usually done by a dedicated testing team. This is often known as the second stage of alpha testing.

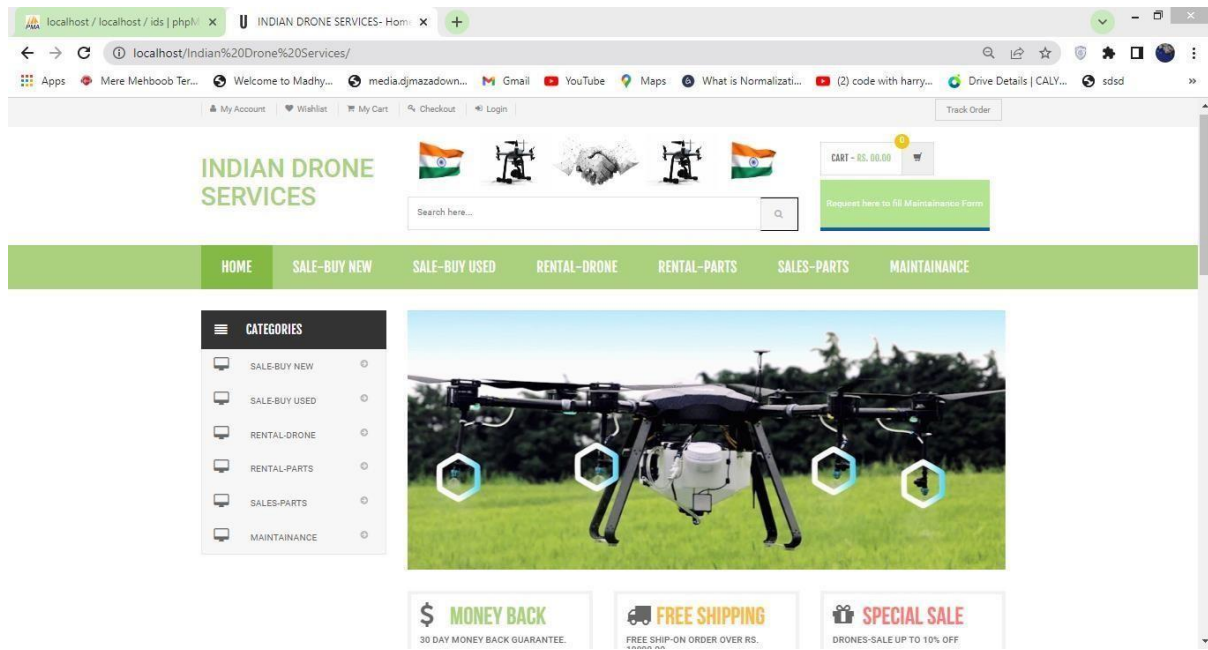
Unit and integrated tests concentrate on functional verification of a component and incorporation of components into a program structure. Validation testing demonstrates tractability to software requirements, and system testing validates software once it has been incorporated into a larger system.

# CHAPTER -6

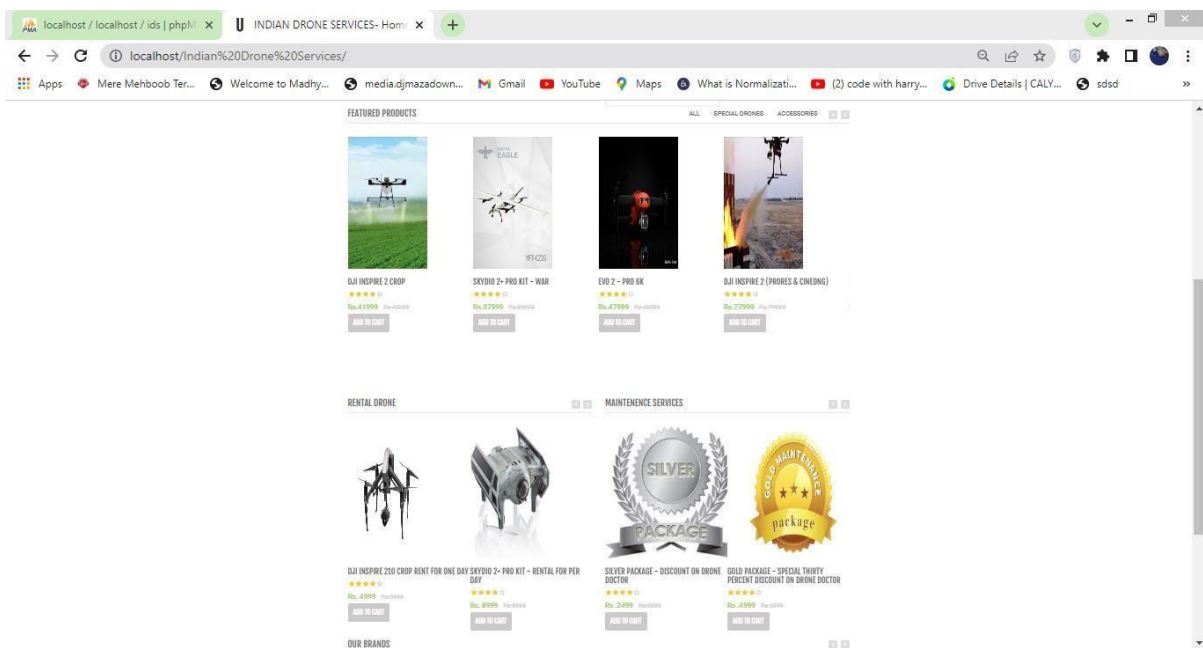
# 6. Results and Outputs : - (SNAPSHOT)

