



**CHRIST**

(DEEMED TO BE UNIVERSITY)

BANGALORE • INDIA

# Zeus

A Drone Delivery Company

**Project Progress Report**

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Under Supervision Of:

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## **Abstract**

There are a fixed set of instructions and rules that are established for ensuring the safety of a drone delivering a goods to a delivery destination. The platform will notify the purchaser that the drone has arrived near the delivery destination. The drone will then hover at a predefined altitude from the landing area at the delivery destination. The customer will then send the delivery code to the drone. The drone will land only if the delivery code is a match to the issued code. Otherwise, the delivery is cancelled, and the drone returns to the base station without landing.

## **Introduction & Objectives of the Project**

The primary objective of our breakthrough system is to establish a baseline industry standard in the field of drone delivery, to enable even the unsavviest of customers to book a drone to deliver their goods of choice with a very simple web interface and an accompanying application portal. Our project is based on the above concept i.e. assisted hiring and rental of delivery drones that fit the customer's requirements in an easy and fast manner.

## **Proposed Study**

Our drone delivery system will be introduced in a relatively new market in which there are currently no companies existing. Hence there are no pre-existing players and we will look to tap into this market by offering a delivery service which will seek to change the logistics industry. Companies like Amazon are looking to tap into this market as well, and they have conducted a couple of tests to check the viability of this field. This area offers a world of opportunity to improve the way products are delivered.

## Problem Statement

How many times have you found yourself in a situation where you need to send a package urgently but are kept from doing so with no such services, only to realize that the norm of the field is a package delivery union that operates in a syndicate and charges the unwilling customers, exorbitant amounts for a service that is extremely important to them.

Our Drone Delivery System brings to the table, a revolutionary technology that aims to standardize the monetary and availability aspects of the aforementioned.

## Modules

- **Login & Signup**

This module will allow customers to register their account as an individual customer or a company and access the different pricing slabs.

- **Invoice & Billing**

This module will be used to generate invoices based on the requirements of the customer.

- **Drone Booking**

This module helps the consumers book a drone suited for their needs based on the weight of the payload.

