INTERNSHIP PROJECT

CUSTOMER SERVICE MANAGEMENT PORTAL

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1 INTRODUCTION:

A Customer Service Management Portal is a website designed to give customers access to services and information they need. It is usually private, requiring log-on. It may contain account information, case information, account history and the means for customers to upload information.

- In Customer Service Management Portal, the Consumer can add and store their daily notes of consumption.
- Consumer can also add a to-do list for the maintenance of their electric appliances, paying bill etc.
- Consumer can Register a complaint for their outages.

To aid in the completion of the project, please adhere to the following project details.

1.1. Design & Implementation:

A project on web-application titled as 'Customer Service Management Portal' is designed to provide end-users access to adequate services & information. It's private, require registration & authentication. It contains end users notes, to-do list, complaint data.

Encompasses services are followed:

- Registration, authentication.
- Composition, addition, deletion of notes.
- Creation, exclusion of to-do list.
- Complain registration.

Project embarks with registration aspect End-users needs to register themselves with the portal.

Registration page incorporate end-user credentials are:

- Username
- Password
- Electronic-Mail address
- Name
- Address
- Gender
- Mobile number
- Date-of-birth

Then after registration, authentication, end-user needs to authenticate identity by inserting username & password to login page.

The technical aspect of registration & authentication uses web programming technology for its foundation & rudimentary functionality, after submission of required credential data at registration page, data gets stored to database, here MySQL is used for database and SQL as a query language. then after at login, verification is done by means of AJAX technology.

Once done, end-user can conveniently utilize the services.

Services description are as follow:

Notes:

- End-user can compose, add notes of choice.
- Notes encompasses modification as well as deletion attribute to notes.
- Notes shows note creation date as a feature.
- The portal is able to take multiple entries of the notes on daily basis, with the new entry having the current date & time.
- Notes allows keyword searching function & allows sorting and filtering using date & time information.

To-do list:

- End-user can create to-do list formatted in calendar format.
- Displays date & time of when a particular task item to be carried out in the to-do list.
- A Notification is triggered on the day the task item has to be carried out.
- End-user is able to mark a task in the to-do list as 'Completed'.
- The completed tasks can appear under a separate category for more organized layout.
- End-users are able to edit or delete a task from a list.

The technical aspect for the calender visualization is done by Javascript Technolgy & with inter-incorporating of web programming technology.

Complain

- End-user can Register a complaint for their outages.
- In the Complaint Registration page, details of end-user's registration will be auto populated.
- End-user can also check the status of already filed complaints.

1.2. Modules:

- CONSUMER REGISTRATION:

  - Consumer needs to register themselves with the portal. A unique id for that consumer will be generated, which will be used for retrieval of data.

- Daily Notes:

  - Consumers will add and store their daily notes like approximately how many hours the electric appliances were used.
  - should be able to create, edit and delete a note. He should be able to see the date and time of the creation of the note.
  - The portal should be able to take multiple entries of the notes on daily basis, with the new entry having the current date and time.
  - When the user logs off and returns, the notes data to be displayed. If he is logging on the same day, that day's notes to be seen, else previous day's notes.
  - Consumers should be able to search a note based on a keyword, should be able to sort and filter using date and time information.

- To-Do List:

  - Consumers will add a to-do list for the maintenance of their electric appliances, paying bill etc.
  - Display date and time of when a particular task item to be carried out in the to-do list.
  - A Notification to be triggered on the day the task item to be carried out.
  - Consumer should be able to mark a task in the to-do list as 'Completed'.
  - The completed tasks can appear under a separate category for more organized layout.
  - Users should be able to edit or delete a task from a list.

- Complaint Registration:

  - Consumer can Register a complaint for their outages.
  - In the Complaint Registration page, his details of consumer registration will be auto populated.
  - After entering the type of outage, a unique complaint no to be generated.
  - One can also check the status of already filed complaints.

- Report:

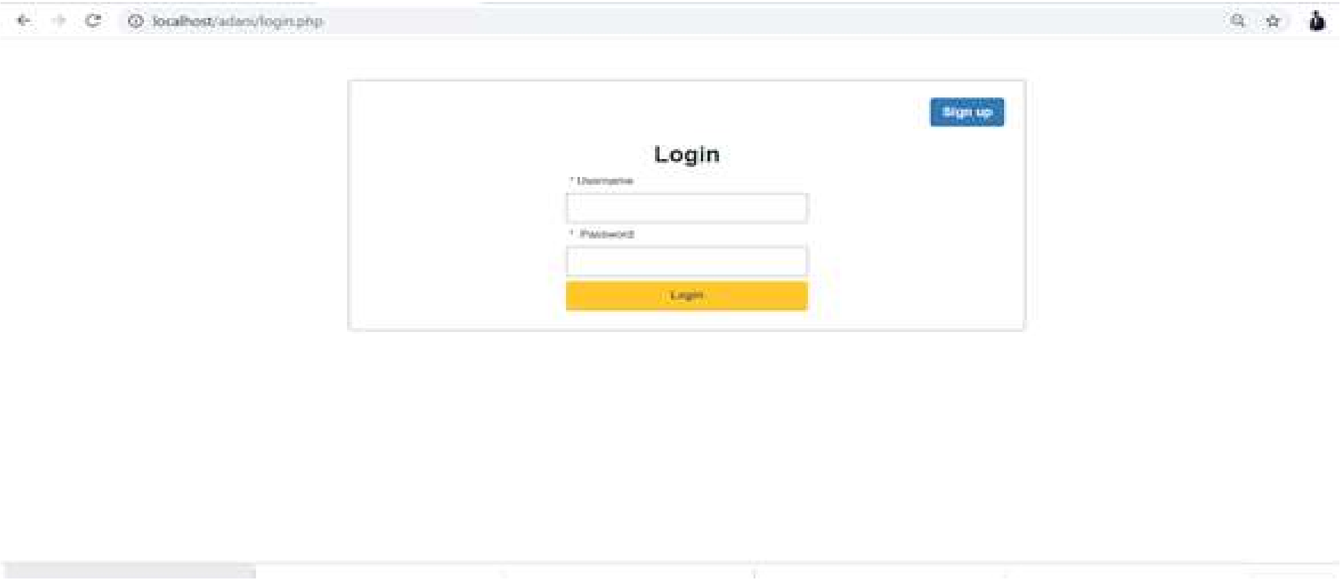
- ○ Display a calendar layout so that the user can click on any date to view the notes/to-do list/complaints of that day.

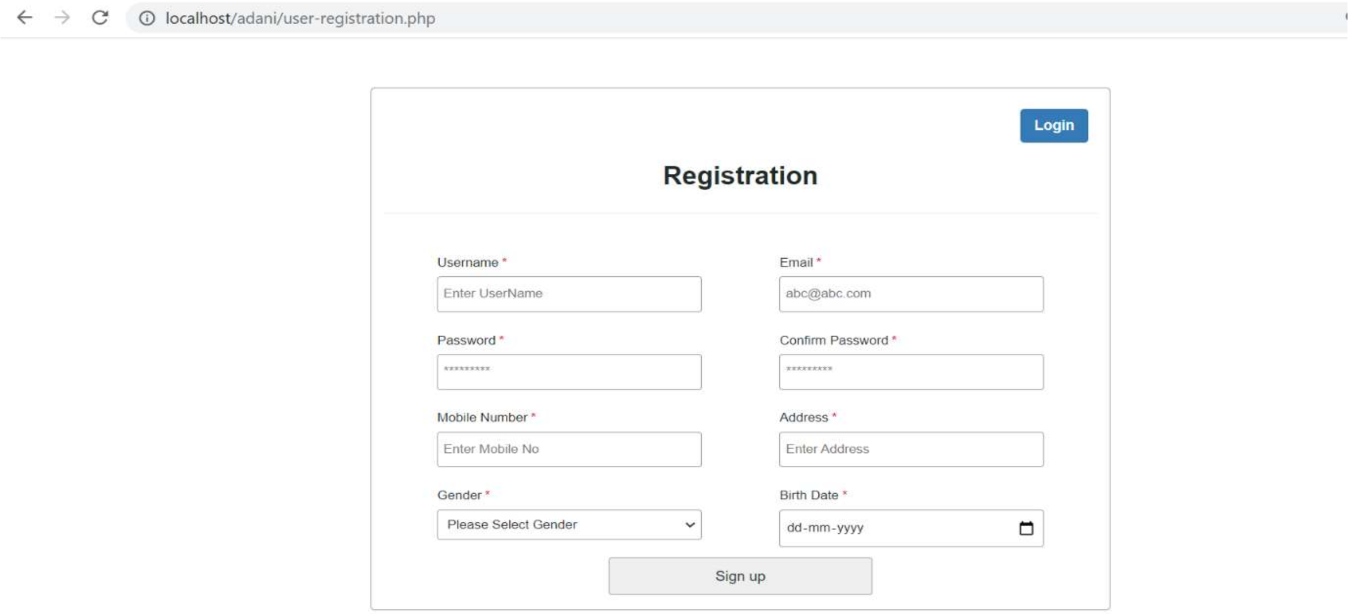
1.3. Technology Used:

- **Front end:** Bootstrap (version 3.4.1), HTML.
- **Back end:** PHP (version 7).
- **Database & Server:** MySQL database and XAMPP server.
- **BOOTSTRAP v3.6:** Bootstrap is a framework build on HTML5 and CSS3. It is used to make responsive UI for web development. In this project entire front-end is made using bootstrap.
- **PHP5:** It is used to communicate with database. It makes easy for us to transfer data easily from front-end to back-end.
- **MySQL:** This is the database which is used in the project. MySQL database is easy to pick up and easily accessible.
- **XAMPP Server:** Xampp server is used so as to get the HTTP access to transfer data. CRUD represents an acronym for the database operation Create, Read, Update and Delete. Using this website, the users can check the best goods and all the transaction history whereas Customer can get their profit. There will be smooth online transaction for the users, records will be safely stored in database.

2 SCREENSHORT:

- Login:





localhost/adani/user-registration.php

Registration

Username *
Enter UserName

Email *
abc@abc.com

Password *
****

Confirm Password *
****

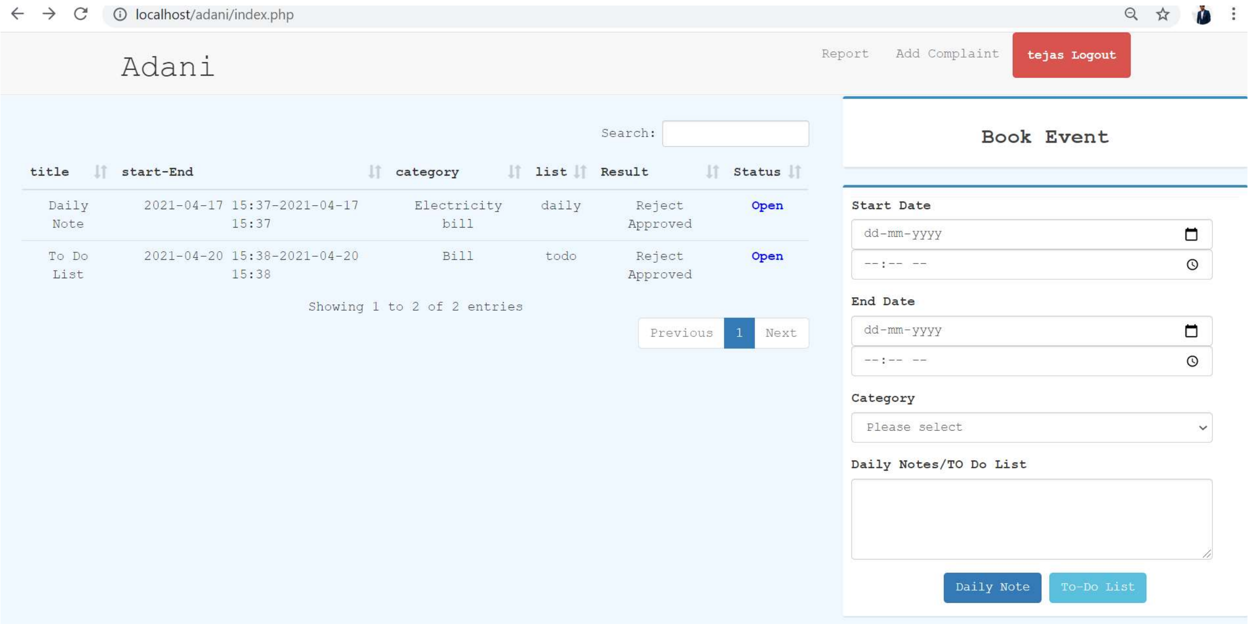
Mobile Number *
Enter Mobile No

Address *
Enter Address

Gender *
Please Select Gender

Birth Date *
dd-mm-yyyy

- User:



localhost/adani/index.php

Adani

Search:

title	start-End	category	list	Result	Status
Daily Note	2021-04-17 15:37-2021-04-17 15:37	Electricity bill	daily	Reject Approved	Open
To Do List	2021-04-20 15:38-2021-04-20 15:38	Bill	todo	Reject Approved	Open