## CUSTOMER/USER SIDE

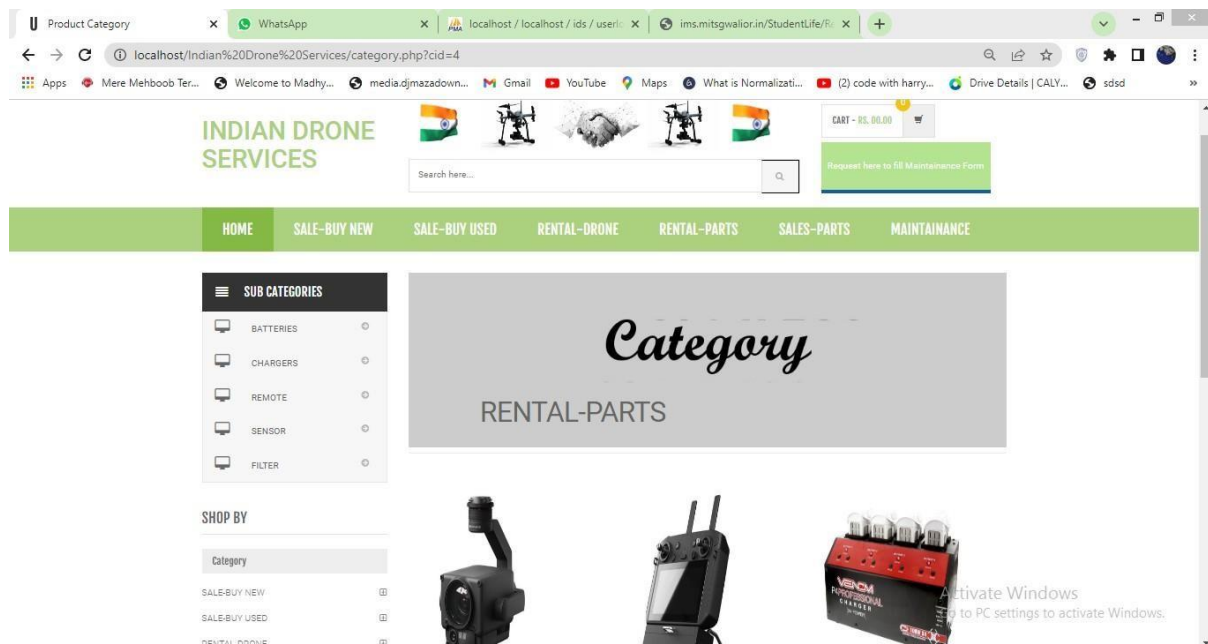
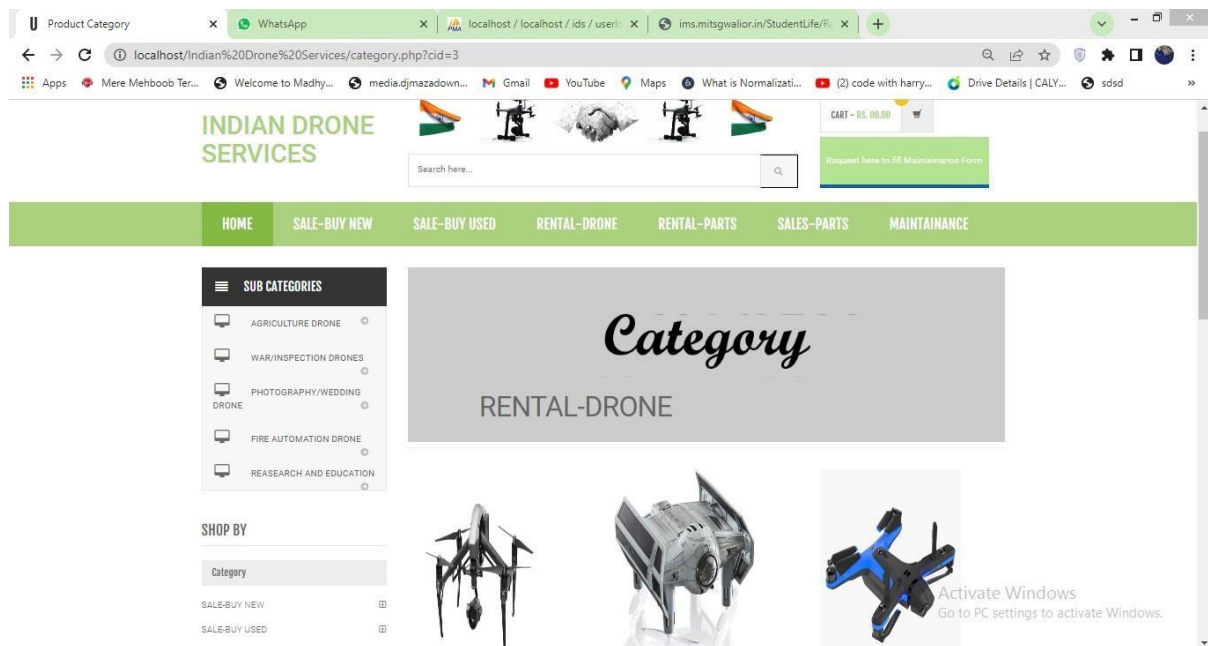
### HOME PAGE



### HOME PAGE 2 (FEATURED DRONE)



## CATEGORY AND SUBCATEGORIES WISE DRONE AND PARTS




# DRONE PRODUCT PAGE OVERVIEW AND DESCRIPTION

## DESCRIPTION AND REVIEW

## CART DETAIL WITH ADDRESS

localhost / localhost / ids | phpMyAdmin | My Cart

localhost/Indian%20Drone%20Services/my-cart.php

Remove	Image	Product Name	Quantity	Price Per unit	Grandtotal
<input type="checkbox"/>		SKIDIES WAR INSPECTION - REFURBISHED ★★★★☆ (0 Reviews)	1	RS 37499.00	37499.00

CONTINUE SHOPPING UPDATE SHOPPING CART

**SHIPPING ADDRESS**

Silver Estate University Road, Gwalior  
Gwalior  
Madhya Pradesh 474011

**BILLING ADDRESS**

Silver Estate University Road, Gwalior  
Gwalior  
Madhya Pradesh 474011

**GRAND TOTAL 37499.00**

PROCEED TO CHECKOUT

## PAYMENT PAGE

localhost / localhost / ids | phpMyAdmin | Shopping Portal | Payment Meth...

localhost/Indian%20Drone%20Services/payment-method.php

Welcome-Mohd. Monish | My Account | Wishlist | My Cart | Checkout | Logout | Track Order

**INDIAN DRONE SERVICES**

CART - RS. 37499.00

Search here...

