

**A**  
**Summer Internship Report On**  
**"Swimming Pool Easy Administration System"**

(CE346 – Summer Internship - I)

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**Under the Supervision of**  
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**Submitted to**  
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for Semester 7 & 5

**Submitted at**



**U & P U. PATEL DEPARTMENT OF COMPUTER  
ENGINEERING  
(NBA Accredited)**  
**Chandubhai S. Patel Institute of Technology (CSPIT)**  
**Faculty of Technology & Engineering (FTE),**  
**CHARUSAT At: Changa, Dist: Anand, Pin: 388421.**  
**2020**



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## CERTIFICATE

This is to certify that the report entitled “**Swimming Pool Easy Administration System**” is a bonafied work carried out by **Nimeshkumar Italiya (17CE036)** under the guidance and supervision of **Dr. Ritesh Patel** for the **Summer Internship – II (CE446)** of 7<sup>th</sup> Semester of Bachelor of Technology in **Computer Engineering** at Chandubhai S. Patel Institute of Technology (CSPIT), Faculty of Technology & Engineering (FTE) – CHARUSAT, Gujarat.

We wish him good luck for his bright future.

Under the supervision of,

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This is to certify that the report entitled “**Swimming Pool Easy Administration System**” is a bonafied work carried out by **Pruthvirajsinh Vaghela (18CE133)** under the guidance and supervision of **Dr. Ritesh Patel** for the **Summer Internship – I (CE346)** of 5<sup>th</sup> Semester of Bachelor of Technology in **Computer Engineering** at Chandubhai S. Patel Institute of Technology (CSPIT), Faculty of Technology & Engineering (FTE) – CHARUSAT, Gujarat.

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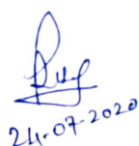


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We wish him good luck for his bright future.

Under the supervision of,



24-07-2020

Dr. Ritesh Patel  
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## **ABSTRACT**

The principal objective of this internship is to learn and explore new things about the technology or tools that we have learnt during our academics. During my six-week internship, we learnt how to interact with the client, how to do documentation, and most importantly how to communicate with co-workers. This internship expanded my thinking in a very creative manner. We come to know about many new tools that made my work easier. We were assigned a project work named ‘Swimming Pool Easy Administration System’. It is a website whose function is basically to maintain the data in database and generate the PDFs of the reports. Admin need to sign up the system. Authentication of the admin is must in order to login. Our role in this project was a Frontend and Backend Developer. My daily tasks were to design GUI or pages of the website as per the task allocated by the internal guide. After the completion of the website, we were given a role of Quality Analysis, to test various test cases in the website.

## ACKNOWLEDGEMENT

The internship opportunity we had with **VTC SWIMMING POOL** was a great chance for learning and professional development. Therefore, we consider ourselves as a very lucky individual as we were provided with an opportunity to be a part of it. We are also grateful for having a chance to meet so many wonderful people and professionals who led me through this internship period.

Bearing in mind previous we are using this opportunity to express my deepest gratitude and special thanks to the **Dr. Ritesh Patel** who in spite of being extraordinarily busy with her duties, took time out to hear, guide and keep us on the correct path and allowing me to carry out my project at their esteemed organization and extending during the training.

We express our deepest thanks to the **owner of VTC POOL, Mr. Minesh Patel and his team** for taking part in useful decision & giving necessary advices and guidance and arranged all facilities to make life easier. We choose this moment to acknowledge his contribution gratefully.

We perceive as this opportunity as a big milestone in my career development. We will strive to use gained skills and knowledge in the best possible way, and will continue to work on their improvement, in order to attain desired career objectives.

## **COMPANY DESCRIPTION**

**Company name:** VTC SWIMMING POOL

**Type of business structure:** Private

**Ownership/management team:** Private Trust

**Location:**

**Company history:** The VTC SWIMMING POOL, is an independent, start-up, based in the Vidhyanagar- state- of- Gujarat, India.

## CHAPTER 1: INTRODUCTION

### 1.1 PURPOSE

The main purpose of doing internship was to gain some more & deep knowledge in the field of web development & to sharpen my skills to next level. We got to know about many new things that we were unaware about. We learnt new tools that was very helpful to complete my task in less time. We learnt how to interact with the people in company's environment.

### 1.2 OBJECTIVE

The objectives of internship program are as follows:

- To gain industry working style and knowledge.
- To build the strength, teamwork spirit and self-confidence in students' life.
- Provides the opportunity to learn real-life work skills and etiquette hands-on at a real job.
- To Gain valuable skills, knowledge and experience in a field to allow us to make a career transition.
- Explore a career interest, develop skills, and gain experience.
- To help us to apply the theory and skills which we have learned in the classroom setting, and for our personal development.
- We will be able instilled with good moral values such as responsibility, commitment and trustworthy during their training.

### 1.3 SELECTION OF ORGANIZATION

As a student, we are supposed to do a summer internship. In Internship we are given a definition of Swimming Pool Automation System. The live project definition was ready and so we conclude to intern the project.

#### 1.3.1 Contact Information

**Location:** VTC Swimming Pool,  
Near Old Water Tank,  
Vallabh Vidhyanagar,  
Anand-388120

**Phone:** +91

**Email**

## CHAPTER 2: PROJECT DESCRIPTION

### 2.1 OVERVIEW

Swimming pool auto system is developed to maintain the customers and member details or information. User can be Add, Update and Delete the customers details in various forms, Categories and reports. User can search the data or information of any customer with the only mobile number or name or form no or receipt no etc. User can generate reports of particular columns. User can download PDF files of all the reports.

### 2.2 PROBLEM STATEMENT

- Swimming pool owner wants at what time the customer enters and exit during his/her allocated batch.
- Swimming pool owner wants the list of customers who has entered the swimming pool before 5 minutes.
- Swimming pool owner wants the list of customers who has entered the swimming pool within 25 minutes of batch start.
- Swimming pool owner wants the list of customers who has entered the swimming pool before 25 minutes of batch start.
- Swimming pool owner wants the total available Cid and Free Cid so that they can allocate the Cid to the other customers.
- Swimming pool owner wants to generate PDF of all the receipt together of the customers with same form number.
- Swimming pool owner wants to print all the receipts of a group of customers in a single receipt.
- Swimming pool owner wants that maximum strength should be 135 and no entry will be there after that.
- Swimming pool owner wants that due date of pending payment should be displayed within the given time interval (i.e.; within 7 days or 10 days or 15 days etc.)
- Swimming pool owner wants exact calculation of the money i.e.; the total amount of fees and total discount given to the customers.

The Swimming Pool Auto System was developed in JAVA initially. The owner wants to update same system. So, we develop a system using PHP and MySQL. Because with PHP and MySQL we can have more security about the data and better management of the data using database.

To overcome the drawbacks of the existing system, the proposed system has been evolved. This project aims mainly for the forms, reports like category listing, customer listing, payments, forms listing, batch occupancy listing and batch in/out. The major problem is to download the forms and reports. So, we add a PDF option for the download of form, reports and receipt. We can download all receipts of customers with all the duration they have selected with their customer ID. The user can also download required columns only by selecting the column visibility option.

## 2.3 RESPONSIBILITIES ASSIGNED

Completing a whole website design requires certain responsibilities to be carried out. Some of the responsibilities assigned to us for completion of this project are as follow:

Sr No.		GUI/Report Name	GUI/REPORT	Developer Name
1	Forms			
2		New Form	GUI	Nimesh
3		Form Listing	Report	Nimesh
4	Category			
5		New Category	GUI	Nimesh
6		Category Listing	Report	Nimesh
7	Customer			
8		Customer Entry- Add	GUI	Dhruvil
9		Customer Entry- Search/Edit/Update	GUI	Dhruvil/ Nimesh
10		Customer Listing (LR)	Report	Nimesh
11		Customer Payment	GUI	Nimesh
12		Payment Receipt	Report	Nimesh
13		Payment Listing	Report	Nimesh
14		Payment Report	Report	Nimesh
15		Available CID	Report	Pruthvi
16		Remove CID	GUI	Pruthvi
17				
18	Other Reports			
19		Current Batch Display	Report	Nimesh
20		Batch Timings (LR)	Report	Dhruvil
21		Batch Occupancy (LR)	Report	Dhruvil
22		Bathwise Customer IN/OUT Report	Report	Nimesh
23		payment Due	Report	Dhruvil
24		Occupancy Summary	Report	Pruthvi
25		Dashboard	GUI	Nimesh
26		Deaily Payment Transaction	Report	Nimesh
	Employee			
27		New Employee	GUI	Nimesh
28		Employee Listing	GUI	Nimesh
29		Employee In/Out Daily	Report	Nimesh
30		Employee In/Out Monthly	Report	Nimesh
31		Date wise	Report	Nimesh
	Extra			
32		login	GUI	Nimesh

33		Dashboard	GUI	Nimesh
----	--	-----------	-----	--------

### 2.3.1 Responsibility assigned

## 2.4 MOTIVATION

The main motto of the internship is to gain practical knowledge and to learn new skills and technology. The internship allows the student to make good communication skills and be familiar with the different industrial environment.

## **CHAPTER 3: SYSTEM ANALYSIS**

### **3.1 INITIAL REQUIREMENT**

Initial requirement was gather in the month of February which was disused by team lead in the month of May, 2020. Following were the final requirement.