- **Status Tracking**

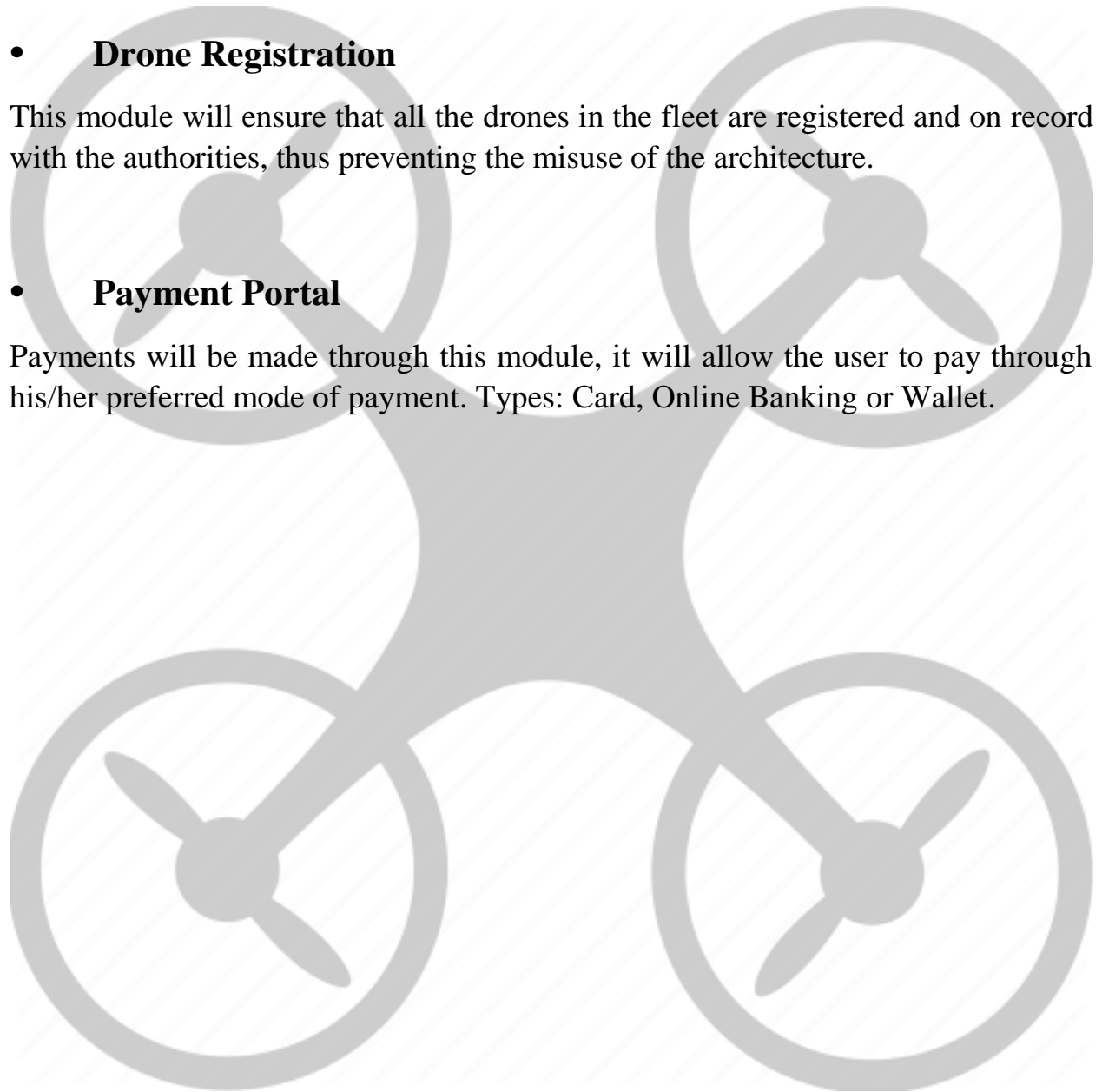
This module will help the users to track their requests. This will show the status of request. Status types: Placed, processing, accepted, arriving & delivered.

- **Drone Registration**

This module will ensure that all the drones in the fleet are registered and on record with the authorities, thus preventing the misuse of the architecture.

- **Payment Portal**

Payments will be made through this module, it will allow the user to pay through his/her preferred mode of payment. Types: Card, Online Banking or Wallet.



# Technical Specifications

## Back End Hardware Requirements

RAM - 16GB DDR5

Processor - Intel i7 7<sup>th</sup> Gen

Hard Drive - 1TB

## Back End Software Requirements

Our Drone delivery platform is going to be built using the following tools and environments:

Framework: - Adobe DreamWeaver CS6 + PHP, CSS

Database - PHPmyAdmin

OS Platform: - Windows 10 Home Edition Single User or Above

## Front End Hardware Requirements (Minimum)

RAM - 1GB (32 Bit) / 2GB (64 Bit)

Processor - Dual Core 1.6GHz or Faster

Disk Space - Na

Operating System - Windows 7 or Above

## Front End Software Requirements

Operating System:

Operating Systems		
Minimum	Recommended	Full Supported List
Windows XP <sup>1</sup>	Windows 8.1	Windows XP <sup>1</sup> Windows Vista Windows 7 / 8 / 8.1
Mac OS X 10.6	Mac OS X 10.9 (Mavericks)	Mac OS X 10.6 (Snow Leopard) Mac OS X 10.7 (Lion) Mac OS X 10.8 (Mountain Lion) Mac OS X 10.9 (Mavericks)

Browser:

Windows Browsers		
Minimum	Recommended	Full Supported List
Chrome (current version <sup>2</sup> )	Chrome (current version <sup>2</sup> )	Chrome (current version <sup>2</sup> )
Internet Explorer 8 <sup>1</sup>	Internet Explorer 11	Internet Explorer 8 <sup>1</sup> Internet Explorer 9 / 10 / 11
Firefox (current version <sup>2</sup> )	Firefox (current version <sup>2</sup> )	Firefox (current version <sup>2</sup> )
Mac Browsers		
Minimum	Recommended	Full Supported List
Chrome (current version <sup>2</sup> )	Chrome (current version <sup>2</sup> )	Chrome (current version <sup>2</sup> )
Firefox (current version <sup>2</sup> )	Firefox (current version <sup>2</sup> )	Firefox (current version <sup>2</sup> )
Safari 5	Safari 7	Safari 5 through Safari 7



# Database Design

Booking_Details		
Booking_ID	int	PK
Customer_ID	varchar(20)	PK
Drone_ID	varchar(10)	PK
Date_Of_Booking	date	
Booking_From_Date	date	
Booking_To_Date	date	
Geo_tag	int	

Billing_And_Invoice		
Invoice_ID	int	PK
Customer_ID	int	PK
Date	date	
Drone_ID	varchar(10)	
Duration	int	
Amount	int	

Drone_Details		
Registration_Number	varchar(10)	PK
Drone_ID	int	PK
Model	varchar(50)	
Payload	int	
Type	varchar(20)	
Range	int	
Cost	int	

Customer		
Customer_ID	varchar(20)	PK
First_Name	varchar(50)	
Last_Name	varchar(50)	
Age	int	
Adhaar_Number	int	
LoginID	varchar(6)	
Password	varchar(50)	
Contact_No	int	

Order_Status		
Booking_ID	int	PK
Status_ID	int	PK
Customer_ID	int	
Drone_ID	int	
Current_Stat	varchar(20)	

Delivery		
Booking_ID	int	PK
Drone_ID	int	PK
Weight	int	
Receiver_Deta	varchar(50)	
Sender_Detail	varchar(50)	
Contents	varchar(100)	

Account		
Accno	int	PK
Customer_I	int	
Login_ID	int	
Type	varchar(30)	