HOME SALE-BUY NEW SALE-BUY USED RENTAL-DRONE RENTAL-PARTS SALES-PARTS MAINTAINANCE

Home / Payment Method

**CHOOSE PAYMENT METHOD**

SELECT YOUR PAYMENT METHOD

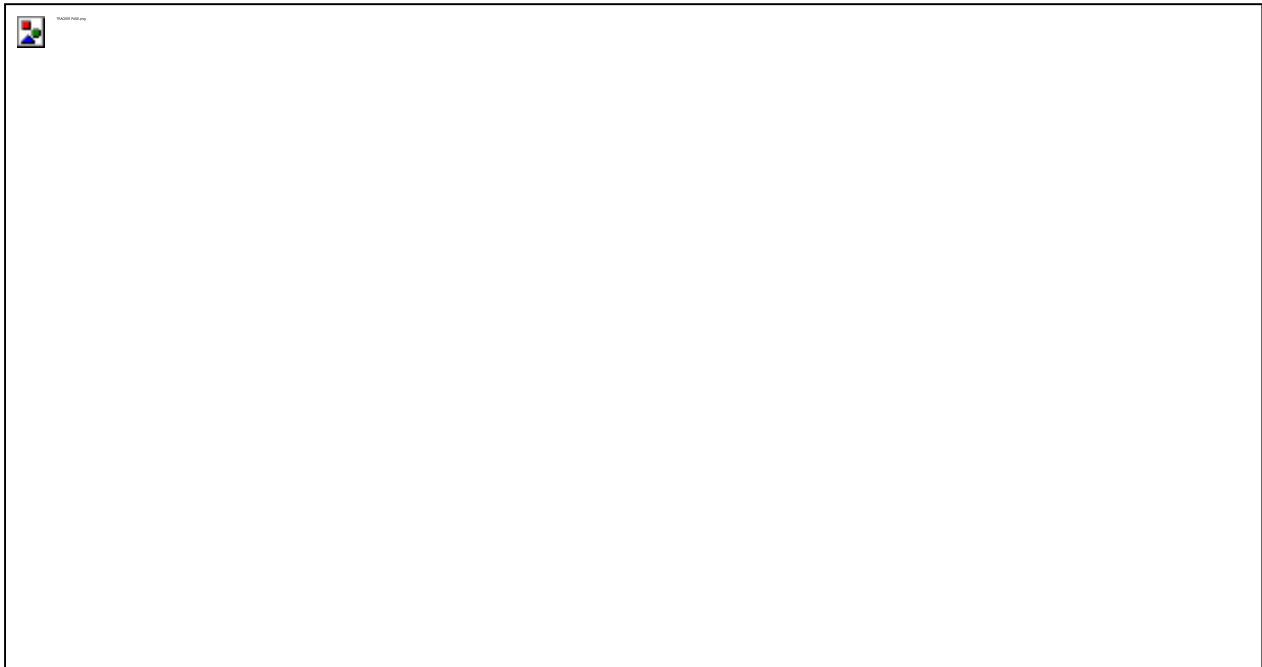
COD  Internet Banking  Debit / Credit card