1. Total batch hours: 6 to 7 am/ 7 to 8 am/8 to 9 am/4 to 5 pm/ 5 to 6 pm/6 to 7 pm/7 to 8 pm
2. Total Time period
  - a. 1 month
  - b. 3 months
  - c. 6 months
  - d. 1 year
  - e. Special batch 2 month
  - f. Special batch 3 month
  - g. Special batch 4 month
3. Admission for swimmer with specified Time slot (Entry can be made possible by staff at the time of admission with date/Time slot/Time period)
4. Admission for learner with Specified Time slot (Entry can be made possible by staff at the time of admission with date/Time slot/Time period)
5. Thumb or any other finger entry
6. Correction facility to other finger entry
7. Entry and exit as per 7 tie slot daily
8. Beeper/Buzzer after completion of one hour
9. Maximum strength of 135 for time slot. No entry after that; however, staff is permitted to go up 150
10. Batch wise register formation
11. If required, we can take out the print even after 5 years
12. Entry is allowed any time during time slot within 25 minutes, but buzzer/Beeper needs to blow after specified time slot only.
13. 2 entry sensors + 2 exit sensors unit shall be installed
14. All required hardware's required for the interlock system
15. The complete system shall comprise of Design and engineering and supply of software and hardware's installation, testing, and commissioning of complete system at site, attending the trouble shooting, Providing to the staff members, free services for 1 year.

### **3.2 CORRECTED REQUIREMENT**

Following were the corrected requirement from the organization.

1. Total batch hours: 6 to 7 am/ 7 to 8 am/8 to 9 am/4 to 5 pm/ 5 to 6 pm/6 to 7 pm/7 to 8 pm
2. Total Time period
  - a. 1 month
  - b. 3 month





- c. 6 month
- d. 1 year
- e. Special batch 2 month
- f. Special batch 3 month
- g. Special batch 4 month
- 3. Admission for swimmer with specified Time slot (Entry can be made possible by staff at the time of admission with date/Time slot/Time period)
  - a. Status: Facility is delivered.
- 4. Admission for learner with Specified Time slot (Entry can be made possible by staff at the time of admission with date/Time slot/Time period)
  - a. Status: Facility is delivered.
- 5. Thumb or any other finger entry
  - a. Status: Facility is delivered. devices are installed and working perfectly. Data from sensors are available in Database.
- 6. Correction facility to other finger entry
  - a. Status: Facility is delivered.
- 7. Maximum strength of 135 for time slot. No entry after that; however, staff is permitted to go up 150
  - a. Status: Summary report which contain datewise & Batchwise current occupancy during all slots. By default, current date. Annex-5
- 8. If required, we can take out the print even after 5 years
  - a. Status: Report should contain Date Range (Should not go beyond current financial year because at every financial year Form no and receipt no is reset to zero) & Personwise, Detail & Summary Report. By default, current date should be in the range. They do not require in terms of report, HTML report is sufficient.
  - b. Summary Report as per Category wise & Non category as well.(Option should be provided)
- 9. 2 entry sensors + 2 exit sensors unit shall be installed
  - a. Correction: As mentioned in point 8, no need to implement buzzer. However, Display should contain Separate provision to display such IN entries. Annex-1
- 10. All required hardware's required for the interlock system
  - a. Status: USB camera and VGA card need to be purchased by VTC as per advise by CHARUSAT.
- 11. The complete system shall comprise of Design and engineering and supply of software and hardware's installation, testing, and commissioning of complete system at site, attending the trouble shooting, Providing to the staff members, free services for 1 year.

## Various Reports required.

### Annex-1

VTC Pool

Current Date and Time:



Current Slot	Next Slot	Defaulters
 <p>List of Customers who entered after 25 minutes of batch start time</p>		
 <p>List of customers who have entered within 25 minutes of batch start time. 5 minutes before should come here.</p>		

**Fig 3.3.1 Annex 1**

### Annex-2

VTC Pool

Current Date and Time:

Current Slot	Next Slot	Defaulters
		

**Fig 3.3.2 Annex 2**

### Annex-3

VTC Pool

Current Date and Time: February 23, 2020



Current Slot Total Count=25(Max 130)	Next Slot	Defaulters
		 <p>Name: Donand Trump Punch Time: 7.10, 7.15, 8.10 Payment Due Date Indication in case of last 4 days</p>

Fig 3.3.3 Annex 3

## Annex-4

VTC Pool

Current Date and Time: February 23, 2020

List of Customers who are hiving Paymet Due in \_\_\_\_ Days.

Sr. no.	Customer Name	Payment Due Date	Last payment
1			
2			
3			

Fig 3.3.4 Annex 4

## Annex-5

VTC Pool

Current Date and Time: February 23, 2020

Currnet Occypacy of batch &lt;Dt Object: Default Current Date&gt;

Sr. no.	Batch Time	Current Occupant	Total Capacity
1	6 to 7 am		
2	7 to 8 am		
3	8 to 9 am		
4	4 to 5 pm		
5	5 to 6 pm		
6	6 to 7 pm		
7	7 to 8 pm		

Fig 3.3.5 Annex 5

## Annex-6

VTC Pool

Current Date and Time: February 23, 2020

Datewise, Batchwise and Category wise Detail Report

Date:

Batch Time:

Sr. no.	Customer ID	Customer Full Name	Receipt ID
1			
2			
3			
4			
5			
6			
7			

Fig 3.3.6 Annex 6

### 3.3 DATABASE DICTIONARY

This project is based on single user, accessed by admin or staff member. There are 8 tables used to store data of customers, employees, forms, category, etc.

#### Old Tables:

Table ▲	Action	Rows	Type	Collation	Size
adminusers	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	48 KiB
audit	★ Browse Structure Search Insert Empty Drop	8,681	InnoDB	latin1_swedish_ci	1.7 MiB
category	★ Browse Structure Search Insert Empty Drop	19	InnoDB	latin1_swedish_ci	32 KiB
client	★ Browse Structure Search Insert Empty Drop	489	InnoDB	latin1_swedish_ci	144 KiB
client_extra	★ Browse Structure Search Insert Empty Drop	517	InnoDB	latin1_swedish_ci	80 KiB
dates	★ Browse Structure Search Insert Empty Drop	1,125	InnoDB	latin1_swedish_ci	112 KiB
employee	★ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	32 KiB
empusers	★ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	32 KiB
forms	★ Browse Structure Search Insert Empty Drop	2,654	InnoDB	latin1_swedish_ci	240 KiB
guests	★ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	32 KiB
logs	★ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	32 KiB
machinedata	★ Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 KiB
monsum	★ Browse Structure Search Insert Empty Drop	31	InnoDB	latin1_swedish_ci	16 KiB
numbers	★ Browse Structure Search Insert Empty Drop	31	InnoDB	latin1_swedish_ci	16 KiB
receipt	★ Browse Structure Search Insert Empty Drop	2,259	InnoDB	latin1_swedish_ci	560 KiB

Old system was working on this tables, which were later joined and new data tables were made.

## Entity- Relationship Diagram (poolaoto)

DHRUVIL SHAH | July 24, 2020

```

    erDiagram
        tblcustomer ||--o{ tblreceipt : "has"
        tblcustomer ||--o{ tblbailypunchhistory : "has"
        tblcustomer ||--o{ tblemmployee : "has"
        tblreceipt ||--o{ tblbailypunchhistory : "has"
        tblbailypunchhistory ||--o{ tblemmployee : "has"
  
```

tblcustomer	
PK	Sysid
	CreatedDate
	SysStatus
FK	FormNo
	TypeOfCustomer
	CustomerName
	Address
	Age
	Gender
	Mobile
	BatchStartDate
	BatchEndDate
	BirthDate
	Swimmer
	SwimExperience
	IsStudent
	VTMCName
	VCTMAddress
	MedCert
	Sletter
	IDCard
	Agreement
	PaymentStartDate
	PaymentEndDate
	LockerNo
FK	Cid
FK	lastReceiptID
	photo


tblreceipt	
PK	Sysid
	CreatedDate
	SysStatus
PK	ReceiptID
FK	FormNo
FK	CategoryName
	ReceivedDate
	TermFee
	CoachFee
	TotalFee
	CGSTAmount
	SGSTAmount
	LockerFee
	discountPercentage
	NetAmount
	PaymentStartDate
	PaymentEndDate
	PayMode
	Remark

tblbailypunchhistory	
PK	Sysid
	CreatedDate
	SysStatus
FK	CustomerSysid
FK	Cid
	CustomerName
	InTime
	OutTime
	Status
	Action

tblemmployee	
PK	Sysid
	CreatedDate
	SysStatus
	Name
	Address
	Mobile
	AadharNo
FK	cid

## CSPIT


**New Tables:****3.3.1 Batch master table**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	<b>Sysid</b> 	int(3)			No	None		AUTO_INCREMENT
2	<b>CreatedDate</b>	date			No	None		
3	<b>SysStatus</b>	varchar(1)	latin1_swedish_ci		No	A		
4	<b>BatchID</b>	int(2)			No	None		
5	<b>Batch StartTime</b>	time			No	None		
6	<b>BatchEndTime</b>	time			No	None		

Batch Master Table is used to store different batch timing. Batch Start Time and Batch End Time stores batch timing.

