

# **Bus Pass Management System**

Major project report submitted in partial fulfilment of  
the requirement for the degree of Bachelor of  
Technology in

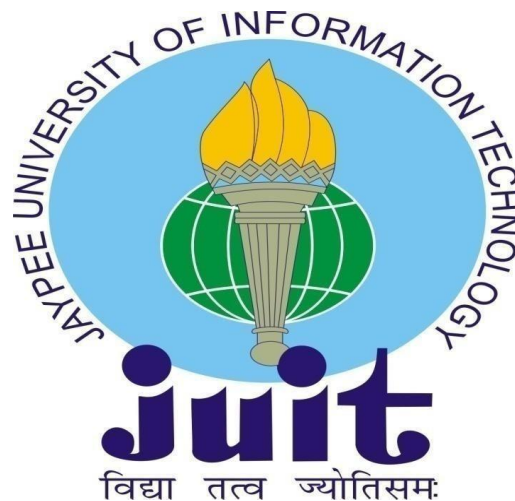
**Computer Science and Engineering**

By

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**UNDER THE SUPERVISION OF**

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# Certificate

## Candidate's Declaration

I hereby declare that the work presented in this report entitled **Cloud Based Bus Pass System** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat is an authentic record of my own work carried out over a period from August 2015 to December 2015 under the supervision of **Dr. Jagpreet Sidhu, Assistant Professor (SG)**.

The matter embodied in the report has not been submitted for the award of any other degree or diploma.



Kanishka Narang,  
181210.

This is to certify that the above statement made by the candidate is true to the best of my knowledge.



**Dr. Jagpreet Sidhu**

**Assistant Professor (SG)**

Computer Science & Engineering and Information Technology  
Jaypee University of Information Technology, Waknaghat,

Dated: 15 May 2022

# AKCNOWLEDGEMENT

Firstly, I express my heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the project work successfully.

I really grateful and wish my profound my indebtedness to Supervisor **Dr. Jagpreet Sidhu, Assistant Professor (SG)**, Department of CSE Jaypee University of Information Technology, Wakhnaghat. Deep Knowledge & keen interest of my supervisor in the field of “**Cloud Computing**” to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stage have made it possible to complete this project.

I would like to express my heartiest gratitude to **Dr. Jagpreet Sidhu**, Department of CSE, for his kind help to finish my project.

I would also generously welcome each one of those individuals who have helped me straight forwardly or in a roundabout way in making this project a win. In this unique situation, I might want to thank the various staff individuals, both educating and non-instructing, which have developed their convenient help and facilitated my undertaking.

Finally, I must acknowledge with due respect the constant support and patients of my parents.

Kanishka Narang,  
181210

# **Abstract**

The 'Bus Pass Management System' is a web application that will keep track of the passes issued by bus companies. The 'Bus Pass Management System' is an automated system that organises and processes data at a rapid rate.

This technique aids bus operators in maintaining a record of bus passes. The operation of detaching the bus from the traveller was previously performed manually. To prevent these challenges using the 'Bus Control System,' this manual method needs human work and a significant amount of time.

# Chapter 01 – INTRODUCTION

## **1.1 Introduction:-**

The 'Bus Bypass Control Machine' is a web-based system that allows bus operators to manage pass information. A bus by-pass management device is a robotic piece of equipment that processes records at a high pace and in a planned phase.

This technique aids bus operators in maintaining a record of bus passes. Prior to the implementation of this programme, the procedure for removing the bus from the visitor was carried out manually. To avoid these issues utilising the 'Bus modify gadget,' this manual solution requires human effort and a significant amount of time.

## **1.2 Problem Statement:-**

- This on-line bus software software will assist students and commuters in locating on-line buses and eliminating the need to wait in lines to bypass or collect

tickets for each trip.

- It will help students and commuters find on-line buses and eliminate the need to wait in lines to bypass or collect tickets for each trip.
- You can pay with a credit card or a master card online.
- It has a unique feature called a chat engine, which allows users to connect with one another in case they want to exchange tickets via the server.

### **1.3 Project Objectives:-**

The Bus Bypass Management System is an internet-based technology that helps people who wish to tour every day manage transit information supplied by management and also offer on-line bus permits.

My goal for this project is to improve the booking organization's ticketing project simpler, more dependable, easier to use, and more convenient. In addition, it takes less time than physical labour.

The primary goal of all mission effort is to automate the booking process for everyday sports. of the device library, as well as:

1. Ticket-related activities.

2. Generate a Customer ID.
3. Assign bus tickets based on demand from customers.
4. Reservations in advance.
- Cancellation of bus tickets.
6. Feedbacks.
7. Chat Software

## **1.4 Methodology:-**

Database: MySQL

Frontend

Tech:

HTML, CSS

Scripting

language:

JavaScript

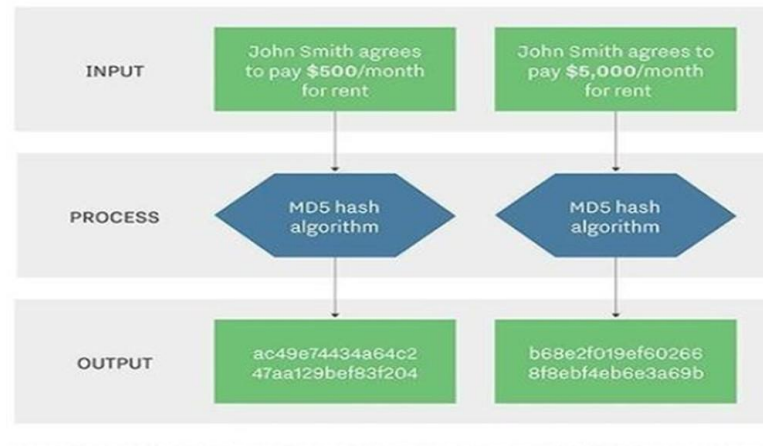
IDE: Sublime

Backend Tech: PHP

Web Sockets



# MD5 Hashing



## REQUIREMENTS FOR HARDWARE:

- Intel P-IV processor based system
- 2.0 GHz Processor Speed
- RAM - 1GB
- 40GB to 80GB hard drive

## REQUIREMENTS FOR SOFTWARE

- Database used - MySQL
- Server used - Apache

- HTML for Front-End
- Java Script is used as Scripting language
- IDE used - Sublime
- Technologies used - PHP, NodeJS
- Web-Sockets - Socket.io

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## Chapter 02 – Literature Survey

Mayuri(Potghan), Gayatri(Shinde), Tazeen (Sheikh) and Sadaf (Sheikh), have suggested a utility to be utilised for reserving a fare for locomotives and even mainlines. Snehal(Kalbhor), Mrs. Snehal(Kulkarni), Ashwini (Mangulkar), presented many methods for buying mainline or neighbouring locomotive tickets using their phone system, as well as adding ticket checking.. Tushar(Dongare), Akshay(Babar) has provided numerous ticketing ways for its cellphone software via GPS region for Android mobile so that travellers may simply identify the channel list and acquire Ramadevi tickets.ok, Murugan. S, Bharath. US has evolved an android cell ticketing app where the user will obtain a price tag within the future. and brought ticket checks. Manmohan(Swarup), Vijendra(Singh), Chanchal(Sonkar) presented a system in which teaching bookkeeping is done via multimedia and multimedia phones Husani Wan Wan Hussin and Paul Coulton presented an application in which more purchasers are expected to engage in cell purchasing and selling, as well as acquisitions.

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## **2.1 Technology and Tools**

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HTML stands for HyperText-MarkUp-Language. According to Tim Berners-Lee, it is a critical markup language for online sites and a component of web pages (1998). The web browser reads HTML files and combines them into visual or audio online pages. (lamp.Cse.Fau.Edu). Cascading style Sheets (CSS) may also be used by web browsers to emphasise the emergence and structure of textual content and other variables (www.W3schools.Com) (Taylor, 2013). CSS is preferred above clear HTML markup pages by the W3C, your source for both HTML and CSS requirements (Debolt, 2007) JavaScript is a prominent ECMA Script language implementation that is primarily utilised in the purchaser JavaScript environment, where it is used as part of an internet browser to decorate user links with various useful Web-sites (Mc-Farland, 2008). This allows for systematic access to computer items within a certain range. A popular writing language is Hypertext Preprocessor that was created to help the internet provide dynamic web pages. As a result, php code is integrated in an HTML rendering report and translated using a php processing module, which outputs an

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internet document used for Web-page(Chen, Pan and others). sq. is a language for computers' used to handle and retrieve statistics from databases, also known as structured Questionnaire Language. It was created to manipulate data in relational databases and is said to be grounded on numerical and relational algebra (Ghosh, 2010). Nowadays, NotePad is the most widely used text editor (simple content).The files that result are usually saved with the extension. Because Txt no longer has shape tags or patterns, this machine is suitable for creating system documents for use with DOS or HTML (533507.Weebly.Com).In Notepad, any left-to-right and left-to-right vertebrate is supported (Afriyie, 2012).