submit

## BILLING AND SHIPPING UPDATE PAGE



## TRACKING ORDER DETAIL



## ORDER HISTORY PAGE

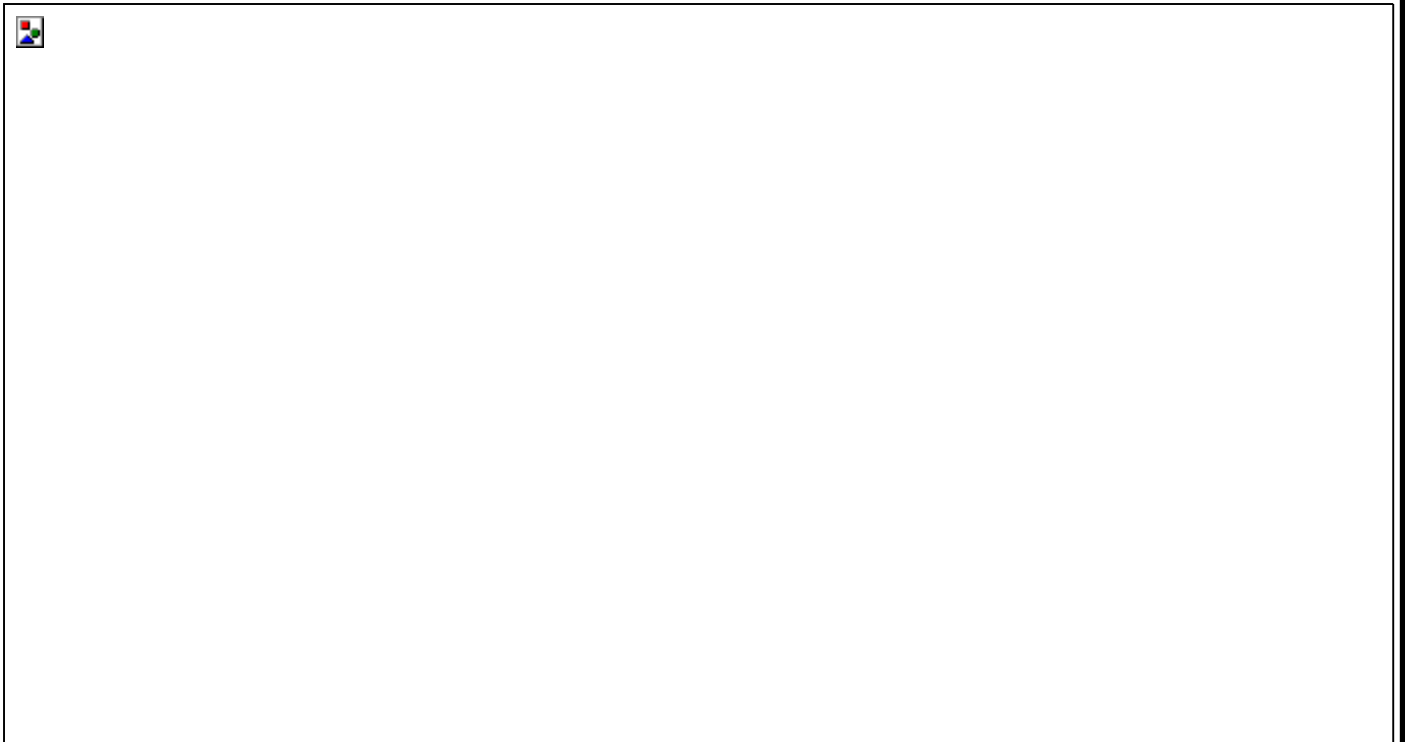


## WISHLIST PAGE



## ADMIN SIDE – INDIAN DRONE SERVICES

### DASHBOAD



### ORDER MANAGEMENT



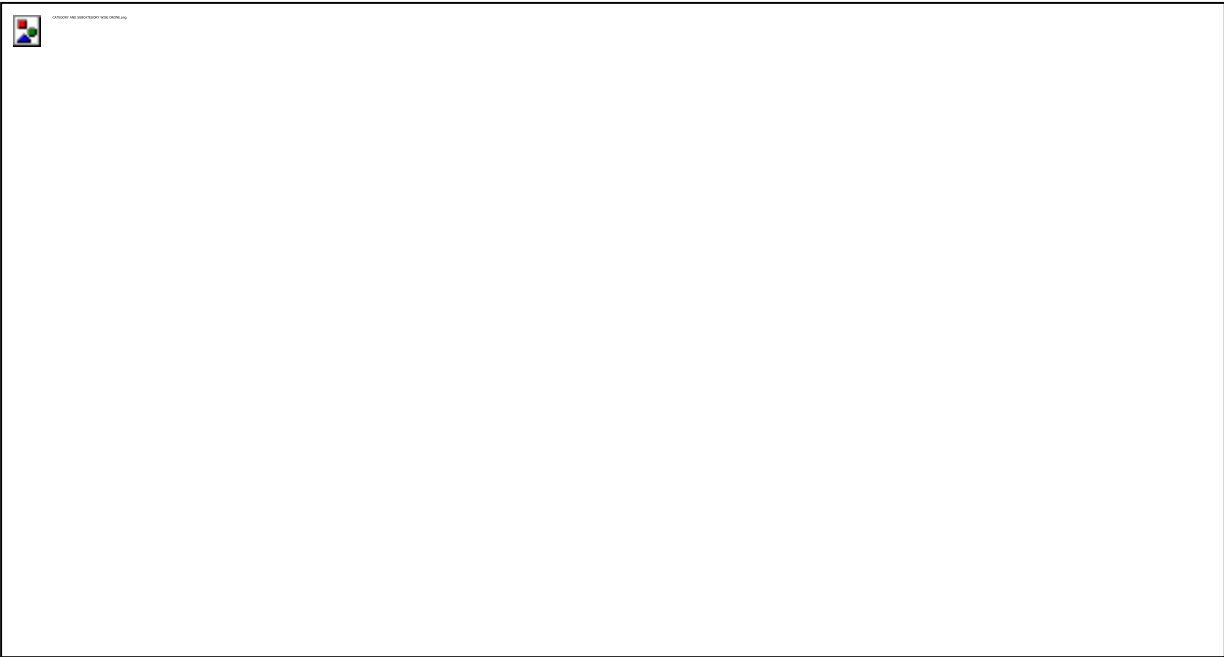