Table Name: tblbatchmaster


**3.3.2 Category table**

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	<b>Sysid</b> 	int(11)			No	None		AUTO_INCREMENT
2	<b>CreatedDate</b>	date			No	None		
3	<b>CategoryName</b>	varchar(25)	latin1_swedish_ci		No	None		
4	<b>SysStatus</b>	varchar(1)	latin1_swedish_ci		No	A		
5	<b>CategoryRemark</b>	varchar(150)	latin1_swedish_ci		Yes	NULL		
6	<b>DurationShortname</b>	varchar(15)	latin1_swedish_ci		Yes	NULL		
7	<b>DurationDays</b>	int(11)			No	None		
8	<b>Information</b>	varchar(150)	latin1_swedish_ci		No	None		
9	<b>Fees</b>	float(7,2)			No	None		
10	<b>StrictEndDate</b>	date			Yes	NULL		
11	<b>ReceiptLable</b>	varchar(150)	latin1_swedish_ci		Yes	NULL		

Category table is used to store contains different selective packages for customers. Durations of dayes are stored with their respective fees and Category name. Categories can be edited or new category can be added by user

Table name: tblcategory


### 3.3.3 Customer table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Sysid 	int(11)			No	None		AUTO_INCREMENT
2	CreatedDate	date			No	None		
3	SysStatus	varchar(1)	latin1_swedish_ci		No	A		
4	FormNo	varchar(10)	latin1_swedish_ci		No	None		
5	TypeOfCustomer	varchar(15)	latin1_swedish_ci		Yes	NULL		
6	CustomerName	varchar(150)	latin1_swedish_ci		Yes	NULL		
7	Address	varchar(150)	latin1_swedish_ci		Yes	NULL		
8	Age	int(11)			Yes	NULL		
9	Gender	varchar(6)	latin1_swedish_ci		Yes	NULL		
10	Mobile	bigint(10)			Yes	NULL		
11	Batch StartTime	time			Yes	NULL		
12	BatchEndTime	time			Yes	NULL		
13	BirthDate	date			Yes	NULL		
14	Swimmer	varchar(1)	latin1_swedish_ci		Yes	NULL		
15	SwimExperience	int(11)			Yes	NULL		
16	IsStudent	varchar(1)	latin1_swedish_ci		Yes	NULL		
17	VTCMName	varchar(150)	latin1_swedish_ci		Yes	NULL		
18	VTCMAddress	varchar(150)	latin1_swedish_ci		Yes	NULL		
19	MedCert	varchar(1)	latin1_swedish_ci		Yes	NULL		
20	Sletter	varchar(1)	latin1_swedish_ci		Yes	NULL		
21	IDCard	varchar(1)	latin1_swedish_ci		Yes	NULL		
22	Agreement	varchar(1)	latin1_swedish_ci		Yes	NULL		
23	PaymentStartDate	date			Yes	NULL		
24	PaymentEndDate	date			Yes	NULL		
25	LockerNO	varchar(15)	latin1_swedish_ci		Yes	NULL		
26	Cid	int(11)			Yes	NULL		
27	lastReceiptID	int(11)			Yes	NULL		
28	photo	varchar(1)	latin1_swedish_ci		Yes	NULL		
29	Remark	varchar(150)	latin1_swedish_ci		Yes	NULL		

Customer table stores customer data like customer name, address, age, selected category, batch time, etc.

Table name: tblcustomer.


### 3.3.4 Daily punch history table.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Sysid 	int(11)			No	None		AUTO_INCREMENT
2	CreatedDate	date			No	None		
3	SysStatus	varchar(1)	latin1_swedish_ci		No	A		
4	CustomerSysId	varchar(15)	latin1_swedish_ci		Yes	NULL		
5	Cid	int(11)			No	None		
6	CustomerName	varchar(150)	latin1_swedish_ci		Yes	NULL		
7	InTime	time			No	None		
8	OutTime	time			Yes	NULL		
9	Status	varchar(150)	latin1_swedish_ci		Yes	NULL		
10	Action	varchar(6)	latin1_swedish_ci		Yes	NULL		

Daily punch history table stores customer in/out history. What time customer got into swimming pool and at what time customer left the pool?

Table name: tblpunchhistory


### 3.3.5 Employee table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Sysid 	int(11)			No	None		AUTO_INCREMENT
2	CreatedDate	date			No	None		
3	SysStatus	varchar(1)	latin1_swedish_ci		No	A		
4	Name	varchar(150)	latin1_swedish_ci		No	None		
5	Address	varchar(150)	latin1_swedish_ci		Yes	NULL		
6	Mobile	bigint(10)			Yes	NULL		
7	AadharNo	bigint(12)			Yes	NULL		
8	cid	int(11)			Yes	NULL		

Employee table stores data of employees of organization working there

Table name: tblemployee.


### 3.3.6 Form table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Sysid 	int(11)			No	None		AUTO_INCREMENT
2	CreatedDate	date			No	None		
3	SysStatus	varchar(1)	latin1_swedish_ci		No	A		
4	FormNo	varchar(10)	latin1_swedish_ci		No	None		
5	CustomerName	varchar(150)	latin1_swedish_ci		Yes	NULL		
6	Mobile	bigint(10)			Yes	NULL		
7	Address	varchar(150)	latin1_swedish_ci		Yes	NULL		
8	NumberOfCustomer	int(4)			No	0		
9	Date	date			No	None		
10	Amount	float(7,2)			No	None		
11	GSTAmount	float(7,2)			No	None		
12	NetAmount	float(7,2)			No	None		
13	Remark	varchar(150)	latin1_swedish_ci		Yes	NULL		
14	Other	varchar(150)	latin1_swedish_ci		Yes	NULL		

Form table stores data of forms which are filled by customer when they come first time at the Swimming Pool

Table name: tblform.

### 3.3.7 Receipt table


#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	Sysid 	int(11)			No	None		AUTO_INCREMENT
2	CreatedDate	date			No	None		
3	SysStatus	varchar(1)	latin1_swedish_ci		No	A		
4	ReceiptID	int(11)			No	None		
5	FormNo	varchar(10)	latin1_swedish_ci		No	None		
6	CategoryName	varchar(25)	latin1_swedish_ci		No	None		
7	ReceivedDate	date			No	None		
8	TermFee	float(7,2)			No	None		
9	CoachFee	float(7,2)			No	0.00		
10	TotalFee	float(7,2)			No	None		
11	CGSTAmount	float(7,2)			No	None		
12	SGSTAmount	float(7,2)			No	None		
13	LockeFee	float(7,2)			No	0.00		
14	discountPercentage	float(7,2)			No	0.00		
15	NetAmount	float(7,2)			No	None		
16	PaymentStartDate	date			Yes	NULL		
17	PaymentEndDate	date			Yes	NULL		
18	PayMode	varchar(6)	latin1_swedish_ci		No	None		
19	Remark	varchar(150)	latin1_swedish_ci		Yes	NULL		

Receipt table stores data of receipt of customer after payment of category selected by customer.

Table name: tblreceipt

### 3.3.8 Misselenous table



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	<b>Sysid</b> 	int(11)			No	None		AUTO_INCREMENT
2	<b>CreatedDate</b>	date			No	None		
3	<b>SysStatus</b>	varchar(1)	latin1_swedish_ci		No	A		
4	<b>Parameter</b>	varchar(100)	latin1_swedish_ci		Yes	NULL		
5	<b>value</b>	varchar(100)	latin1_swedish_ci		Yes	NULL		
6	<b>Information</b>	varchar(150)	latin1_swedish_ci		Yes	NULL		
7	<b>Description</b>	varchar(150)	latin1_swedish_ci		Yes	NULL		

### 3.3.9 Machine data table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	<b>cld</b>	int(11)			Yes	NULL		
2	<b>cpuid</b>	varchar(20)	latin1_swedish_ci		Yes	NULL		
3	<b>capture</b>	datetime			Yes	NULL		
4	<b>Status</b>	varchar(20)	latin1_swedish_ci		Yes	NULL		
5	<b>Action</b>	varchar(6)	latin1_swedish_ci		Yes	NULL		

Machine data stores Cid with its respective assigned Customer.

Table name: tblmachinedata

## 3.4 MIGRATION QUERIES

```

DROP TABLE IF EXISTS `tblBatchMst`;
DROP TABLE IF EXISTS `tblcategory`;

DROP TABLE IF EXISTS `tblforms`;

DROP TABLE IF EXISTS `tblcustomer`;

DROP TABLE IF EXISTS `tblreceipt`;

DROP TABLE IF EXISTS `tblMisselenous`;

DROP TABLE IF EXISTS `tblDailyPunchHistory`;

DROP TABLE IF EXISTS `tblEmployee`;

CREATE TABLE `tblBatchMst` (
  `Sysid` INT(3) NOT NULL AUTO_INCREMENT ,
  `CreatedDate` DATE NOT NULL ,
  `SysStatus` VARCHAR(1) NOT NULL DEFAULT 'A' ,
  `BatchID` INT(2) NOT NULL ,
  `BatchStartTime` TIME NOT NULL ,
  `BatchEndTime` TIME NOT NULL ,
  PRIMARY KEY (`Sysid`));

CREATE TABLE `tblcategory` (
  `Sysid` int(11) NOT NULL AUTO_INCREMENT,
  `CreatedDate` date NOT NULL,
  `CategoryName` varchar(25) NOT NULL,

```

```

`SysStatus` varchar(1) NOT NULL DEFAULT 'A' ,
`CategoryRemark` varchar(150) NULL,
`DurationShortname` varchar(15) NULL,
`DurationDays` int(11) NOT NULL,
`StrictEndDate` date NULL,
`ReceiptLable` varchar(150) NULL,
`Information` varchar(150) NULL,
`Fees` float(7,2) NOT NULL,
PRIMARY KEY (`Sysid`)
);

CREATE TABLE `tblreceipt` (
`Sysid` int(11) NOT NULL AUTO_INCREMENT,
`CreatedDate` date NOT NULL,
`SysStatus` varchar(1) NOT NULL DEFAULT 'A' ,
`ReceiptID` int(11) NOT NULL,
`FormNo` varchar(10) NOT NULL,
`CategoryName` varchar(25) NOT NULL,
`ReceivedDate` date NOT NULL,
`TermFee` float(7,2) NOT NULL,
`CoachFee` float(7,2) NOT NULL DEFAULT '0.00',
`TotalFee` float(7,2) NOT NULL,
`CGSTAmount` float(7,2) NOT NULL,
`SGSTAmount` float(7,2) NOT NULL,
`LockeFee` float(7,2) NOT NULL DEFAULT '0.00',
`discountPercentage` float(7,2) NOT NULL DEFAULT '0.00',
`NetAmount` float(7,2) NOT NULL,
`PaymentStartDate` DATE NULL ,
`PaymentEndDate` DATE NULL ,
`PayMode` varchar(6) NOT NULL,
`Remark` varchar(150) DEFAULT NULL,
PRIMARY KEY (`Sysid`)
);

CREATE TABLE `tblforms` (
`Sysid` INT NOT NULL AUTO_INCREMENT ,
`CreatedDate` DATE NOT NULL ,
`SysStatus` VARCHAR(1) NOT NULL DEFAULT 'A' ,
`FormNo` VARCHAR(10) NOT NULL ,
`CustomerName` VARCHAR(150) NULL ,
`Mobile` BIGINT(10) NULL ,
`Address` VARCHAR(150) NULL ,
`NumberOfCustomer` INT(4) NOT NULL DEFAULT 1,
`Date` DATE NOT NULL ,
`Amount` FLOAT(7, 2) NOT NULL ,