## **2.1 Requirements on Minor Project**

### **1. Functional Requirements**

- Administrative functions
- Authentication
- Authorization levels
- Business Rules
- Transaction revisions, changes, and cancellations

### **2. Requirements that aren't functional**

- 
- Response-Time, Utilization, Through-Put, Static Volumetric Performance
  - Obtainability
  - Authenticity
  - Proficiency
  - Serviceability
  - Maintainability

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# **CHAPTER 03 –Environment for System Development**

## **3.1 Html**

### **WHAT EXACTLY IS Html?**

For the data in order to locate globally, one requires a language that the university knows, a type of native-language publication that all robots can comprehend. The International Publishing Language

HTML for the Internet (Markup Hyper Text)

### **Html is used to provides Authors the Ability To**

1. Use to create online docs with titles, tables, text, lists, also photographs and many other things.
2. With the press of a button, Hypertext links are used to return information online.
3. The creation of forms for Information searches, bookings, and product orders are examples of distant

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trade transactions.

4. Allows you to directly insert spreadsheets, video clips, audio samples, and other apps into documents.

### **Some HTML Tags**

<HTML>tag	: HTML-tag to begin
<HEAd>	: Creating the head of a web page
<TITLE>	: Giving the body of a web page
</HEAD>	: To end the head of a web page
</BODY>	: Ending the body of a web page
</HTML>	: Putting an end to a webpage
<FORM>	: Developing HTML forms
<INPUT TYPE=BUTTON>	: The creation of but-tons
<INPUT-TYPE='CHECKBOX'>	: To create check-boxes
<INPUT-TYPE='SUBMIT'>	: To create submit-button



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<INPUT-TYPE='TEXT'> : To create Text field

## **Html 4.0**

Html 4.0 also improves accessibility For individuals with impairments by expanding style styles, writing, embedding frames, greater right-to-left guide text support, rich tables, and other enhancements.

## **3.2 INTRODUCING JAVA-SCRIPT**

### **WHAT EXACTLY IS JAVA-SCRIPT?**

JavaScript, which was originally supported by Netscape Navigator, is the most widely used web language today. JavaScript allows you to embed and execute programmes directly on your website. The applications basically are included in the Script> section. If you want the content to be written directly on a Web page, put it in the BODY> section.

**EX:** <Html>

<Head>

---

*<Title></Title>*

*</Head>*

*<Body>*

*<Script Language= "JavaScript">*

*</Script>*

*</Body></Html>*

## **JAVASCRIPTS OBJECTS**

An object-oriented language is JavaScript. JavaScript comes with a number of preset objects.

### **Objects of the JavaScript**

- 1 document: Compliant with the body of the current Web page. This tool displays the page's HTML, which includes all of the links, pictures, and anchors.
- 2 form: Contains information about HTML forms on the current page.
- 3 frame: The frame of the browser window.
- 4 history: Keeps track of those websites you visited before

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arriving at the present page on your web browser.

5. Location: This field contains related data of the current location of the web page.
6. navigator: This relates to the browser itself, and it allows you to identify the browser used by the user.
7. window: This refers to the current browser window.

## **JAVASCRIPTS EVENTS**

### Events of Java-Script

1. In switch: When the data is in control, like the text field, the in switch is triggered.
2. on Click: When an object is clicked, it appears.
3. in Focus: When an element obtains focus, this occurs.
4. in Mouse Down: appears mainly when the mouse-button is pressed down.
5. in Reset: User presses the reset button, this appears.

## **JAVA-SCRIPT FUNCTIONS**

### **Declaration of function**

---

Syntax: function *function*

*name* ()

{

...

...

}

Write these functions in

<SCRIPT> tag.

### **3.3 INTRODUCING WEB SOCKETS**

Web socket protocol supports real-time two-way communication.

Conversation

The engine uses WebSocket to establish communication for conversation just once

Publish the message and distribute it to your subscribers. It also uses the same web socket connection to send and receive messages as well as forward messages.

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## Difference between Web Socket and HTTP Connection

### Web Socket connection

Web-Socket is a dual-oriented which by reusing the default connection channel, this communication protocol may transport data from client to server or from server to client.. The connection is kept alive until disconnected as a client or server.

To receive data on a single communication channel, almost all real-time applications employ Web-Sockets.

WEbSocket is used by all regularly updated apps since it is quicker than HTTP Connection.

### HTTP connection

HTTP Protocol is an indirect protocol that works on top of the TCP protocol based on the Connection, we can create a connection using HTTP request methods after discovering that the HTTP response connection is closed.

A simple RESTful application leverages the stateless HTTP protocol.

When we don't want to keep a connection open for an extended period of time, HTTP is slower than WebSocket.

## 3.4 RDBMS CONCEPTS

### 1. DATA ABSTRACTION

The database gadget's main goal is to offer users with a non-

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obtrusive view of the records. This programme conceals certain information about how records are saved and maintained. However, for the system to function, the statistics must have been properly downloaded. Hence performance culminates in the production of a complex-data visualisation shape on a website. Customers of the database gadget must be kept in the dark about something complicated. This is done by specifying a number of output phases through which the website may be viewed.

## **2 CATEGORIZATION OF DATABASE**

Below are three different database approaches:

### **a. Hierarchical-Database:**

In this style of design, data is represented by a simple tree. A record having more than three dependents is called Root. Root can have any number of dependents. There is a minimum number of dependents and a maximum number of levels for each of them. This method has the following drawbacks:

### **b. Network Database:**

Data is represented by Network configuration on Network Websites. As a result, the occurrence of a record can be immediately communicated to a large

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number of managers and dependents, allowing for more direct contact than the classification system. The Network model's fundamental flaw is that data representation is so complicated that it leads to a DML (Data Fraud Language) problem.

**c. Relational Database:**

For each set of tables containing a number of columns with distinct names, the relationship model depicts the data and the relationship between the data.

## **3.5 THE SQL(LANGUAGE)**

A relational database language is SQL. SQL is a non-procedural language, which means we specify what we want done rather than how.

### **SQL FEATURES**

1. SQL is mainly a query language for working together.
2. The website management language is SQL.
3. The language of website editing is SQL.
4. SQL is the server/client programming Language.

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5. SQL is a programming language used to create distributed websites.

6. SQL is a website gateway language.

### **SQL Commands - Basics**

- ✓ Data definition language (DDL)
- ✓ Data manipulation (DML) Commands
- ✓ Transactional Control (TCL) language instructions
- ✓ Data Management language Commands (DCL)

### **PHP**

- The acronym PHP actually stands in this manner "PHP: Hypertext Preprocessor."
- It is a popular open source script.
- On the server, PHP scripts are used.
- It is free to download and thereby to use .

### **What exactly is a PHP File?**

- PHP files can include text, HTML, CSS, JavaScript, and PHP



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code.

PHP code is said to run on the server, and the output is displayed in the browser as plain HTML.

- PHP Files end with ".php"

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### **What does PHP Do?**

PHP can create dynamic content for web pages.

On a server, PHP may create read, open, write, delete, and are also used for closing files. Form data may be collected by PHP.

PHP is capable of sending and receiving cookies.

PHP may add, delete, and edit information on your website.

PHP may be used to control user access.

PHP is capable of encrypting data.

You are not limited to extracting HTML with PHP. You may save images, To your PC, you may save PDF files and even Flash films. Any text may be extracted, including XHTML and XML.

## **3.6 Design Document, Models and Dataflow**

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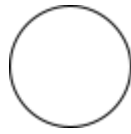
## Diagrams

- The complete system is represented by a physical graphic that depicts the exact physical limits that any website must fulfil in order to be saved on disc. This graphic represents the overall picture of the current systems.
- The ER-Diagram concept shapes device integration because it not only identifies existing companies but also the basic gadget relationships that exist and the important elements required to maintain machine condition.
- The DFD content level is presented to provide an overview of the active features and implications of the system. The device displays the input and output phases at the highest level possible within existing structures.

The DFD does not present the steps in order. The DFD only illustrates how the process differs from the system and how data flows through it. The following are some of the DFD symbols used in the project.



External-Entities



Process: A transaction of information that resides within the bounds of the system to be module.