## USER MANAGEMENT



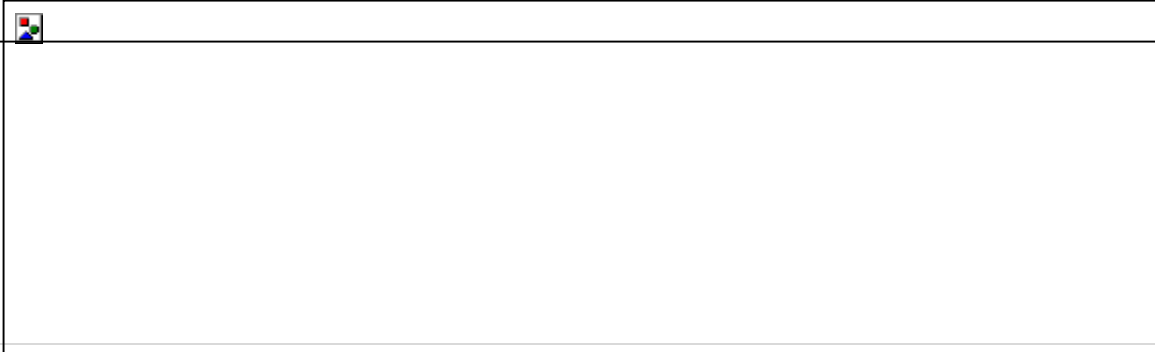
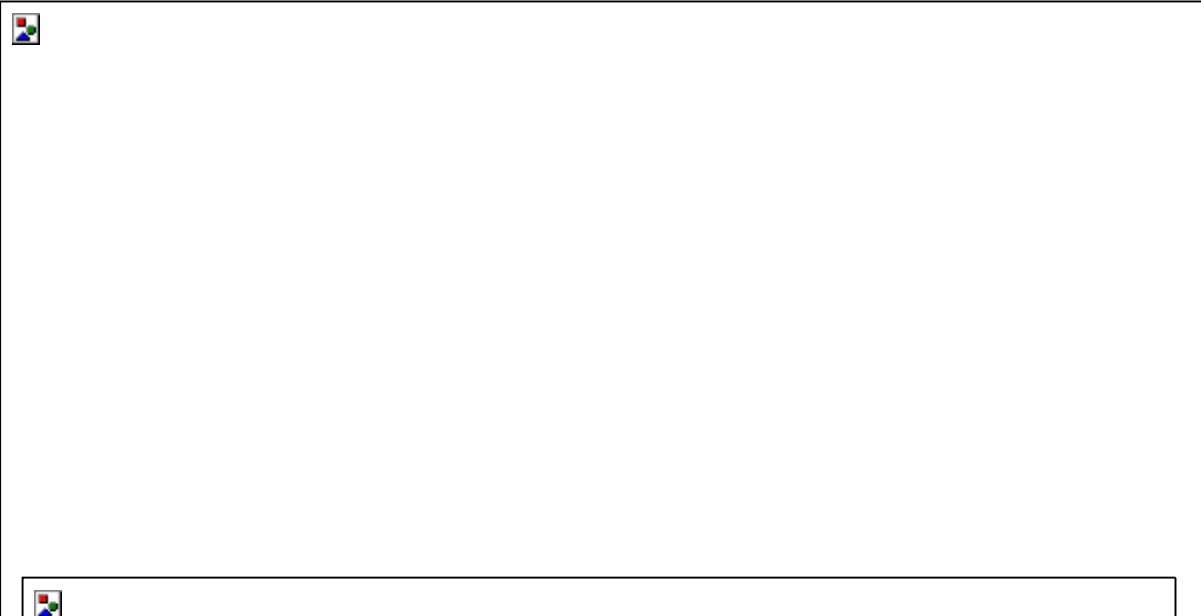
## CATEGORY WISE PRODUCT



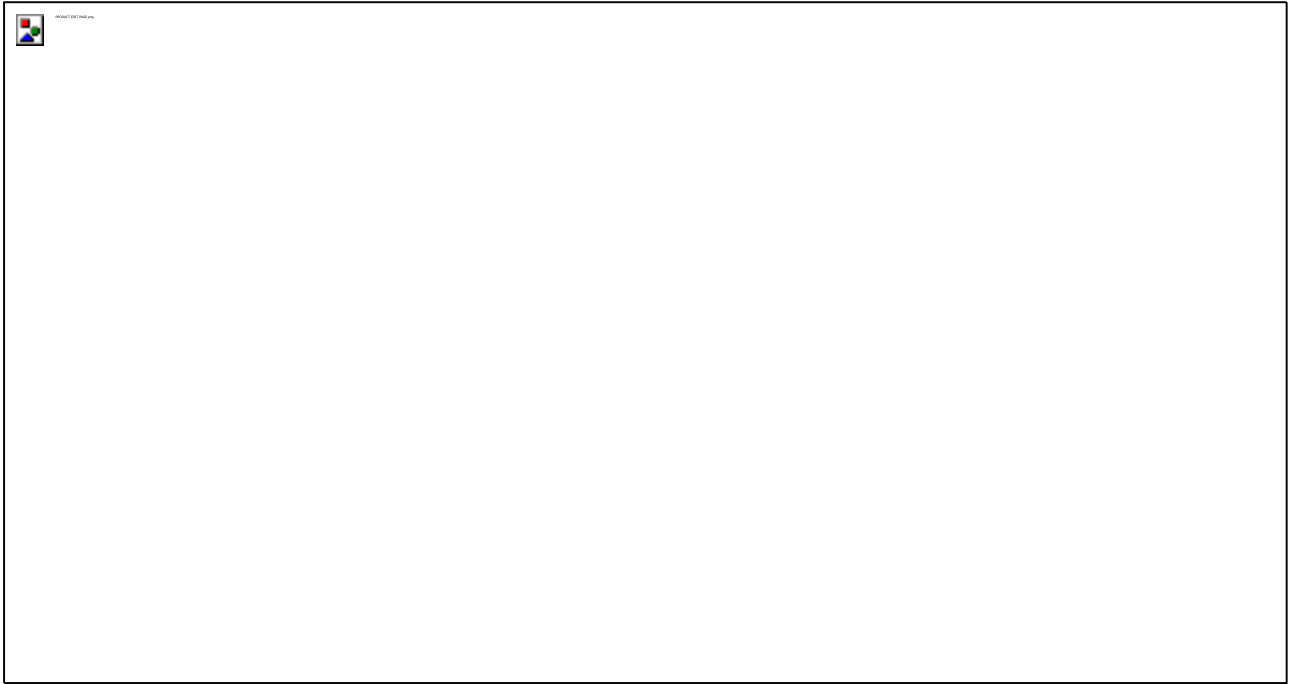
**CATEGOY AND SUBCATEGORY WISE DRONE PRODUCT**