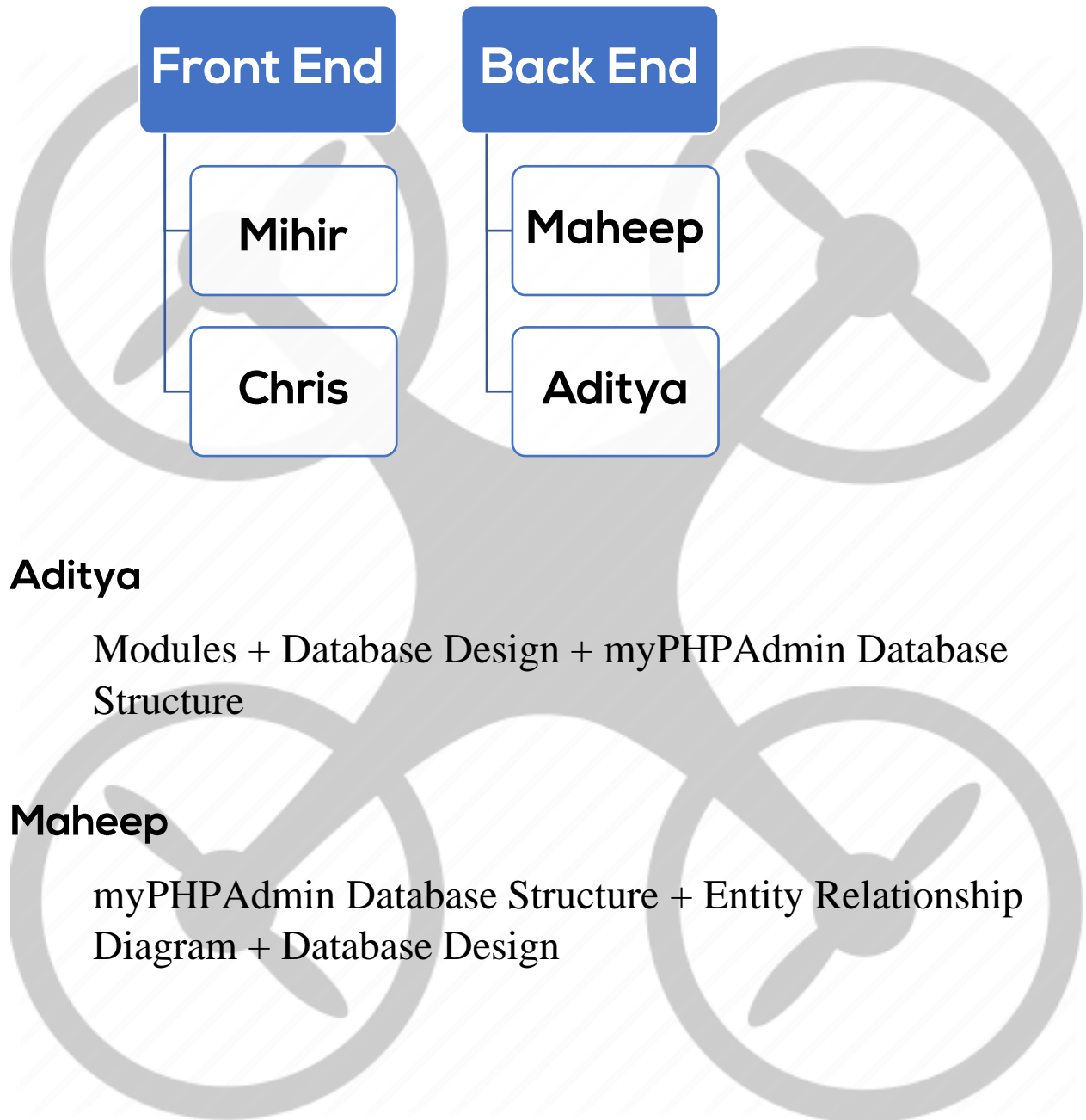
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    erDiagram
        Customer ||--o{ Booking_Details : Controls
        Booking_Details ||--o{ Billing_Invoice : Accesses
        Booking_Details ||--o{ Customer : Pays_Through
        Booking_Details ||--o{ Drone : Has_An
        Booking_Details ||--o{ Drone : Drone_Is_Booked
        Customer ||--o{ Drone : Books
        Account ||--o{ Drone : Makes_A
        Account ||--o{ Delivery : Sends_Receives
        Account ||--o{ Order_Status : Tracks
        Order_Status ||--o{ Drone : Has_A
        Order_Status ||--o{ Drone : Is_Notified_Via

        Customer {
            string Login_ID PK
            string Customer_ID PK
            string Phone_Number
            string Type
            string Gender
            int Age
            string Password
            string First_Name
            string Address
        }
        Booking_Details {
            string Booking_ID PK
            string GeoTag
            string Drone_ID PK
            string Payment_Mode
            string Date_Of_Booking
        }
        Billing_Invoice {
            string Invoice_ID PK
            string Date
            float Amount
            string Drone_ID PK
        }
        Account {
            string Account_Number PK
            string Customer_ID PK
        }
        Delivery {
            string Sender_ID PK
            string Receiver_ID PK
            string Contents
            float Weight
            string Drone_ID PK
        }
        Order_Status {
            string Status_ID PK
            string Drone_ID PK
            string Customer_ID PK
            string Booking_ID PK
            string Current_Status
        }
        Drone {
            string Drone_ID PK
            string Model
            float Rate
        }
  
```



# Work Distribution



## Aditya

Modules + Database Design + myPHPAdmin Database Structure

## Maheep

myPHPAdmin Database Structure + Entity Relationship Diagram + Database Design

**Mihir**

Webpage Designing with Bootstrap, HTML, CSS and  
Adobe Illustrator

**Christopher**

Webpage Design Support, PHP Data Passing (Between  
Pages & To The Database)