## DATAFLOWS



DATASTORE: A repository of data that is to be stored for use by one or more processes, may be as simple as buffer of queue or as a relational database.

### **RULES FOR DFD:**

- Adjust the system width using context diagrams.
- Set the DFD to read the main action sequence from left to right and up and down.
- Create list of every input and output.
- Using circular objects, Each process in a system should be identified and labelled.
- A method is required for any data conversion and transfer. As a result, never link a data store to a data source, destination, or other data store via a data flow arrow.
- Ignore all control information and hide any hardware..
- Make sure the terminology appropriately conveys what is being done.

- 
- There should be no ambiguous procedures.
  - Recognize outside sources, data centres, and squares.
  - Each international trade event's number is repeated.
  - Except for easy record retrieval, identify all data flow for each step of the operation.
  - Label the data-flow in every arrow.
  - The information flow in each arrow should be used.
  - The data flow arrow to show how the data is moving, should be used.
  - Unspecified data cannot be flowed.
  - Data transmission between two external organisations is not possible.

### **VARIOUS DFD LEVELS:**

Because of the complications of a device, the requirement of depiction of performance of a any one records drift system. A context analysis diagram is used to depict an outline of the various structures inside the employer at the highest level. while the DFD blew up

The representation of the various DFD levels is as follows

- LEVEL-0 INPUT/OUTPUT OF THE SYSTEM

- 
- LEVEL-1 DATAFLOW FUNCTIONAL LEVEL OF THE SUBSYSTEM
  - LEVEL-2 DETAIL DATA FLOW AT THE FILE LEVEL

From one level to the next, the input and output data should be consistent.

**LEVEL 0:- INPUT/OUTPUT OF THE SYSTEM**

Degree zero DFD manages inputs and outputs from the main machine and tactics, defining massive machine parameters. This graphic is similar to a context diagram at the consumer level.

**LEVEL 1:- DATAFLOW FUNCTIONAL LEVEL OF THE SUBSYSTEM**

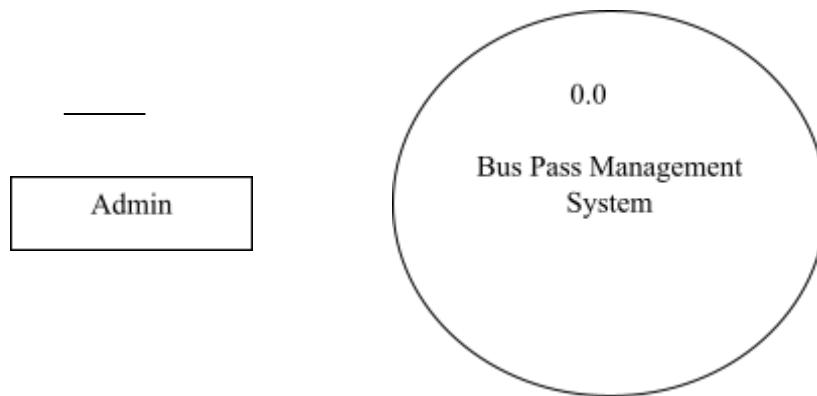
level 1 DFD defines the next level of data within the device, defining the flow of data between sub-structures that makes up the entire thing.

**LEVEL 2:- DETAIL DATA FLOW AT THE FILE LEVEL**

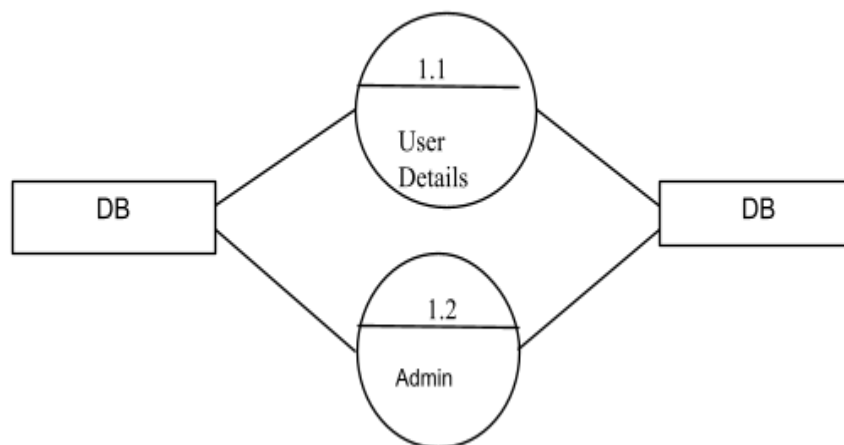
If infinite resources are available and time is restricted, all undertakings are viable. It is critical and sensible to assess the feasibility of a problem as soon as possible. There are several impacts of feasibility and danger analysis.. If the danger to undertake is too great.

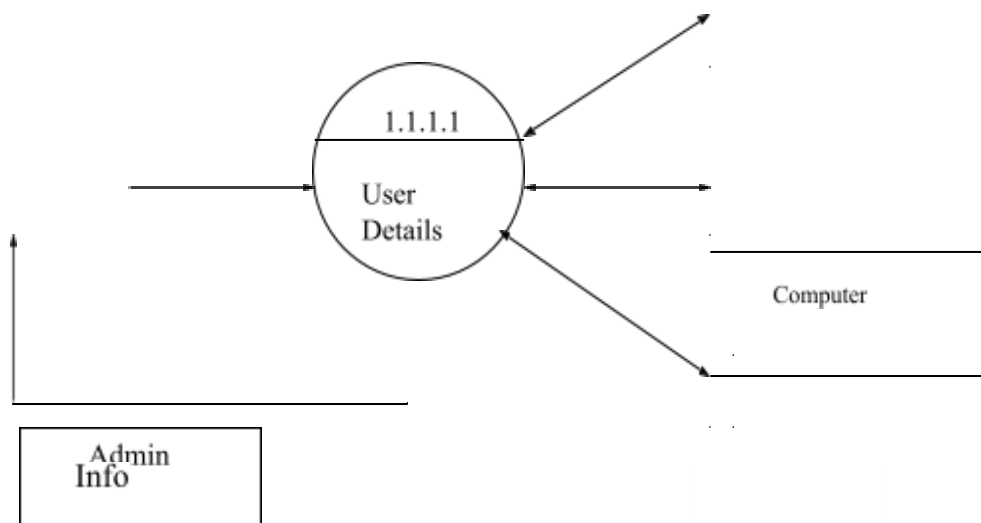
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# LEVEL FIRST OF THE DATAFLOW FIGURE



## Level 2 OF THE DFDs





## 2. Unified-Modeling-Language-Diagrams(UML):

- These associated programming languages use a model approach controlled by a set of syntactic, semantic, and pragmatic principles, the software engineer can construct an analytical version.
- The UML device is represented by five distinct ideas that define the device from a unique viewpoint. Each view is described in the following drawing set.

### Model View of User

- i. The view depicts the whole from the observation of a single person.

- 
- ii. The analytical presentation describes the utilisation situation from the perspective of clients who have given up.

### **Structural model view**

The records and overall performance in this version follow the flow of the gadget.

Vertical systems are represented in this model view.

### **Behavioral Model View**

- ◆ Represents behavioural fluctuations as a component of a gadget, reflecting the group's interaction with the various structural aspects indicated in the user model and the shape version's perspective.

### **Implementation-Model-View**

- ◆ This example includes order and behaviour as part of the plan since it can be constructed.