**INSERT PRODUCT (DRONES)**



## PRODUCT EDIT PAGE

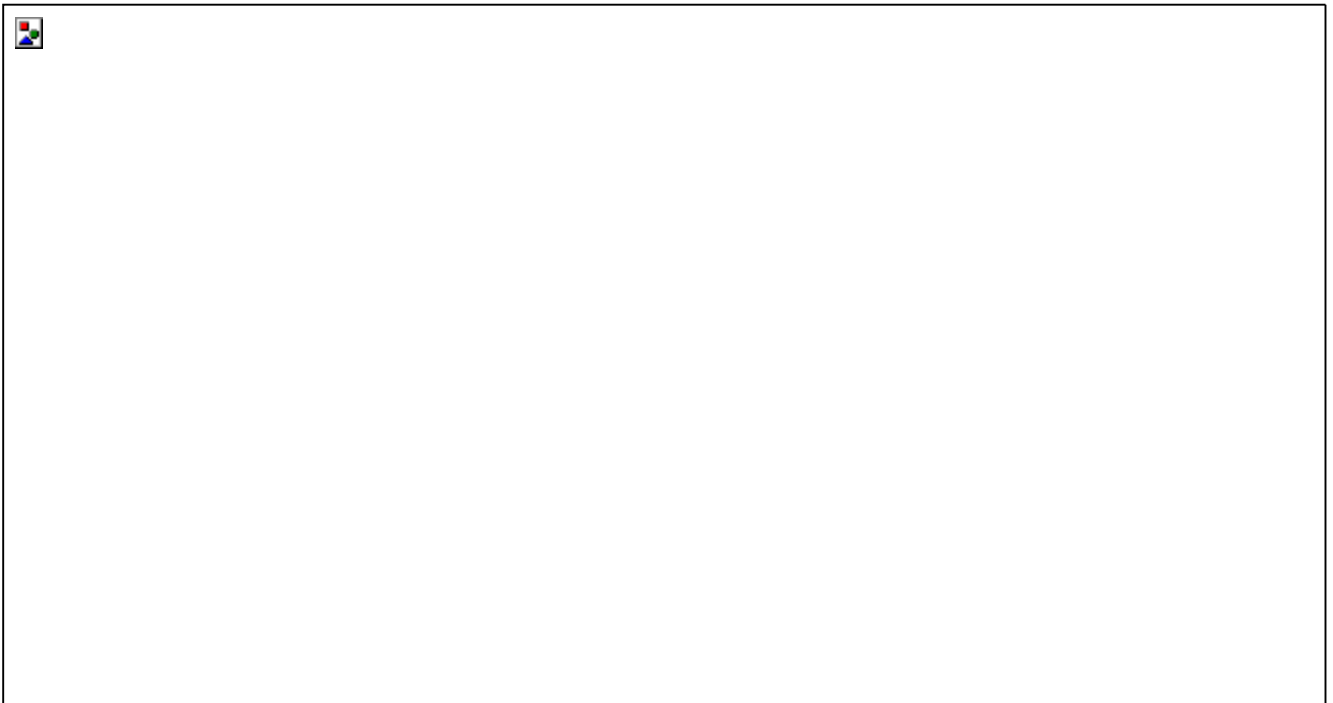


## USER LOGS

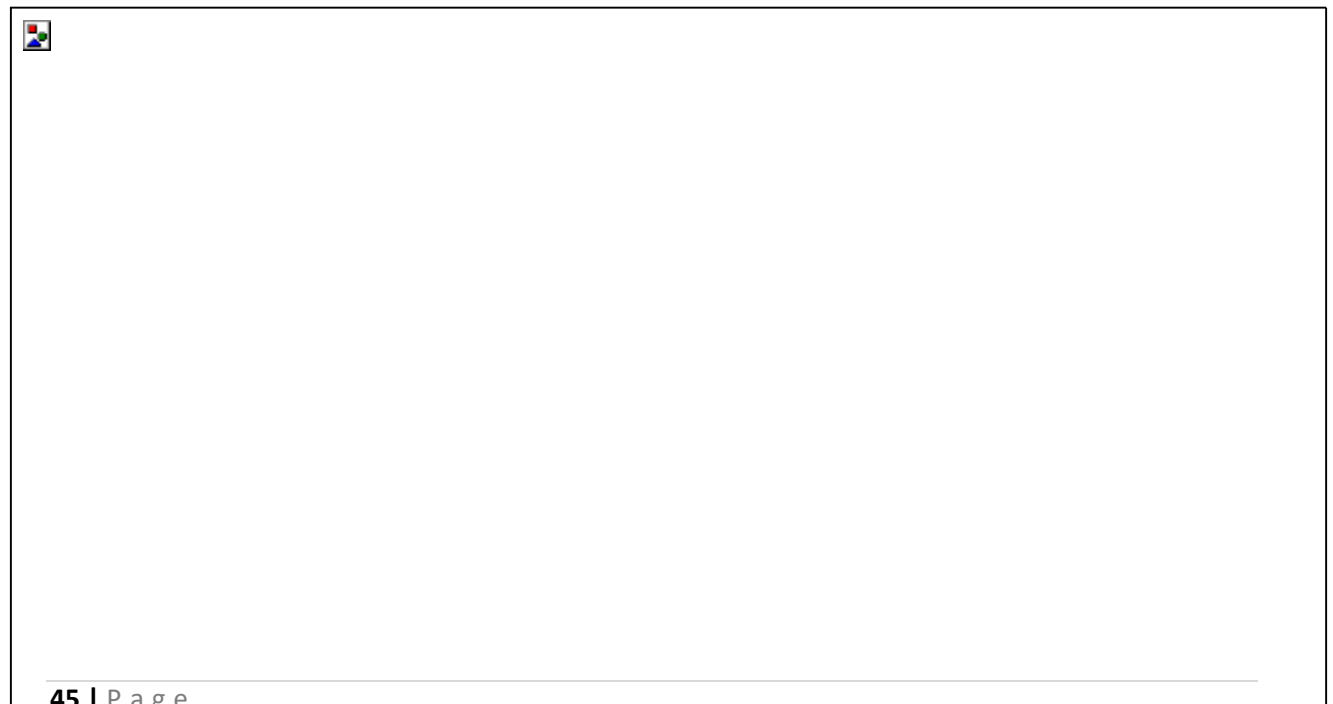


## **DATABASE OF IDS**

### **IDS DB\_TABLES**



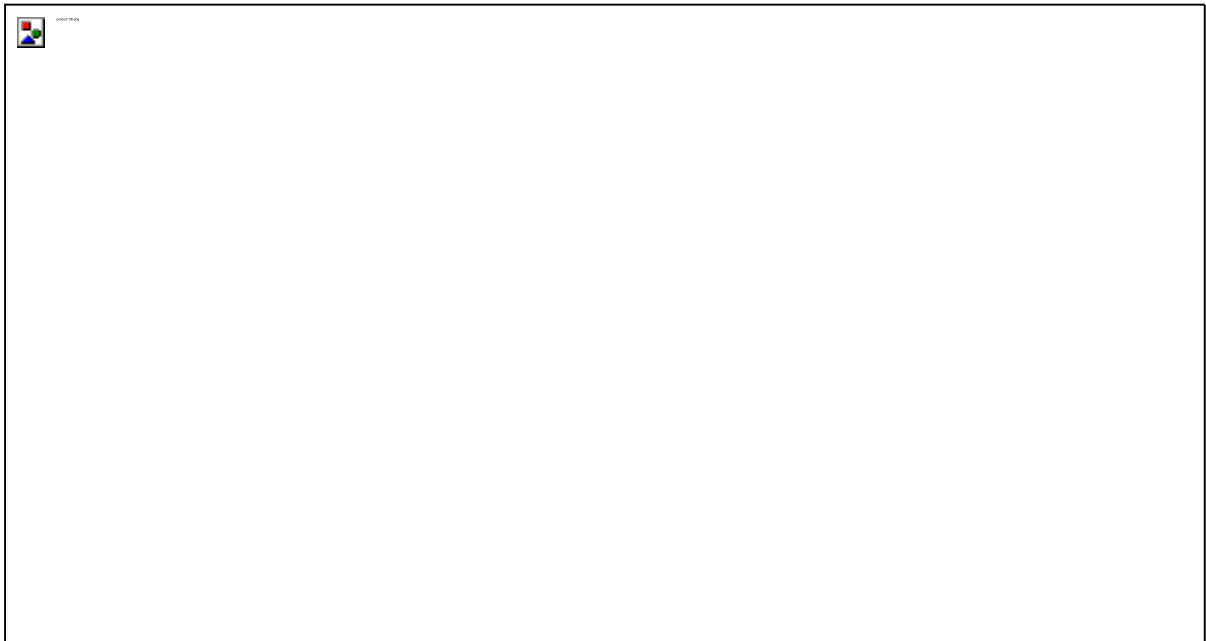
### **CATEGORY DATABASE OF IDS**



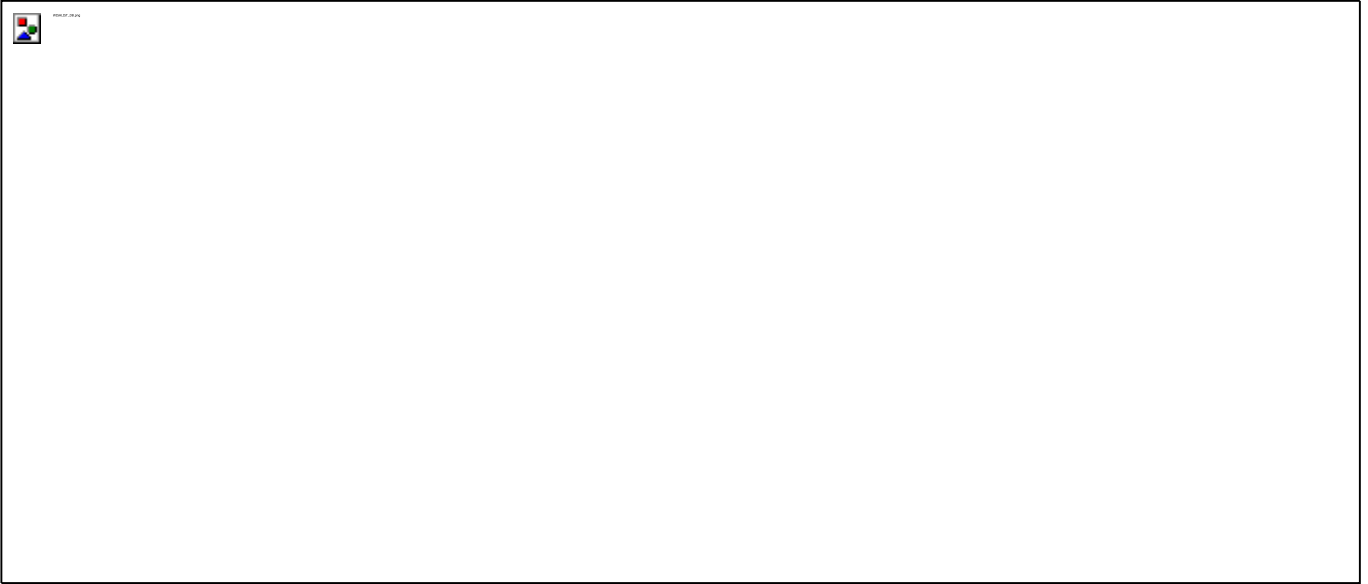
## SUBCATEGORY DATABASE OF IDS



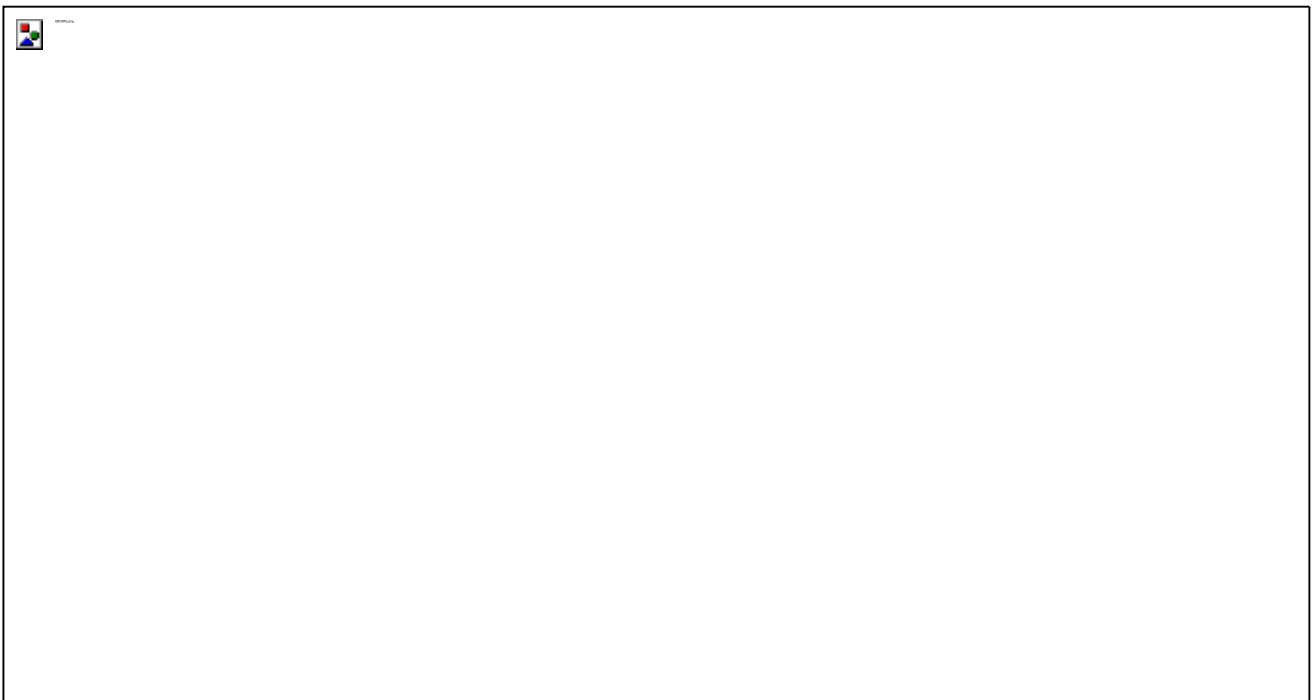
## PRODUCT(DRONE) DETAIL DATABASE



## WISHLIST DATABASE



## ORDER HISTORY DATABASE



## ORDER TRACKING DATABASE



# CHAPTER -7

## **7. Conclusion: -**

### **Conclusion**

This website presents an approach that might be used for developing a little and compact-sized quadcopter that may be used to perform rescue operations and supply audio/video aid to the people in distress. It could even be used as a closed-circuit television to extend the safety strength especially within the area where human interference is strictly prohibited. It could even be used for performing live video streaming. Quadcopters offer advantages for several applications when comparing with their manned counterparts. They save human pilots from flying in dangerous conditions which will be encountered not only in military applications but also in other scenarios involving operation in inclemency conditions, or almost buildings, trees, civil infrastructures, and other obstacles.