```

```

`GSTAmount` FLOAT(7, 2) NOT NULL ,
`NetAmount` FLOAT(7, 2) NOT NULL ,
`Remark` VARCHAR(150) NULL ,
`Other` VARCHAR(150) NULL ,
PRIMARY KEY (`Sysid`));

CREATE TABLE `tblcustomer` (
`Sysid` INT NOT NULL AUTO_INCREMENT ,
`CreatedDate` DATE NOT NULL ,
`SysStatus` VARCHAR(1) NOT NULL DEFAULT 'A' ,
`FormNo` VARCHAR(10) NOT NULL ,
`TypeOfCustomer` VARCHAR(15) NULL ,
`CustomerName` VARCHAR(150) NULL ,
`Address` VARCHAR(150) NULL ,
`Age` INT NULL ,
`Gender` VARCHAR(6) NULL ,
`Mobile` BIGINT(10) NULL ,
`BatchStartTime` TIME NULL ,
`BatchEndTime` TIME NULL ,
`BirthDate` DATE NULL ,
`Swimmer` VARCHAR(1) NULL ,
`SwimExperience` INT NULL ,
`IsStudent` VARCHAR(1) NULL ,
`VTCMName` VARCHAR(150) NULL ,
`VTCMAddress` VARCHAR(150) NULL ,
`MedCert` VARCHAR(1) NULL ,
`Sletter` VARCHAR(1) NULL ,
`IDCard` VARCHAR(1) NULL ,
`Agreement` VARCHAR(1) NULL ,
`PaymentStartDate` DATE NULL ,
`PaymentEndDate` DATE NULL ,
`LockerNO` VARCHAR(15) NULL ,
`Cid` INT NULL ,
`lastReceiptID` INT NULL ,
`photo` VARCHAR(1) NULL ,
`Remark` varchar(150) DEFAULT NULL,
PRIMARY KEY (`Sysid`));

CREATE TABLE `tblMisselenous` (
`Sysid` INT NOT NULL AUTO_INCREMENT ,
`CreatedDate` DATE NOT NULL ,
`SysStatus` VARCHAR(1) NOT NULL DEFAULT 'A' ,
`Parameter` VARCHAR(100) NULL ,
`value` VARCHAR(100) NULL ,
`Information` VARCHAR(150) NULL ,

```

```

`Description` VARCHAR(150) NULL ,
PRIMARY KEY (`Sysid`));

CREATE TABLE `tblDailyPunchHistory` (
`Sysid` INT NOT NULL AUTO_INCREMENT ,
`CreatedDate` DATE NOT NULL ,
`SysStatus` VARCHAR(1) NOT NULL DEFAULT 'A' ,
`CustomerSysId` VARCHAR(15) NULL ,
`Cid` INT NOT NULL ,
`CustomerName` VARCHAR(150) NULL ,
`InTime` TIME NOT NULL ,
`OutTime` TIME NULL ,
`Status` VARCHAR(150) NULL ,
`Action` VARCHAR(6) NULL ,
PRIMARY KEY (`Sysid`));

CREATE TABLE `tblEmployee` (
`Sysid` INT NOT NULL AUTO_INCREMENT ,
`CreatedDate` DATE NOT NULL ,
`SysStatus` VARCHAR(1) NOT NULL DEFAULT 'A' ,
`Name` VARCHAR(150) NOT NULL ,
`Address` VARCHAR(150) NULL ,
`Mobile` BIGINT(10) NULL ,
`AadharNo` BIGINT(12) NULL ,
`cid` INT NULL , PRIMARY KEY (`Sysid`));

ALTER TABLE `forms` CHANGE `formno` `formno_` CHAR(7) CHARACTER SET latin1 COLLATE latin1_swedish_ci NOT NULL;

ALTER TABLE `client_extra` CHANGE `form_no` `formno` CHAR(7) CHARACTER SET latin1 COLLATE latin1_swedish_ci NULL DEFAULT NULL;

insert into tblcategory(CreatedDate, CategoryName, CategoryRemark, DurationShortName, DurationDays, fees, Information) select CURDATE(), cat_name, cat_remark, duration, 0, fees, info from category;

insert into tblreceipt(CreatedDate, ReceiptID, FormNo, CategoryName, ReceivedDate, TermFee, CoachFee, TotalFee, CGSTAmount, SGSTAmount, LockerFee, discountPercentage, NetAmount, PaymentStartDate, PaymentEndDate, PayMode, Remark) select CURDATE(), r_no, form_no, category, rdate, term_fee, coach_fee, total_fee, cgst, sgst, locker_fee, discount, netpay, strtDate, endDate, paymode, remark from receipt LEFT JOIN (SELECT DISTINCT rno, strtDate, endDate FROM dates) as seTab ON rno=r_no;

insert into tblforms(FormNo, CreatedDate, Date, CustomerName, Mobile, Address, Amount, GSTAmount, NetAmount, Other) select formno_, CURDATE(), fdate, name, mob, address, amount, gst, netpay, type from forms LEFT JOIN client ON formno_=form_no;

insert into tblcustomer(FormNo, CreatedDate, TypeOfCustomer, CustomerName, Address, Age, Gender, Mobile, BatchStartTime, BatchEndTime, BirthDate, Swimmer, SwimExperience, IsStudent, VTCMName, VTCMAddress, MedCert, Sletter, IDCard, Agreement, photo, PaymentStartDate, PaymentEndDate, LockerNO, Cid, lastReceiptID);

```

```

select form_no, CURDATE(), category, name, address, age, gender, mob, strtTime, endTime, dob, swim,
swim_exp, is_student, vtcn_name, vtcn_add, a_med_cert, a_sletter, a_idcard, as_agreement, photo, sDate,
eDate, LockerNO, cid, r_no_ from (select * from (select * from (select * from (SELECT * FROM client
LEFT JOIN (SELECT DISTINCT * FROM `client_extra`) as client_extra_ ON formno = form_no) as fTeb
LEFT JOIN (select form_no as _formno, max(strtDate) as sDate, max(endDate) as edate from (SELECT
DISTINCT form_no, strtDate, endDate FROM receipt INNER JOIN dates on r_no = rno) as newDate group
BY newDate.form_no) as seDates ON form_no=_formno) as fTeb_ LEFT JOIN (SELECT form_no as fno_,
lockerNo FROM `receipt` WHERE lockerNo is not NULL) lTab on form_no=fno_) as _fTab LEFT JOIN
(SELECT form_no as _fno, cid FROM `receipt` WHERE cid is not NULL) cTab ON form_no=_fno) as
__fno LEFT JOIN (SELECT max(r_no) as r_no_, form_no as f_no FROM `receipt` group BY form_no) as
lastTab ON form_no = f_no;

```

```

insert into tblBatchMst (CreatedDate, BatchID, BatchStartTime, BatchEndTime) VALUES (CURDATE(), 1,
'06:00:00', '07:00:00'), (CURDATE(), 2, '07:00:00', '08:00:00'), (CURDATE(), 3, '08:00:00', '09:00:00'),
(CURDATE(), 4, '16:00:00', '17:00:00'), (CURDATE(), 5, '17:00:00', '18:00:00'), (CURDATE(), 6,
'18:00:00', '19:00:00'), (CURDATE(), 7, '19:00:00', '20:00:00');

```

```

insert into tblMisselenous(CreatedDate, Parameter, value) VALUES (CURDATE(), 'FormFee', '127.12'),
(CURDATE(), 'FormGst', '22.88'), (CURDATE(), 'NextReceiptId', (select max(ReceiptId) from
tblreceipt)+1);

```

```

insert into tblDailyPunchHistory(CreatedDate, CustomerSysId, Cid, CustomerName, InTime, OutTime);

```

```

select date_, Sysid, machinetab.cid, CustomerName, intime, outtime
from (( SELECT cid, count(*) as t, substring(capture,12,8) as intime, NULL as outtime,
substring(capture,1,10) as date_ FROM machinedata GROUP BY substring(capture,1,10), cid HAVING t=1
and cid>25 )

```

```

UNION (SELECT cid, count(*) as t, min(substring(capture,12,8)) as itime, max(substring(capture,12,8)) as
outtime, substring(capture,1,10) as date_ FROM machinedata GROUP BY substring(capture,1,10), cid
HAVING t>1 and cid>25)) as machinetab

```

```

LEFT JOIN tblcustomer ON tblcustomer.cid=machinetab.cid;

```

```

ALTER TABLE `tblforms` CHANGE `NumberOfCustomer` `NumberOfCustomer` INT(4) NOT NULL
DEFAULT '0';

```

```

UPDATE tblforms LEFT JOIN receipt ON tblforms.FormNo=receipt.form_no SET tblforms.CustomerName
= receipt.mem_name WHERE tblforms.CustomerName IS NULL;

```

```

ALTER TABLE machinedata ADD COLUMN (`Status` VARCHAR(20) NULL , `Action`
VARCHAR(6) NULL);

```

```

-- SELECT * from tblforms WHERE CustomerName IS NULL order by Date;