### **Environmental-Model-View**

- ◆ Mainly structural and behavioural characteristics of respective system could be expressed in this

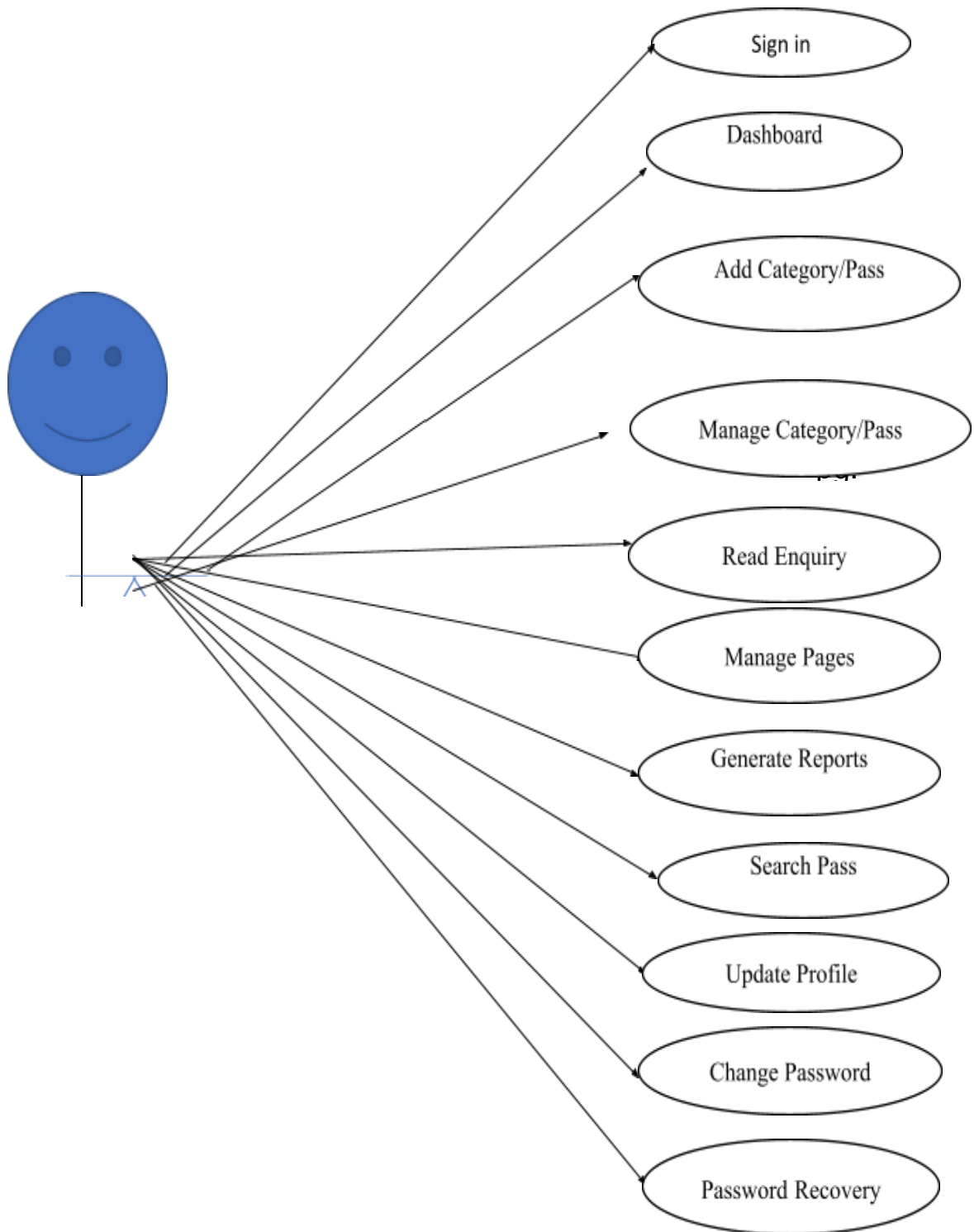


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scenario.

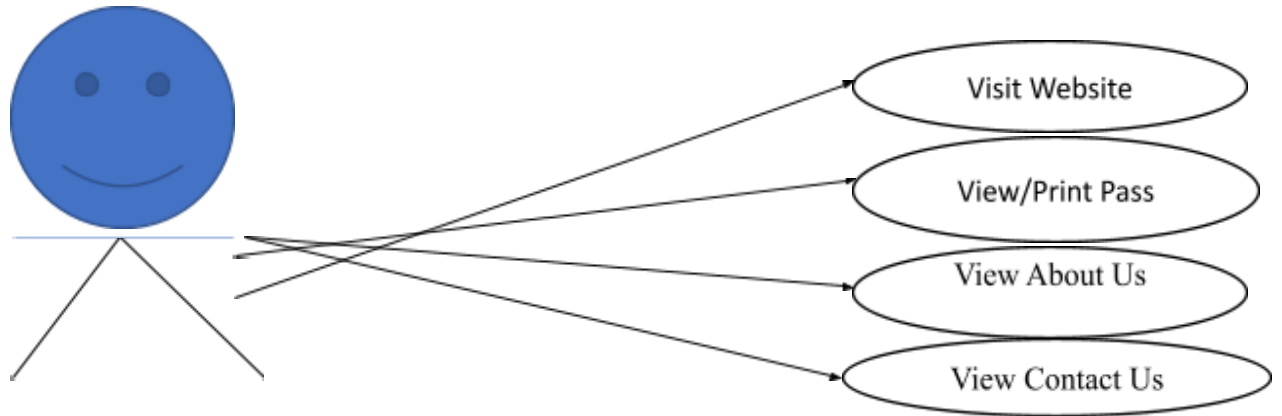
- ◆ UML is made up entirely of unusual domain names.
- ◆ UML analytical version, which specialises in user version and system structure examination?
- ◆ Behavioral modelling, implementation modelling, and environmental model views are all covered by UML layout modelling.

## Use Case Diagrams: Admin



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## Use Case Diagrams: User



## Entity Relationship Diagrams

An E-R (Entity-Relationship) Diagram depicts the relationship between the table's entities.

**The symbols used in E-R diagrams are:**

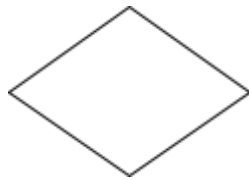
SYMBOL

PURPOSE

Represents Entity sets.



Representing attributes.



Representing  
Relationship Sets.

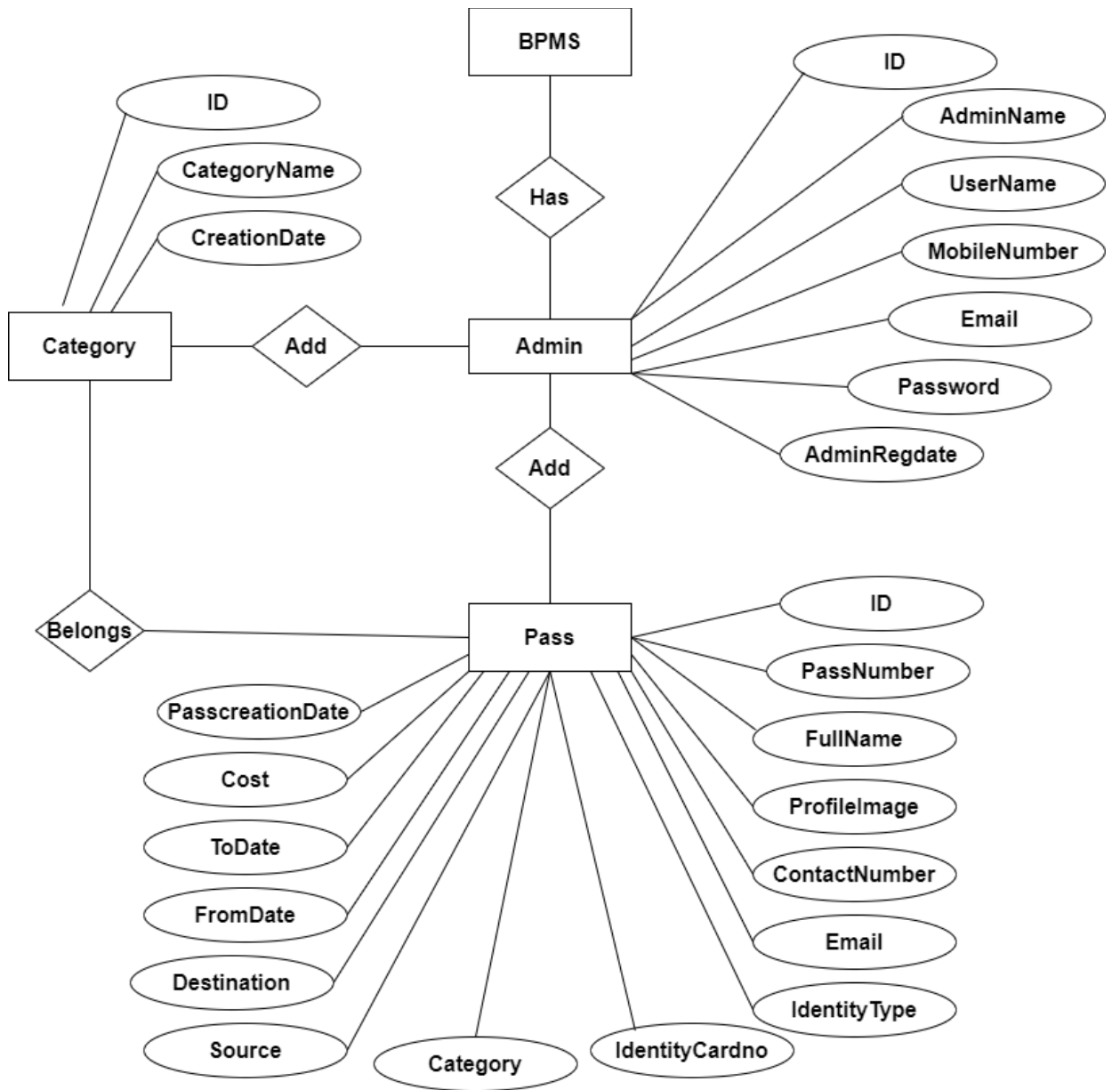
\_\_\_\_\_   
e representing

Lin

flow

Systematic analysis refers to a collection of tools and techniques for analysing data.