It may be mentioned that the platform which we've created is capable of sustaining autonomous flight at a height of 20 feet at a variety of 30 meters. While this in essence proves to need our ultimate goal; we've created a proven and solid platform for later development. Our platform is often outfitted with additional sensors (cameras; IR sensors; wireless technology; and 3D mapping tools; etc.) to expand the general usefulness and adaptability of the quadcopter design. The capabilities of this design may convince be asymptotic in nature; however, these might not be realized until proper funding is given and experimental analysis is conducted. The result suggests that we were ready to create a sustainable and versatile platform for an Unmanned Aerial Vehicle (UAV) capable of completing inspection in real-time on a pipeline facility.

### **FUTURE ENHANCEMENT**

With the help of this project, the organization will be able to managing customer data in effective way. Proper management of RENTAL and customer data will provide facility of obtaining customer details time to time on the basis of which organization can make marketing and RENTAL plan effectively.

Whether you call them Unmanned Aerial Vehicles (UAVs), Miniature Pilotless Aircraft or Flying Mini Robots, drones are rapidly growing in popularity. They are still in the infancy stage in terms of mass adoption and usage, but drones have already broken through rigid traditional barriers in industries which otherwise seemed impenetrable by similar technological innovations.

Over the past few years, drones have become central to the functions of various businesses and governmental organizations and have managed to pierce through areas where certain industries were either stagnant or lagging behind. From quick deliveries at rush hour to scanning an unreachable military base, drones are proving to be extremely beneficial in places where man cannot reach or is unable to perform in a timely and efficient manner.

Increasing work efficiency and productivity, decreasing workload and production costs, improving accuracy, refining service and customer relations, and resolving security issues on a vast scale are a few of the top uses drones offer industries globally. Adoption of drone technology across industries leapt from the fad stage to the mega-trend stage fairly quickly as more and more businesses started to realize its potential, scope, and scale of global reach.

Whether drones are controlled by a remote or accessed via a smartphone app, they possess the capability of reaching the most remote areas with little to no manpower needed and require the least amount of effort, time, and energy. This is one of the biggest reasons why they are being adopted worldwide, especially by these four sectors: Military, Commercial, Personal, and Future Technology.

With the help of this project, the organization will be able to managing customer data in effective way. Proper management of RENTAL and customer data will provide facility of obtaining customer details time to time on the basis of which organization can make marketing and RENTAL plan effectively.

# CHAPTER -8

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- <http://www.w3schools.com/php/default.asp>
- <http://www.w3schools.com/jquery/default.asp>
- <http://www.w3schools.com/bootstrap/default.asp>
- <http://www.bootstrap.com>