```

```

ALTER TABLE `forms` CHANGE `formno_` `formno` CHAR(7) CHARACTER SET latin1 COLLATE
latin1_swedish_ci NOT NULL;

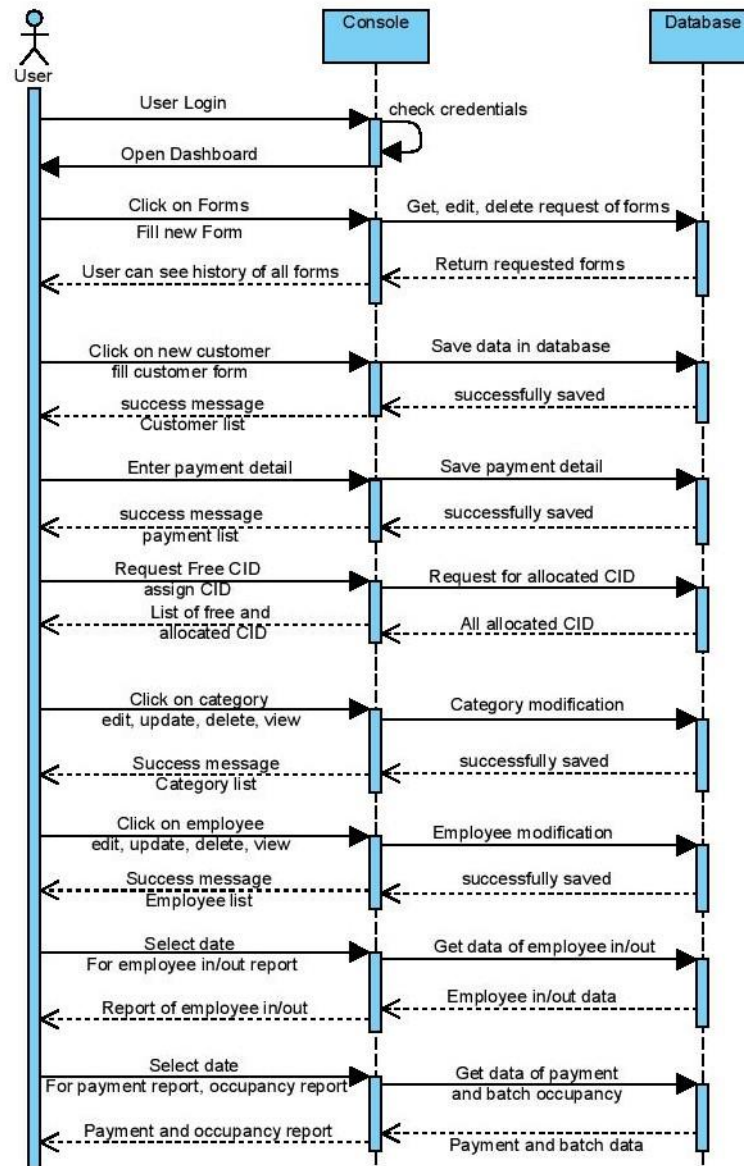
```

```

ALTER TABLE `client_extra` CHANGE `formno` `form_no` CHAR(7) CHARACTER SET latin1
COLLATE latin1_swedish_ci NULL DEFAULT NULL;

```

### 3.5 Sequence Diagram



#### 3.5.1 Sequence diagram

## CHAPTER 4: GUI DESIGNING

### 4.1 GUI

<b>Three Types of Report</b>			
	1. Listing Report		LR
	2. Summary Report		SR
	3. Preformatted Report		FR
<b>Menu</b>			
<b>Forms</b>			
	New Customer Form	GUI	
	Form Listing	LR	It shows rows from tblform
<b>Category</b>			
	New Category	GUI	
	Category Listing	LR	It shows rows from tblcategory
<b>Customer</b>			
	Customer Entry- Add	GUI	tblform, tblcustomer
	Customer Entry- Search/Edit/Update	GUI	
	Customer Listing (LR)	LR	Date range--Joining from tblforms, tblcustomer, tblreceipt
	Customer Payment	GUI	tblform, tblcustomer, tabreceipt
	Payment Receipt	FR	if multiple customer then comma separated name, otherwise one to one mapping
	Payment Listing	LR	Date Range, it comes from tblreceipt and tblcustomer
	Payment Report	SR	Daily, Monthly and Financial year wise Report
	Available CID	LR	
	Remove CID	GUI	It suggests based on PaymentEndDate
<b>Other Reports</b>			
	Current Batch Display	LR	Annex-1
	Batch Timings (LR)	LR	Comes from tblBatchMst
	Batch Occupancy (LR)	SR	It shows current as well as next 7 days availability from PaymentEndDate from tblCustomer
	Batchwise Customer IN/OUT Report	LR	It shows batchwise IN/OUT from tblDailyPunchHistory (One day before), on click of today it should bring from machinedata
	payment Due	LR	from tblcustomer
	Occupancy Summary	SR	Summary count Daywise All batch occupancy report from tblmachinehistory
	Occupancy Listing (Day to day customer listing)	LR	Listing of customer Date range, and Batch selection. Data comes from tblmachinehistory
	Dashboard	GUI	

#### 4.1.1 GUI

### New Customer form:

FORM	
Date : <input style="width: 100%;" type="text"/>	L: System date
form no : <input style="width: 100%;" type="text"/>	L: Empty
Customer name : <input style="width: 100%;" type="text"/>	L: Empty
Address : <input style="width: 100%;" type="text"/>	L: Empty
Number of Customer : <input style="width: 100%;" type="text"/>	L: Empty
Amount : <input style="width: 100%;" type="text"/>	L: $\frac{\text{form no} \times \text{form amount}}{\text{value}}$
GST amount : <input style="width: 100%;" type="text"/>	L: $\frac{\text{form no} \times \text{GST amount}}{\text{value}}$
Net pay : <input style="width: 100%;" type="text"/>	L: It will be calculated from $\frac{\text{form no} \times \text{GST amount}}{100}$
Remark : <input style="width: 100%;" type="text"/>	L: Empty
<input style="width: 100px; height: 30px; border: 1px solid black;" type="button" value="SAVE"/>	

### Form Listing:

[illegible]



**New/Add Customer:**

It is most important form to be filled. It is use to get customer data like batch timing selected, category selects, payment details, photo id etc.

### ADD CUSTOMER

Form No

Receipt No

Name

BirthDate

Mobile No

Gender ☐ Male ☐ Female

Type of Customer ☐ Learner ☐ Swimmer

Batch

Swimmer ☐ Yes ☐ No

SwimExperience

IsStudent ☐ Yes ☐ No

CID

VCTMName

VCTMAddress

MedCert ☐ Yes ☐ No

Sletter ☐ Yes ☐ No

IDCard ☐ Yes ☐ No

Photo ☐ Yes ☐ No

Agreement ☒

L: Other form inputs will be disabled until form no is filled

L: On base of form no list of previous receipts will come in combo box in descending order by date

L: Empty, if there is no previous receipt or data in tblcustomer, type varchar, size 25

L: Date Selector Empty, if there is no previous receipt or data in tblcustomer

L: Integer, size 10, empty if there is no previous receipt or data in tblcustomer

L: Radio button for gender selection

L: radio button to select type of customer

L: Drop down to select Batch Time, Editable even if data is present.

L: Radio button

L: Input box to know Swimming Experience, Type Integer

L: radio button to know customer is student or not.

L: CID from tblPunchHistory, Editable.

L: VCTMName, Type varchar, size 150.

L: TCTMAddress, type varchar, size 150

L: Radiobutton to know Medical certificate is submitted or not.

L: Radiobutton to know Student letter is submitted or not.

L: Radio button to know idcard is submitted or not

L: Radio button to know photo is submitted or not.

L: Check box to agree all given details.

OnClick Submit: On submit button click all the given data will be inserted in tblcustomer.

Until Form No is not filled and any receipt is found in tblreceipt with same form no, other input fields will be disabled.

**4.1.3 New Customer****Customer Listing:**

This GUI shows the List of current active customers. It has 2 DateTime Picker and Search button to filter data of particular time Period.

**Customer Listing.**

Select Date Range:  to

L: By default Current Date

Data Table of Customer Detail

Form No.	Customer Name	Mobile No	Batch Start Time	Batch End Time	Type of Customer	Date	
36	Xyz	0123456789	06:00:00	07:00:00	Learner	2020-04-23	<input type="button" value="↑"/>
							<input type="button" value="↑"/>

Click on This Button to View all detail of Selected Customer

**4.1.4 Customer Listing**

**New Receipt:**

It is used while payment of customer. It has dropdown to select category, batch time etc. It has auto calculation of CGST and GST.

The 'New Receipt' form includes the following fields and sections:

- Date:** [system]
- Time:** [system]
- row:** [ ]
- formno:** [ ]
- Membername:** [ ]
- Categoryname:** [ ]
- Termfee:** [ ]
- Coach fee:** [ ]
- Total fee:** [ ]
- CGST:** [ ]
- SGST:** [ ]
- lockup fee:** [ ]
- locker no:** [ ]
- Discount:** [ ]
- Netpay:** [ ]
- Mobile:** [number (10)]
- Address:** [text area]
- Paymode:** [Radio] → cheque, cash
- Remark:** [ ]
- CID:** [ ]

**View Receipt Data Table:**

Syno	Member name	Category name	Term fee	Coach fee	Total fee	CGST	SGST	Mobile	Address

**4.1.5 New Receipt****Available CID:**

It shows which CIDs are available from CID pool which are not in use.

The 'Available CID' form includes the following sections:

- Allocated CID** [ ] **Free CID** [ ] **Other CID** [ ]
- < sort by name asc >**
- Table:**

s.no	Customer Name	CID allocated
1	Mahida KaviRaj	02
•	•	•
•	•	•
•	•	•

**4.1.6 Available CID**

**Remove CID:**

This GUI is used to remove CID from its allocated customer when customers fess expires.