Developing a New System Type: The conventional method focuses on cost-benefit and feasibility analysis, project management, and the selection of hardware and software. for private challenges.



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## **3.7 Database Design**

The website's gadget statistics should be preserved and downloaded. The layout of the system includes website design. The analysis segment recognises statistical additives and data systems to be kept. built and assembled to create a data storage and healing device


A website is a collection of connected statistics saved with the least amount of waste so that numerous clients may access them quickly and effectively. The main goal is to make gaining access to the website easier, faster, less expensive, and less challenging for the consumer. Relationships between information items are established, and irrelevant data is deleted. The goal of orientation is to achieve internal statistical consistency, as well as less volatility and greater stability. This results in fewer records being retained, a lower risk of data breach, and more frequent updates. The MS gain access to website has been chosen to improve the relevant database.

**Curfew E-Pass Management System Project (CPMS) contains 3 MySQL tables :**


**admin table Structure :** This database keeps track of the administrator's login and personal information.

| # | Name   | Type         | Collation          | Attributes | Null | Default             | Comments | Extra          |
|---|--|--------------|--------------------|------------|------|---------------------|----------|----------------|
| 1 | ID  | int(10)      |                    |            | No   | None                |          | AUTO_INCREMENT |
| 2 | AdminName  | varchar(120) | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 3 | UserName   | varchar(120) | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 4 | MobileNumber   | bigint(10)   |                    |            | Yes  | NULL                |          |                |
| 5 | Email  | varchar(120) | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 6 | Password   | varchar(200) | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 7 | AdminRegdate   | timestamp    |                    |            | Yes  | current_timestamp() |          |                |


**tblcategory table Structure :** The table encapsulates the category of pass.

| # | Name   | Type         | Collation          | Attributes | Null | Default             | Comments | Extra          |
|---|--|--------------|--------------------|------------|------|---------------------|----------|----------------|
| 1 | ID  | int(10)      |                    |            | No   | None                |          | AUTO_INCREMENT |
| 2 | CategoryName   | varchar(200) | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 3 | CreationDate   | timestamp    |                    |            | Yes  | current_timestamp() |          |                |

**tblpass table Structure :** The table encapsulates the pass information of person.

| #  | Name   | Type          | Collation          | Attributes | Null | Default             | Comments | Extra          |
|----|--|---------------|--------------------|------------|------|---------------------|----------|----------------|
| 1  | ID  | int(10)       |                    |            | No   | None                |          | AUTO_INCREMENT |
| 2  | PassNumber   | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 3  | FullName   | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 4  | ProfileImage   | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 5  | ContactNumber  | bigint(10)    |                    |            | Yes  | NULL                |          |                |
| 6  | Email  | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 7  | IdentityType   | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 8  | IdentityCardno   | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 9  | Category   | varchar(100)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 10 | Source   | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 11 | Destination  | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 12 | FromDate   | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 13 | ToDate   | varchar(200)  | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 14 | Cost   | decimal(10,0) |                    |            | Yes  | NULL                |          |                |
| 15 | PasscreationDate   | timestamp     |                    |            | Yes  | current_timestamp() |          |                |

**tblpage:** This table encapsulates the detail for ‘about us’ and ‘contact us’ page.

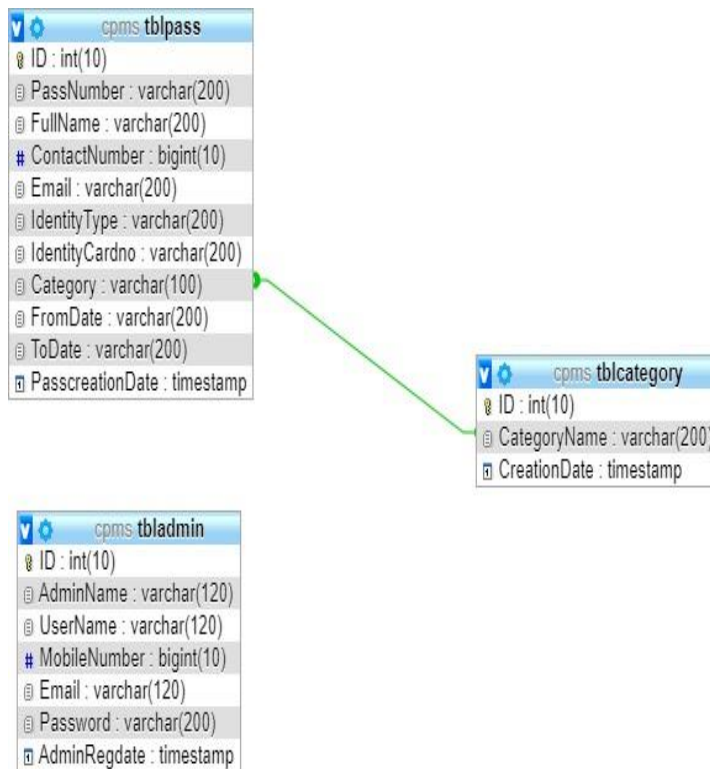
| # | Name   | Type         | Collation          | Attributes | Null | Default             | Comments | Extra                         |
|---|--|--------------|--------------------|------------|------|---------------------|----------|-------------------------------|
| 1 | ID  | int(10)      |                    |            | No   | None                |          | AUTO_INCREMENT                |
| 2 | PageType   | varchar(200) | utf8mb4_general_ci |            | Yes  | NULL                |          |                               |
| 3 | PageTitle  | varchar(200) | utf8mb4_general_ci |            | Yes  | NULL                |          |                               |
| 4 | PageDescription  | mediumtext   | utf8mb4_general_ci |            | Yes  |                     |          |                               |
| 5 | Email  | varchar(200) | utf8mb4_general_ci |            | Yes  | NULL                |          |                               |
| 6 | MobileNumber   | bigint(10)   |                    |            | Yes  | NULL                |          |                               |
| 7 | UpdationDate   | timestamp    |                    |            | No   | current_timestamp() |          | ON UPDATE CURRENT_TIMESTAMP() |

**tblcontact:** This table encapsulates the enquiry information of users.

| # | Name        | Type         | Collation          | Attributes | Null | Default             | Comments | Extra          |
|---|-------------|--------------|--------------------|------------|------|---------------------|----------|----------------|
| 1 | ID          | int(10)      |                    |            | No   | None                |          | AUTO_INCREMENT |
| 2 | Name        | varchar(200) | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 3 | Email       | varchar(200) | utf8mb4_general_ci |            | Yes  | NULL                |          |                |
| 4 | Message     | mediumtext   | utf8mb4_general_ci |            | Yes  |                     |          |                |
| 5 | EnquiryDate | timestamp    |                    |            | No   | current_timestamp() |          |                |
| 6 | IsRead      | int(5)       |                    |            | Yes  | NULL                |          |                |

### Diagram used for Class:

The class diagram depicts a set of classes, interfaces, collaborations, and their interactions.





---

# **Chapter 04 – PERFORMANCE ANALYSIS**

## **4.1 SYSTEM TESTING**

### **SOFTWARE TESTING TECHNIQUES:**

Because it is the ultimate check of the specification, design, and code, software testing is an important aspect of software quality assurance..

### **OBJECTIVES FOR TESTING:**

Checking out is the process of devising a strategy for identifying flaws. A fantastic test case is one that is capable of detecting undetectable errors.

A successful examination is one that demonstrates a mistake that has not yet been detected.

The aforementioned objectives indicate a significant shift in the viewing environment.

The examination will not reveal any flaws; rather, it will reveal that software programme errors exist.

---

There are three different sorts of testing methods.

1. Unit-Test
2. Integration-Test
3. Performance-Test

**Unit based Testing:**

A small bit of software programme layout module testing focusing on verification activities. The focus of the unit check is always on the white field. Prevalence testing is used as part of unit testing to test module interfaces, location information systems, border situation testing, and the employment of all neutral techniques and error detection strategies.

**Integration based Testing:**

Integration based testing is a scientific approach of building a device structure and evaluating it for integration problems at the same time. The scope of the test specifies which areas of operation, general performance, and internal design will be examined. Techniques like the floor test and the floor inspection are used.

**Performance Testing:**

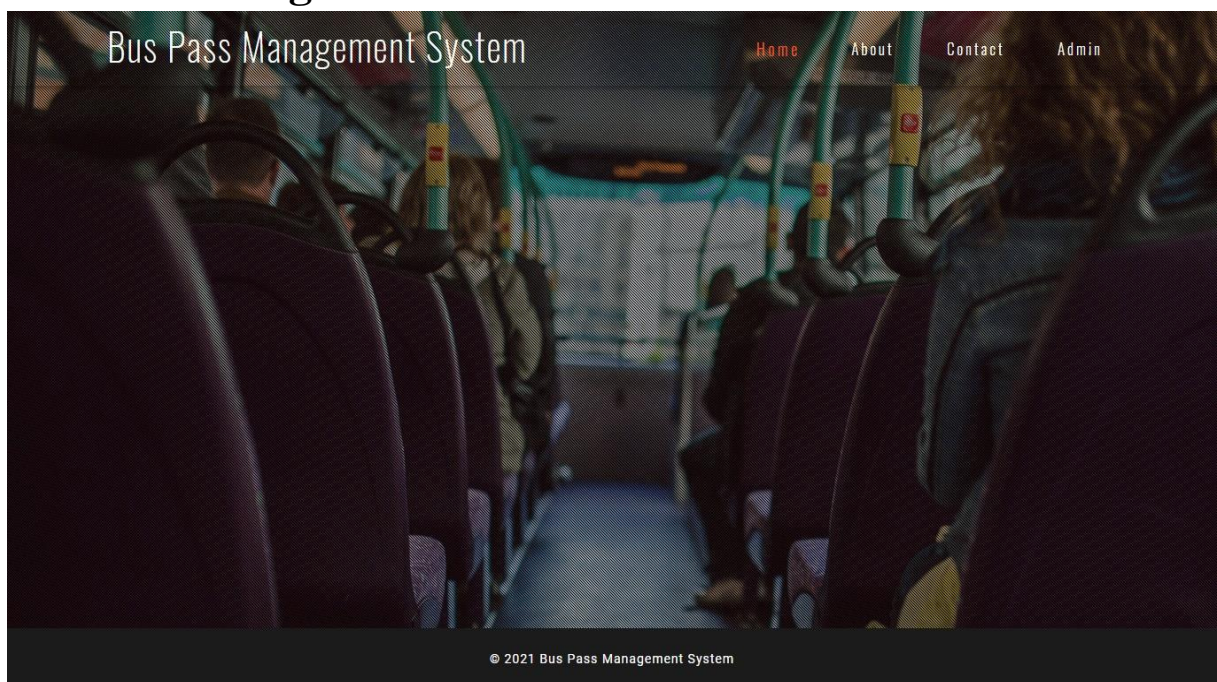
To verify whether machine features are being carried out in a

---

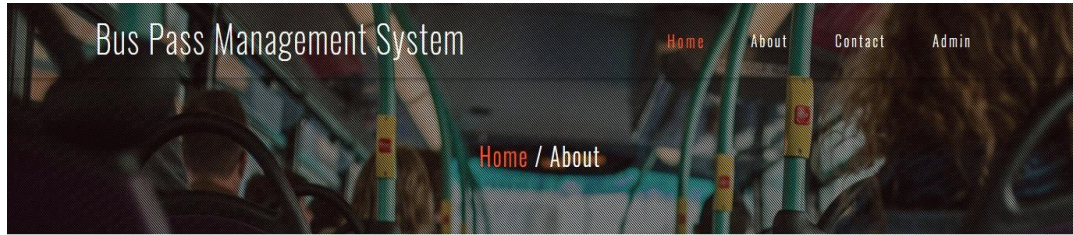
timely manner, Both read and update operations must have their time aggregated.

## **4.2 OUTPUT SCREEN OF PROJECT**

### **Home Page**



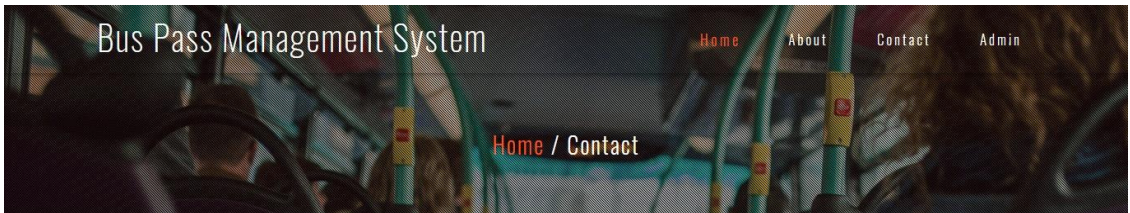
### **About Us Page**



## ABOUT US

fdggfg bjkbhkhjllkujuouortiouolutre  
mkllkjlgtrjoitemlher  
lkjirewfkjgrekmvvetjoituorglkj  
jllkjlojpolpoipnmooulu yhuinuytbr c6etesrwx4a4wse4trsdtyghi  
oiuintycvaswqax345r75

## Contact Us Page



## CONTACT US

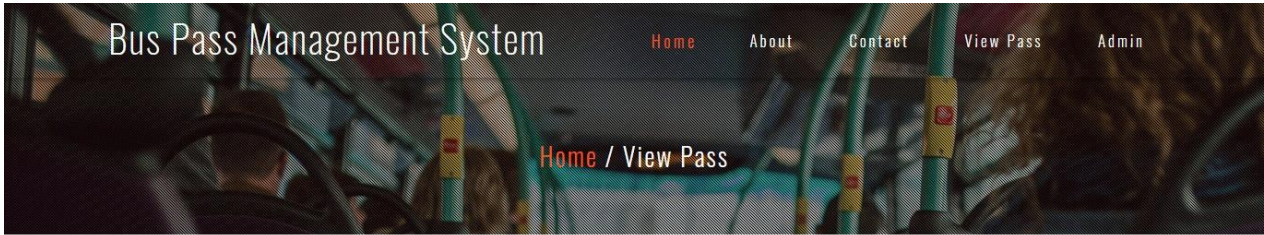
|                                       |       |
|---------------------------------------|-------|
| Name                                  | Email |
| Message                               |       |
| <input type="submit" value="SUBMIT"/> |       |

### GET IN TOUCH :

- #890 CFG Apartment, Mayur Vihar, Delhi-India.
- Mobile Number : 4654789799
- Email : info@gmail.com



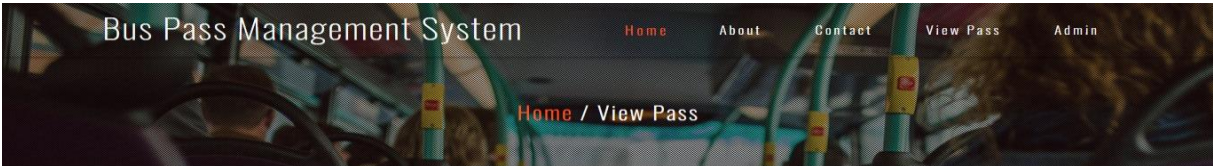
# View Pass



## VIEW PASS

Search by Pass Number

# View Detail of Pass



## VIEW PASS

Pass ID: 286529906

|               |              |                      |                     |
|---------------|--------------|----------------------|---------------------|
| Category      | Delux Bus    |                      |                     |
| Full Name     | Yogesh Kumar |                      |                     |
| Photo         |              |                      |                     |
| Mobile Number | 4654464646   | Email                | yogi@gmail.com      |
| Identity Type | Adhar Card   | Identity Card Number | AD-122346           |
| Source        | dfg          | Destination          | kgf                 |
| From Date     | 2020-04-14   | To Date              | 2020-05-14          |
| Cost          | 900          | Pass Creation Date   | 2020-04-14 17:17:03 |

---

## Panel on Admin's Side Page for Login

Bus Pass Management System


Please Sign In

**Username**  
admin

**Password**  
\*\*\*

Keep me signed in    [Lost Password?](#)

Login

 [Back Home](#)

## If Password is forgotten

Bus Pass Management System

Reset Your Password

E-Mail

Mobile Number

New Password

Confirm Password

[Already have an account](#)

submit

# Dash-Board

The dashboard is titled "BPMS" and is accessed by the "Admin user" who is currently "Online". The navigation menu on the left includes: Dashboard, Category, Passes, Pages, Enquiry, Search, and Report of Pass. The main dashboard area displays five data cards:

- 4 Total Category** (Pink card with calendar icon)
- 5 Total Pass** (Yellow card with mug icon)
- 1 Pass Created Today** (Red card with pencil icon)
- 1 Pass Created Yesterday** (Yellow card with pencil icon)
- 2 Pass Created in Seven Days** (Light blue card with pencil icon)

# Profile for Admin

**BPMS**

**Admin user**  
Online

Dashboard  
Category  
Passes  
Pages  
Enquiry  
Search  
Report of Pass

### Admin Profile

**Admin Name**  
Admin user

**User Name**  
admin

**Contact Number**  
1234567890

**Email address**  
adminuser@gmail.com

**Admin Registration Date**  
2020-04-14 12:14:27

Update

# In case if Password needs to be changed

**BPMS**

**Admin user**  
Online

Dashboard  
Category  
Passes  
Pages  
Enquiry  
Search  
Report of Pass

### Change Password

**Current Password**

**New Password**

**Confirm Password**

Change



## In order for the Category to be added

The screenshot shows the 'Add Category' form in the BPMS interface. The left sidebar contains navigation options: Dashboard, Category, Passes, Pages, Enquiry, Search, and Report of Pass. The main content area has a header 'Add Category' and a form with a 'Category Name' input field and an 'Add' button.

## For Managing Category

The screenshot shows the 'Manage Category' table in the BPMS interface. The left sidebar is the same as in the previous screenshot. The main content area has a header 'Manage Category' and a table with columns: S.NO, Category Name, Creation Date, and Action. The table contains 4 entries. Below the table, it says 'Showing 1 to 4 of 4 entries' and has 'Previous', '1', and 'Next' navigation buttons.

| S.NO | Category Name | Creation Date       | Action   |
|------|---------------|---------------------|--|
| 1    | AC Bus        | 2021-07-04 19:57:53 | <a href="#">Edit</a>    <a href="#">Remove</a> |
| 2    | Non AC Bus    | 2021-07-04 19:58:32 | <a href="#">Edit</a>    <a href="#">Remove</a> |
| 3    | Volvo Bus     | 2021-07-04 19:58:47 | <a href="#">Edit</a>    <a href="#">Remove</a> |
| 4    | Delux Bus     | 2021-07-04 19:59:01 | <a href="#">Edit</a>    <a href="#">Remove</a> |

## Category if needs to be updated

The screenshot shows the 'Update Category' form in the BPMS interface. The user is 'Admin user' and is 'Online'. The left sidebar contains navigation options: Dashboard, Category, Passes, Pages, Enquiry, Search, and Report of Pass. The main form area has a title 'Update Category' and a single input field labeled 'Category Name' containing the text 'AC Bus'. A blue 'Update' button is positioned to the right of the input field.

## To Add a Pass

The screenshot shows the 'Add Pass' form in the BPMS interface. The user is 'Admin user' and is 'Online'. The left sidebar contains navigation options: Dashboard, Category, Passes, Pages, Enquiry, Search, and Report of Pass. The main form area has a title 'Add Pass' and several input fields: 'Full Name', 'Profile Image' (with a 'Choose File' button and 'No file chosen' text), 'Contact Number', 'Email Address', 'Identity Type' (a dropdown menu with 'Choose Identity Type' selected), 'Identity Card No.', 'Category' (a dropdown menu with 'AC Bus' selected), 'Source', 'Destination', 'From Date' (with a date format 'dd-mm-yyyy' and a calendar icon), 'To Date' (with a date format 'dd-mm-yyyy' and a calendar icon), and 'Cost'. A blue 'Add' button is located at the bottom right of the form.

## Managing the Pass

The screenshot displays the 'Manage Pass' interface within the BPMS system. The interface includes a sidebar with navigation options: Dashboard, Category, Passes, Pages, Enquiry, Search, and Report of Pass. The main content area shows a table of pass records with columns for S.NO, Pass Number, Full Name, Contact Number, Email, and Creation Date. Each record has a 'View | Edit' action link. The table shows 5 entries, and the current page is 1 of 1.

| S.NO | Pass Number | Full Name     | Contact Number | Email                        | Creation Date       | Action      |
|------|-------------|---------------|----------------|------------------------------|---------------------|-------------|
| 1    | 286529906   | Yogesh Kumar  | 4654464646     | yogi@gmail.com               | 2020-04-14 17:17:03 | View   Edit |
| 2    | 915773340   | Suresh Khanna | 9879676976     | suresh@gmail.com             | 2020-04-13 17:20:15 | View   Edit |
| 3    | 884595667   | Anuj kumar    | 1234567890     | phpgurukulofficial@gmail.com | 2020-04-16 08:08:27 | View   Edit |
| 4    | 210712236   | Abir Singh    | 4654646546     | abir@gmail.com               | 2021-07-04 20:31:38 | View   Edit |
| 5    | 474965545   | Augustya      | 6546465464     | aug@gmail.com                | 2021-07-05 13:20:44 | View   Edit |

## Updating Pass

**BPMS** 👤


**Admin user**  
Online

- Dashboard
- Category
- Passes
- Pages
- Enquiry
- Search
- Report of Pass

### Edit Pass

Pass ID: 286529906

**Full Name**  
Yogesh Kumar

**Photo**  [Edit Image](#)

**Contact Number**  
4654464646

**Email Address**  
yogi@gmail.com

**Identity Type**  
Adhar Card

**Identity Card No.**  
AD-122346

**Category**  
Delux Bus

**From Date**  
14-04-2020

**To Date**  
14-05-2020

**Cost**  
900

**Pass Creation Date**  
2020-04-14 17:17:03

[Update](#)

## Updating Image


**BPMS** 👤

**Admin user**  
Online

- Dashboard
- Category
- Passes
- Pages
- Enquiry
- Search
- Report of Pass

### Update Image

**Full Name**  
Yogesh Kumar

**Old Photo** 

**New Photo**  
[Choose File](#) No file chosen

[Update](#)

# Details of Pass

**BPMS** User Profile Icon

**Admin user**  
● Online

Dashboard

Category <

Passes <

Pages <

Enquiry <

Search <

Report of Pass <

### Pass Details

Pass ID: 286529906

|               |              |                      |                     |
|---------------|--------------|----------------------|---------------------|
| Category      | Delux Bus    |                      |                     |
| Full Name     | Yogesh Kumar |                      |                     |
| Photo         |              |                      |                     |
| Mobile Number | 4654464646   | Email                | yogli@gmail.com     |
| Identity Type | Adhar Card   | Identity Card Number | AD-122346           |
| Source        | dfg          | Destination          | kgf                 |
| From Date     | 2020-04-14   | To Date              | 2020-05-14          |
| Cost          | 900          | Pass Creation Date   | 2020-04-14 17:17:03 |

[print](#)

## About Us

**BPMS** 👤

**Admin user**  
Online

- Dashboard
- Category** <
- Passes <
- Pages <
- Enquiry <
- Search <
- Report of Pass <

## About Us

**Page Title**  
About us

**Page Description**

fdggfg bjbkhhkjllkujoluortiouoiutre  
 mkjkljgjoittemiher  
 lkjrewlk:grekmvvetjoituorglkj  
 jlkjlkjoipoipoipmouolu yhuinuytbr: c6etesrwx4a4wse4trsdtyghi  
 oiuintyevavqax345r75

**Add**

## Contact Us

**BPMS** 👤

**Admin user**  
Online

- Dashboard
- Category <
- Passes <
- Pages <
- Enquiry <
- Search <
- Report of Pass <

## Contact Us

**Page Title**  
Contact Us

**Page Description**

#890 CFG Apartment, Mayur Vihar, Delhi-India.

**Email**  
info@gmail.com

**Mobile Number**  
4654789799

**Add**

# View Enquiry

The screenshot shows the 'Read Enquiry' page in the BPMS system. The left sidebar contains navigation options: Dashboard, Category, Passes, Pages, Enquiry, Search, and Report of Pass. The user is identified as 'Admin user' and is 'Online'. The main content area displays a table with the following data:

| S.No | Name  | Email          | Enquiry Date        | Action                       |
|------|-------|----------------|---------------------|------------------------------|
| 1    | Kiran | kran@gmail.com | 2021-07-05 12:56:24 | <a href="#">View Details</a> |

Below the table, it indicates 'Showing 1 to 1 of 1 entries' and includes pagination controls for 'Previous', '1', and 'Next'.