**REVOME CUSTOMER ID**

Customer ID      SEARCH

<input type="checkbox"/>	C-ID	Customer name	Remove
<input type="checkbox"/>	01	Patel Nileshkumar	
⋮	⋮	⋮	⋮

Remove Selected

→ Customer ID takes input and shows details of Particular ID onlick search.  
 → If no customer ID is selected then all ID of customer will be shown.  
 → Onlick: Remove Selected — It will remove C-ID in customer table and keeps C-ID empty.

**4.1.7 Remove CID****Batch Occupancy:**

It shows the total no of customers in each batch with the time.

**OCCUPANCY SUMMARY**

start date: 01/4/20      End date: 01/4/20

Date	6:00-7:00 am	7:00-8:00 am	8:00-9:00 am	4:00-5:00 pm	5:00-6:00 pm	6:00-7:00 pm	7:00-8:00 pm
01/4/20	132	135	129	136	130	125	134

**4.1.8 Batching Occupancy**

It shows report of customers, what time get into the swimming pool and at what time he/she exist the pool. There is Date picker to filter the report data.

[illegible]

#### 4.1.9 IN/OUT Report

### Payment Listing:

It shows Payment on daily bases, what was the amount of payment, CGST, SGST, etc. It has data filter to filter data date wise and also what data to be displayed.

[illegible]

#### 4.1.10 Daily Payment

**Payment Report Month Wise:**

This GUI shows data of Payment on Monthly Bases.

Payment Report  
As per month Selection.

Select Month :  to

L: By Default Current Month

Month	Total Receipt	Payment
2020-04	32	1234.00
2020-03	34	1111.00
Total		

**4.1.11 Payment Report Month Wise****New Employee Form:**

This form is filled to insert data of new employee appointed at pool management.

New Employee

Employee Name:

Mobile No:

Address:

Aadhar No:

Cid:

**4.1.12 New Employee Form**

**Employee Listing:**

Shows the list of employees working at swimming pool.

Employee Listing.

Search:

Emp No.	cid	Name	Address	Mobile	Adhar No.	Action

**4.1.13 Employee Listing****Employee daily in/out report:**

Shows day wise in and out time of employees at work.

Daily In/Out Report

From :  To  Emp No.

L: Start Date      L: End Date     

Date	Day	Emp No.	Emp Name	Punch Time	Cid

**4.1.14 Employee daily in/out report**



## CHAPTER 5: SYSTEM IMPLEMENTATION

### 5.1 REQUIREMENTS

The various implementation tools are listed below:

Operating System	: Windows 10
Frontend Development	: HTML5, CSS3, Bootstrap4 and JavaScript
Backend Development	: PHP and
Mysql IDE	: Visual Studio
Web Server	: Wamp or Xampp Server

### 5.2 TOOLS & TECHNOLOGY USED

The front is an abstraction, simplifying the underlying component by providing a user- friendly interface. There are several tools available that can be used to develop the front end of a website.

#### 5.2.1 HTML

HTML (Hypertext Markup Language) is the most basic building block of the Web. It describes and defines the content of a webpage. "Hypertext" refers to links that connect webpages to one another, either within a single website or between websites. Links are a fundamental aspect of the Web. By uploading content to the Internet and linking it to pages created by other people, you become an active participant in the World Wide Web. HTML uses "markup" to annotate text, images, and other content for display in a Web Browser.

#### 5.2.2 CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. CSS is designed primarily to enable the separation of document content from document presentation, including aspects such as the layout, colors, and fonts. It allows one to adapt the presentation to different types of devices, such as large screens, small screens, or printers. CSS is independent of HTML and can be used with any XML-based markup language.

#### 5.2.3 BOOTSTRAP

Bootstrap is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first web sites. Bootstrap is a free and open-source front-end web framework for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions. Bootstrap components such as navbar, Breadcrumbs, paginations and Bootstrap's JavaScript plugins such as dropdown, modals, carousel etc. are used in Training Management web application. Bootstrap includes a powerful mobile-first flexbox grid system for building layouts of all shapes and sizes. It's based on a 12-column layout and has multiple tiers, one



for each media query range.

#### 5.2.4 JAVASCRIPT

JavaScript is the client-side scripting language of the web. It's one of the most popular and in demand skills in today's job market for good reason. JavaScript not only enables you to add powerful interactions to websites, but is also the foundation of a lot of commonly used libraries like jQuery.

#### 5.2.5 PHP

PHP is general purpose scripting language that is especially suited to web development. It is fast, flexible and pragmatic. Self-referentially short for PHP: Hypertext Preprocessor, an open source, server-side, HTML embedded scripting language used to create dynamic Web pages. The characteristics of PHP are simplicity, efficiency, security, flexibility and familiarity. It can encrypt data. Using PHP, you can restrict users to access some pages of our websites. Access cookies variable and set cookies. PHP performs system functions, i.e. from files on a system it can create, open, read, write, and close them. PHP can handle forms and we can add, delete, modify elements within our database.

#### 5.2.6 MYSQL

MySQL is a relational database management system based on the Structured Query Language, which is popular language for accessing and managing the records in the database. MySQL is open source and free software under the GNU license. It is supported by Oracle Company. MySQL is very friendly with PHP, the most popular language for web development. MySQL supports large databases and It is quicker than other databases. MySQL allows us to implement database on tables, rows, columns and indexes. It allows us to updates the table indexes automatically. It uses many SQL queries and combines useful information from multiple tables for the end users.

### 5.3 Cost Estimation(Man-month invented):

Team of three members Nimeshkumar Italiya, Pruthvirajsinh Vaghela and Dhruvil Shah have worked on this project under the guidance of Dr. Ritesh Patel for total 138 hours and designed 25 pages. Project execution time was 3 weeks, worked around 126 man hours/per head.

- Nimeshkumar Italiya have designed 24 pages with 232 units worked for 115 hours.
- Pruthvirajsinh Vaghela have designed 3 pages with 20 units worked for 15 hours.
- Dhruvil Shah have designed 5 pages with 63 units worked for 18 hours.

S r N o.		GUI/Repo rt Name	GUI/RE PORT	Develop er Name	Text Box	Co mb obo x	Drop down	Radio /Chec kbox	Click Button	Total	1 - 3 table	3-6 table	Total Lines of code	Develo pment Hours
1	Forms									0				
2		New Form	GUI	Nimesh	9		1		2	12	6		477	4
3		Form Listing	Report	Nimesh	1		3		5	9	7		478	5
4	Category									0				
5		New Category	GUI	Nimesh	6				2	8	3		266	2
6		Category Listing	Report	Nimesh	1		2		5	8	2		334	3
7	Customer									0				
8		Customer Entry-Add	GUI	Dhruvil	12		1	9	1	23	5		704	8
9		Customer Entry-Search/Edit/Update	GUI	Dhruvil/ Nimesh	12		1	9	1	23	5		704	3
10		Customer Listing (LR)	Report	Nimesh	1		4		8	13	2		435	5
11		Customer Payment	GUI	Nimesh						0	2		485	6
12		Payment Receipt	Report	Nimesh	15	1	4	3	5	28	4		867	8
13		Payment Listing	Report	Nimesh	1		4		6	11	5		482	5
14		Payment Report	Report	Nimesh	3		10		7	20		3	1146	10
15		Available CID	Report	Pruthvi	1		2		4	7	2		321	5
16		Remove CID	GUI	Pruthvi	1		2		2	5	2		300	5
17										0				
18	Other Reports									0				
19		Current Batch Display	Report	Nimesh					6	6	6		291	10

20		Batch Timings (LR)	Report	Dhruvil	0	0	0	0	0	0	1		107	1
21		Batch Occupancy (LR)	Report	Dhruvil	3	0	2		3	8	1		288	4
22		Bathwise Customer IN/OUT Report	Report	Nimesh	2		5		3	10	1	2	518	7
23		payment Due	Report	Dhruvil	3	0	2	0	2	7	1		244	2
24		Occupancy Summary	Report	Pruthvi	1		4		3	8	1		330	5
25		Dashboard	GUI	Nimesh			7		25	32			305	3
26		Deaily Payment Transaction	Report	Nimesh	1		3		3	7	1		316	4
	Employee													
27		New Employee	GUI	Nimesh	5				1	6	3		358	4
28		Employee Listing	GUI	Nimesh	1		2		4	7	2		344	6
29		Employee In/Out Daily	Report	Nimesh	2		4		3	9	2		366	5
30		Employee In/Out Monthly	Report	Nimesh	2		4		3	9		2	336	4
31		Date wise	Report	Nimesh	2		4		3	9		2	435	7
	Extra													
32		login	GUI	Nimesh	2				1	3	2		111	4
33		Dashboard	GUI	Nimesh					34				294	3
				<b>Total</b>	87	1	71	21	142	288	66	9	1164 2	138

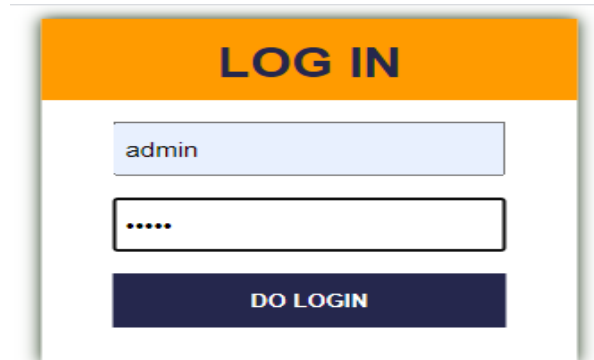
#### 4.3.1 Cost Estimation

## CHAPTER 6: USER MANUAL

### 6.1 Project Page Developed

#### 6.1.1 LOGIN PAGE

The first task for any website is security & authentication and that purpose a login page is developed so that no unknown authority can harm the system or webpage.



**Fig 6.1.1 Login Page**

When the user clicks on do login button, it will open a dashboard.

#### 6.1.2 DASHBOARD

Dashboard is that allows the user to visualize the key performance indicators and other strategic data for your organization at glance.



**Fig 6.1.2 Dashboard**

### 6.1.3 FORM

When user fills the physical form its data is filled in database through filling this form and its filled by pool staff.

The screenshot shows a mobile application interface for filling out a form. The form is titled 'Form details:' and contains the following fields:

- Form Number: \***: A text input field.
- Date: \***: A date picker showing '2/07/2020'.
- Customer Name:**: A text input field.
- Mobile No:**: A text input field.
- Address:**: A text area with the placeholder 'Enter address.'.
- Amount: \***: A text input field showing '127.12'.
- GST Amount: \***: A text input field showing '22.88'.
- Net Amount: \***: A text input field showing '150'.
- Remark:**: A text input field.
- Other:**: A text input field.

A blue 'SAVE' button is located at the bottom right of the form.

**Fig 6.1.3 Form**

### 6.1.4 AVAILABLE CID

It shows the list of customers and employees with the respective allocated CID.

The screenshot shows a mobile application interface for viewing a list of customers and employees with their respective allocated CIDs. The interface includes a header bar with a blue background and a white bar with three buttons: 'ALLOCATED CID', 'FREE CID', and 'OTHER CID'. Below the buttons is a table with the following data:

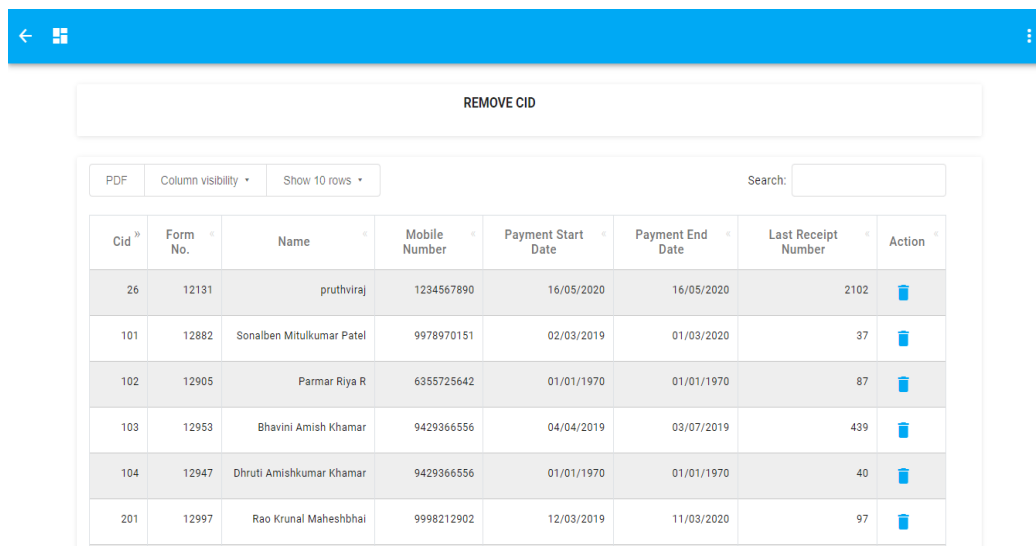
Form No.	Customer Name	Allocated Cid
12131	pruthviraj	26
12882	Sonalben Mitulkumar Patel	101
12905	Parmar Riya R	102
12953	Bhavini Amish Khamar	103
12947	Dhruti Amishkumar Khamar	104
12997	Rao Krunal Maheshbhai	201
172	Bhikhalal Gandadal Shah	272

At the bottom of the table, there is a footer showing 'Showing 1 to 7 of 7 entries' and navigation buttons: 'Previous', '1', and 'Next'.

**Fig 6.1.4 Available Cid**

### 6.1.5 REMOVE CID:

It is used to free CID from allocated customers or employees after they quit the Swimming Pool. On clicking to Delete Symbol, CID is disallocated.

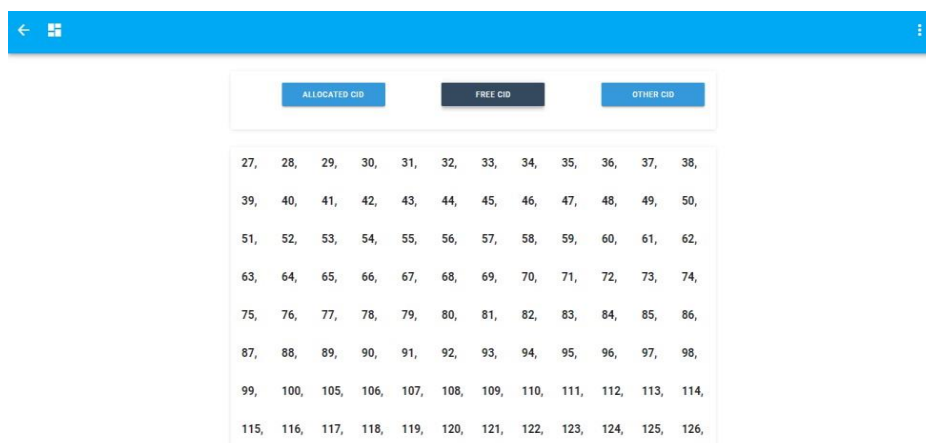


Cid	Form No.	Name	Mobile Number	Payment Start Date	Payment End Date	Last Receipt Number	Action
26	12131	pruthviraj	1234567890	16/05/2020	16/05/2020	2102	
101	12882	Sonalben Mitulkumar Patel	9978970151	02/03/2019	01/03/2020	37	
102	12905	Parmar Riya R	6355725642	01/01/1970	01/01/1970	87	
103	12953	Bhavini Amish Khamar	9429366556	04/04/2019	03/07/2019	439	
104	12947	Dhruvi Amishkumar Khamar	9429366556	01/01/1970	01/01/1970	40	
201	12997	Rao Krunal Maheshbhai	9998212902	12/03/2019	11/03/2020	97	

**Fig 6.1.5 Remove Cid**

### 6.1.6 FREE CID

It shows how many CID are not allocated to customers or employees and are available in free CID pool.



FREE CID											
27,	28,	29,	30,	31,	32,	33,	34,	35,	36,	37,	38,
39,	40,	41,	42,	43,	44,	45,	46,	47,	48,	49,	50,
51,	52,	53,	54,	55,	56,	57,	58,	59,	60,	61,	62,
63,	64,	65,	66,	67,	68,	69,	70,	71,	72,	73,	74,
75,	76,	77,	78,	79,	80,	81,	82,	83,	84,	85,	86,
87,	88,	89,	90,	91,	92,	93,	94,	95,	96,	97,	98,
99,	100,	105,	106,	107,	108,	109,	110,	111,	112,	113,	114,
115,	116,	117,	118,	119,	120,	121,	122,	123,	124,	125,	126,

**Fig 6.1.6 Free Cid**

### 6.1.7 CATEGORY

This form is to be filed by Admin when they need to create new Category or when they want to edit any previously created Category.

Category details:

Category Name: \*

Duration Short Name:

Duration Days: \* 0

Strict End Date: CLEAR

Receipt Lable:

Fees : \* 0.00

Remark:

Information: SAVE CANCEL

Fig 6.1.7 Category

## 6.1.8 CATEGORY LISTING

It shows the number of category available which already present in the system.

Category No.	Name	Duration Name	Duration Days	Strict End Date	Receipt Lable	Fees	Remark	Information.	Action
1	CVM-FIRST	HALFYEAR	0	-	-	1610.17	cvm first term	CVM STUDENT	
2	CVM-SECOND	HALFYEAR	0	-	-	1610.17	cvm second term	CVM STUDENT	
3	CVM-BOTH	YEAR	0	-	-	2542.38	cvm both term	CVM STUDENT	
4	OTH-FIRST	HALFYEAR	0	-	-	1949.16	other student first term	OTHER STUDENT	
5	OTH-SECOND	HALFYEAR	0	-	-	1949.16	other second	OTHER STUDENT	

Fig 6.1.8 Category Listing

### 6.1.9 New Customer:

This form is used to insert customer detailed information with his selected batch and category.

**Fig 6.1.9 New Customer**

### 6.1.10 Customer Listing:

This Report shows the active customer of Swimming Pool. With Date Picker to filter them on bases of their admission date.

Customer No.	Date	Form No.	Name	Category	Mobile Number	Batch Time	Cid	Type Of Customer	Last Receipt Number	Remark	Action
515	17/05/2020	10001	Ritesh Patel	-	9904400918	6:00:00 AM - 7:00:00 AM	26	learner		Test	
501	14/05/2020	98	Pratham P Patel	OTH-SECOND	9909918611	7:00:00 PM - 8:00:00 PM		Swimmer	1776		
500	14/05/2020	9741	Dev Mahendrabhai Patel	VAC-THREE	9825071318	6:00:00 AM - 7:00:00 AM		Swimmer	638		
499	14/05/2020	97	Yug Kalpeshkumar Pathak	VAC-THREE	9427549094	5:00:00 PM - 6:00:00 PM		Learner	485		
498	14/05/2020	95	Mangesh S	GEN-MON	9421826187	7:00:00 AM -		Learner	133		

**Fig 6.1.10 Customer Listing**



### 6.1.11 Payment Listing:

It shows the list of payments to Swimming Pool by customers on the bases of selected date in Date Picker. Default it is present day data.