# View Detail of Enquiry

The screenshot shows the 'View Enquiry' page in the BPMS system. The left sidebar is identical to the previous screenshot. The main content area displays detailed information for the enquiry:

|                |  |              |                |
|----------------|--|--------------|----------------|
| <b>Name</b>    | Kiran                                    | <b>Email</b> | kran@gmail.com |
| <b>Message</b> | cost of volvo place pritampura to dwarka |              |                |

# Search Pass

**BPMS** Admin user Online

### Search Pass

Search by Pass Number/Mobile Number

  
  
Result against "1" keyword  
10 records per page Search:   

| S.NO | Pass Number | Full Name  | Contact Number | Email                        | Creation Date       | Action                                      |
|------|-------------|------------|----------------|------------------------------|---------------------|---|
| 1    | 884595667   | Anuj kumar | 1234567890     | phpgurukulofficial@gmail.com | 2020-04-16 08:06:27 | <a href="#">View</a>   <a href="#">Edit</a> |

Showing 1 to 1 of 1 entries

Previous **1** Next

# Between Dates Report of Pass

**BPMS** Admin user Online

### Between Dates Reports

From Date:

To Date:



## View Detail of Between Dates Reports of Pass

BPMS

Admin user  
Online

Between Dates Reports of Pass

Pass Report from 2021-07-01 to 2021-07-06

10 records per page Search:

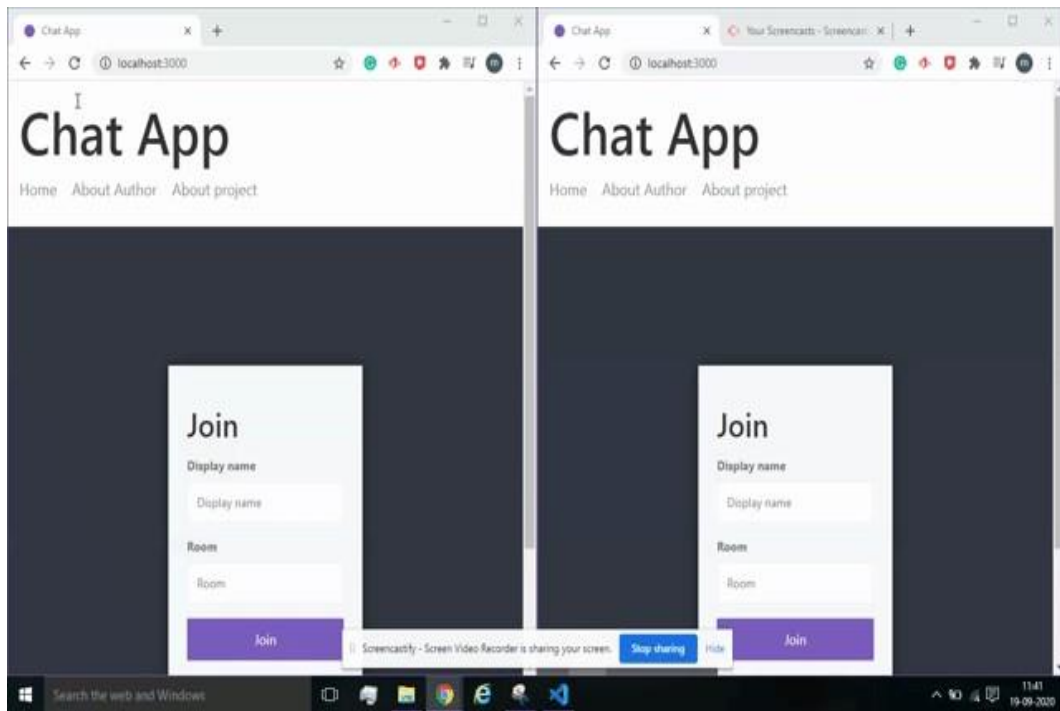
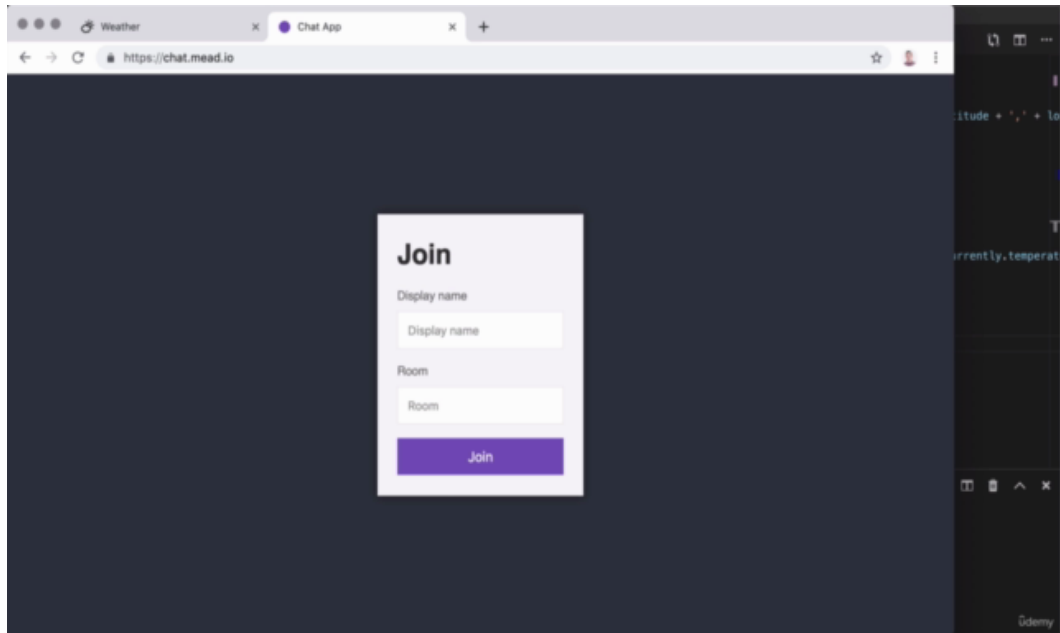
| S.NO | Pass Number | Full Name  | Contact Number | Email          | Creation Date       | Action      |
|------|-------------|------------|----------------|----------------|---------------------|-------------|
| 1    | 210712236   | Abir Singh | 4654646546     | abir@gmail.com | 2021-07-04 20:31:38 | View   Edit |
| 2    | 474965545   | Augustya   | 6546465464     | aug@gmail.com  | 2021-07-05 13:20:44 | View   Edit |

Showing 1 to 2 of 2 entries

Previous 1 Next

## CHAT ENGINE

User provides a user name and the ticket no. that they wish to change, subsequently they enter into the respective room. They can chat in real time with other users in the room as well as provide their Location information. Other users in the room are notified when a new user joins or if someone leaves.



chat interface for 'hartman' with a 'Users' sidebar and a main chat area.

**Users**  
nic  
caron

caron has joined

**nic** 9:33 pm  
Hej Hej This is better than Whatsapp!

**caron** 9:33 pm  
Hej, agreed. We should chat here

**nic** 9:34 pm  
Could you send me your Location maybe we can meet up?

**caron** 9:34 pm  
[My current location](#)

**nic** 9:34 pm  
Ahh you close to me I am over here!

**nic** 9:34 pm  
[My current location](#)

**caron** 9:34 pm  
Super close :)

**caron** 9:35 pm  
See you soon, hej då

**Admin** 9:35 pm  
caron has left!

**Admin** 9:35 pm  
caron has joined!

Enter text here Send Send Location

---

## Chapter 05 – Conclusions

The 'Bus Pass management system' is a strong tool that is far more than a "basic" diagramming tool. Its MDA (version driven architecture) guide is far more geared toward people who use UML in-depth and with a few code generation goals than it is for truly drawing diagrams to document requirements. However, utilising 'Bus skip control device' as a diagramming tool works well, because the utility is developed in Delphi and runs quicker than Java-based utilities, it is particularly useful on Windows. Modern international is a computerised world where tasks must be accomplished quickly, demanding the utilisation of premier assets and gold standard ways. As a result of this unpreventable condition, digitalization of each one of the quarter within the most crucial sectors is needed for the race which have to be held. The simplicity, accuracy, and user-friendly interface of our project are only a few of its distinguishing features. Our bundle includes all of the features and capabilities of the Visual Studio programme. The thesis has been advanced to manage the entire administrative Curfew Pass operation. The software programme generates and replicates entire human labour and paper work performed by the executive in an extremely highly electronic environment. The result of which is, both the consumer and the administrative team is relaxed. The customer gets He just enters in his order and is only a click away. We'd want to offer our deepest gratitude and appreciation to everyone who assisted us in successfully creating, formatting, and executing this project.

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