Date: 21/07/2020

PDF Column visibility Show 10 rows Search:

Receipt Id.	Form No.	Category Name	Customer Name	Term fee	Coach fee	Locker fee	CGST	SGST	Discount%	Payment Mode	Net Amount	Remark
No data available in table												
Receipt Id.	Form No.	Category Name	Customer Name	Term fee	Coach fee	Locker fee	CGST	SGST	Discount%	Payment Mode	Net Amount	Remark

Showing 0 to 0 of 0 entries Previous Next

**Fig 6.1.11 Payment Listing**

### 6.1.12 New employee form

This form is used to fill data of employee at time of appointment.

Employee Name:

Mobile No:

Address:

Aadhar No:

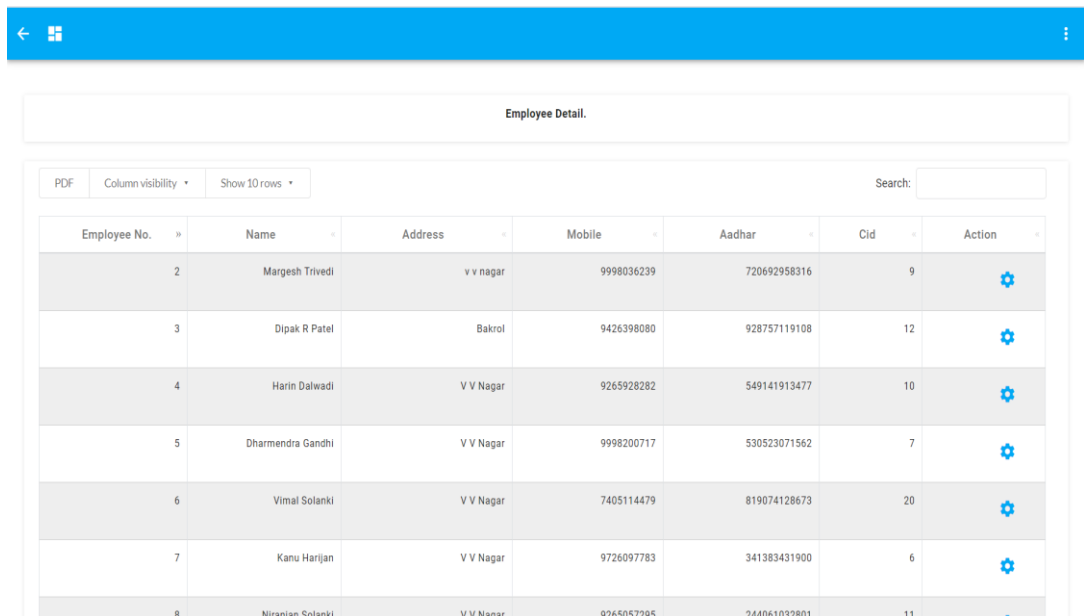
cid:

SAVE

**Fig 6.1.12 New employee form**

### 6.1.13 Employee Listing

Show list of employees working at swimming pool.



Employee Detail.

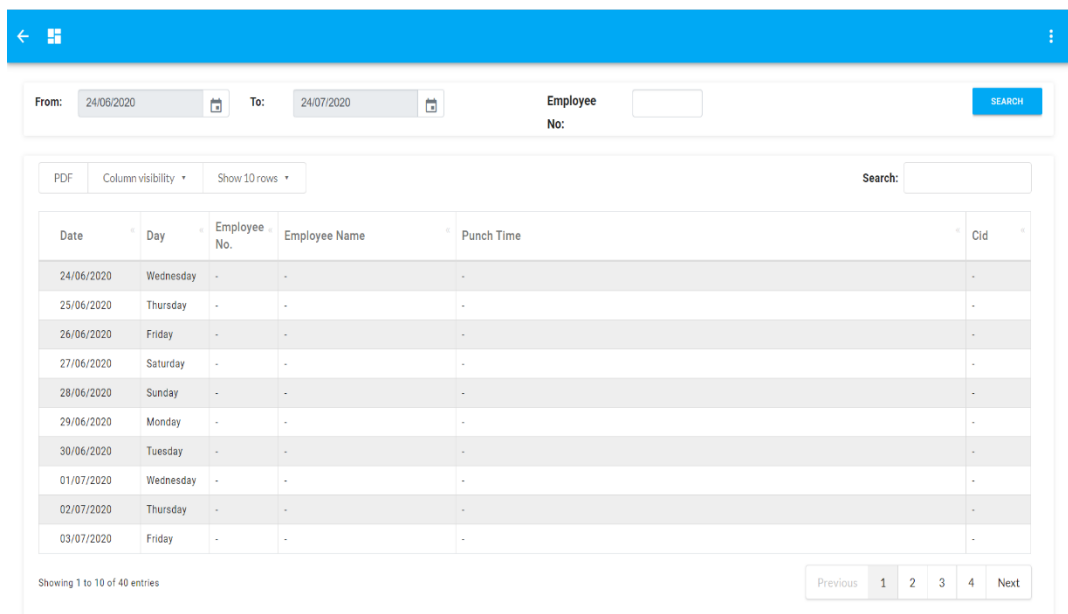
PDF Column visibility Show 10 rows Search:

Employee No.	Name	Address	Mobile	Aadhar	Cid	Action
2	Margesh Trivedi	v v nagar	9998036239	720692958316	9	
3	Dipak R Patel	Bakrol	9426398080	928757119108	12	
4	Harin Dalwadi	V V Nagar	9265928282	549141913477	10	
5	Dharmendra Gandhi	V V Nagar	9998200717	530523071562	7	
6	Vimal Solanki	V V Nagar	7405114479	819074128673	20	
7	Kanu Harijan	V V Nagar	9726097783	341383431900	6	
8	Niranjan Solanki	V V Nagar	9265057295	244061032801	11	

Fig 6.1.13 Employee Listing

### 6.1.14 Employee daily in/out report

Shows in/out time of employee of the date selected in date selected.



From: 24/06/2020 To: 24/07/2020 Employee No: SEARCH

PDF Column visibility Show 10 rows Search:

Date	Day	Employee No.	Employee Name	Punch Time	Cid
24/06/2020	Wednesday	-	-	-	-
25/06/2020	Thursday	-	-	-	-
26/06/2020	Friday	-	-	-	-
27/06/2020	Saturday	-	-	-	-
28/06/2020	Sunday	-	-	-	-
29/06/2020	Monday	-	-	-	-
30/06/2020	Tuesday	-	-	-	-
01/07/2020	Wednesday	-	-	-	-
02/07/2020	Thursday	-	-	-	-
03/07/2020	Friday	-	-	-	-

Showing 1 to 10 of 40 entries Previous 1 2 3 4 Next

Fig 6.1.14 Employee daily in/out report

### 6.1.15 Employee monthly in/out report

Shows the in/out time of days of month selected in date picker.

Month	Employee No.	Employee Name	Cid	Present days in month
1/2020	-	-	9	02/31
1/2020	3	Dipak R Patel	12	01/31
1/2020	-	-	15	02/31
10/2019	-	-	6	17/31
10/2019	-	-	7	14/31
10/2019	-	-	8	36/31
10/2019	-	-	13	03/31
10/2019	-	-	20	02/31
11/2019	-	-	6	24/30
11/2019	-	-	13	04/30

**Fig 6.1.15 Employee monthly in/out report**

### 6.1.16 Employee date wise in/out report

Shows in/out time of employee on date selected in date picker.

Employee Name	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Margesh Trivedi	-	-	-	-	-	-	07:02 AM 08:05 AM	06:02 AM 09:12 AM	06:02 AM 04:50 PM	-	-	-	-	-	-	-
Harin Dalwadi	-	-	-	-	-	-	07:25 AM 07:56 AM	06:25 AM 07:12 AM	06:25 AM 06:56 AM	-	-	-	-	-	-	-
Dharmendra Gandhi	-	-	-	-	-	-	08:12 AM 08:38 AM	06:12 AM 07:12 AM	06:12 AM 07:12 AM	-	-	-	-	-	-	-

**Fig 6.1.16 Employee date wise in/out report**

## **CHAPTER 7: TESTING**

### **7.1 WHAT TESTING IS?**

Testing is a method of assessing the functionality of a program. Testing is a set of processes aimed at investigating, evaluating and ascertaining the completeness and quality of project. Testing refers to the process of implementing all or part of the system with the intent of finding errors. It is performed in order to find the bugs or errors in the system and minimize it. In general, testing is finding out how well something works. Testing is more than just debugging.

#### **7.1.1 UNIT TESTING**

Each division class of every page is tested in the browser, Inspecting HTML, and modifying style and layout in real-time.

#### **7.1.2 SYSTEM TESTING**

After completing the overall website design and development it is tested for error by uploading the file in XAMPP Server, which shows errors along with the warnings. It also provides the validation output errors with detailed descriptions along with the code as well as line and column number in which the error occurred. XAMPP Server provides the validation by URI, by file upload and by direct input.

#### **7.1.3 PERFORMANCE TESTING**

Performance testing is designed to test the run-time performance of software within the context of an integrated system. Performance testing occurs throughout all steps in the testing process. Even at the unit level, the performance of an individual module may be assessed as white-box tests are conducted.

## CONCLUSION

Everyone is studying a lot in the classroom as well as lecture hall but that full fills when those classroom and lecture hall studies going to be implemented. According to the curriculum, I had the great internship training in one of a growing start-up company called VTC POOL. Actually, nowadays practical experience is much needed than theoretical base studies. We spent around six weeks at home for my internship training. The training gave me such an opportunity to enhance my knowledge and skills with the practical business environment. This kind of training is much needed for every student in their life. Especially the department and the faculty allowed the students to get the internship training as their wishes but that should be met with their specialization and discipline of the study. In the future, the faculty, and each department should consider internship training with a public quoted company as well as a multinational company that will help the students more to learn and enhance the skill and knowledge. The internship training should be continued in the future for the student's improvement.

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