Showing 1 to 2 of 2 entries

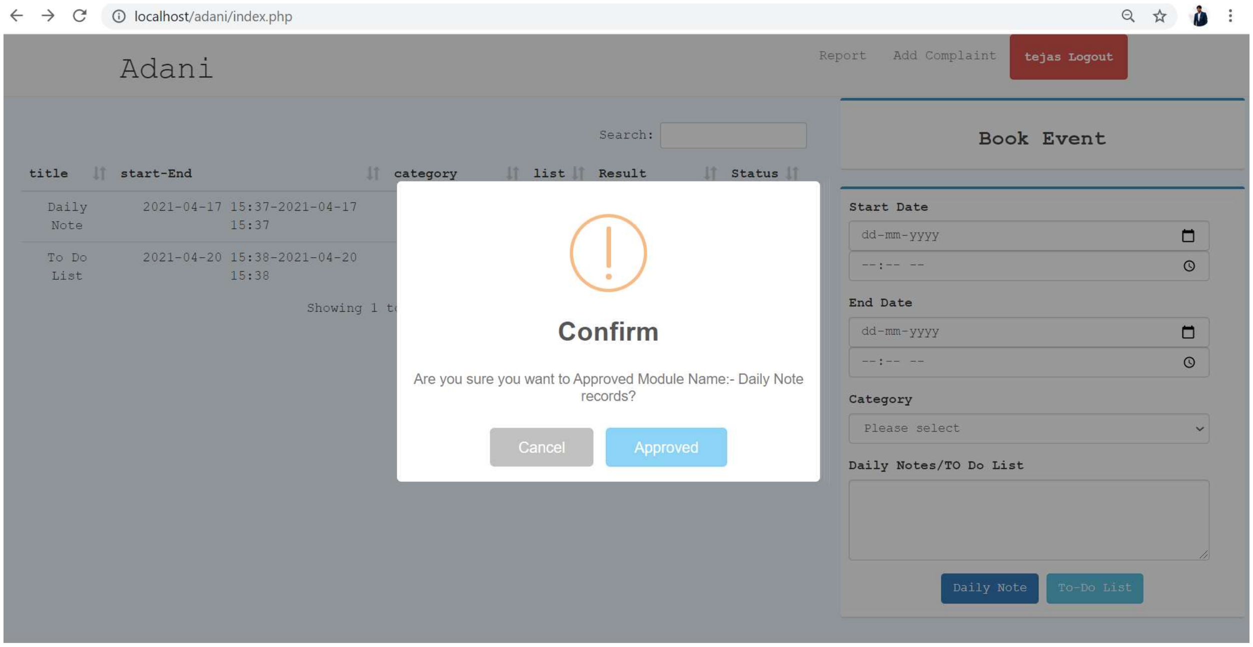
Book Event

Start Date
dd-mm-yyyy
--:-- --

End Date
dd-mm-yyyy
--:-- --

Category
Please select

Daily Notes/TO Do List



localhost/adani/index.php

Adani

Search:

title	start-End	category	list	Result	Status
Daily Note	2021-04-17 15:37-2021-04-17 15:37				
To Do List	2021-04-20 15:38-2021-04-20 15:38				

Showing 1 t

Confirm

Are you sure you want to Approved Module Name:- Daily Note records?

Book Event

Start Date

dd-mm-yyyy

--:-- --

End Date

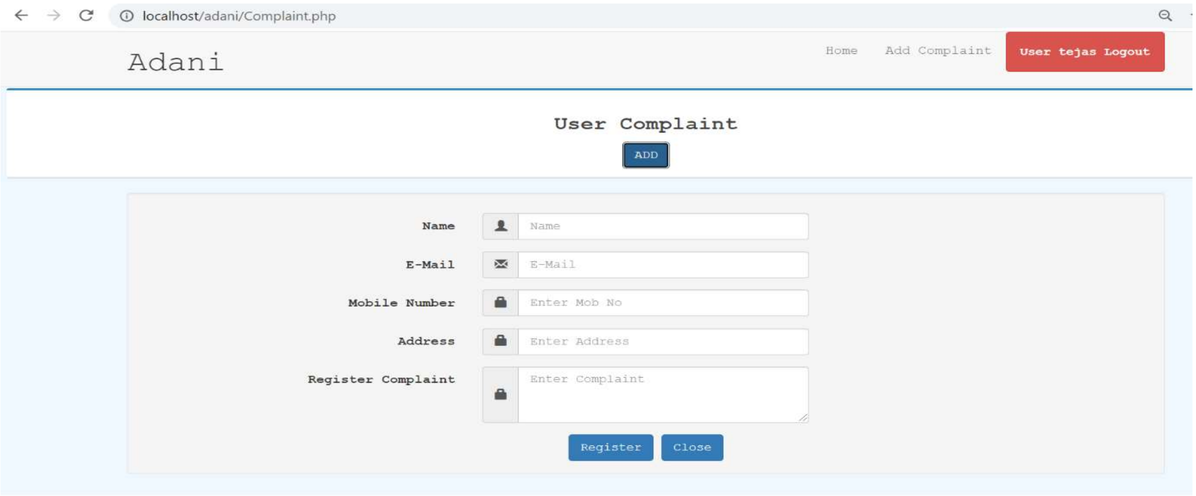
dd-mm-yyyy

--:-- --

Category

Please select

Daily Notes/TO Do List

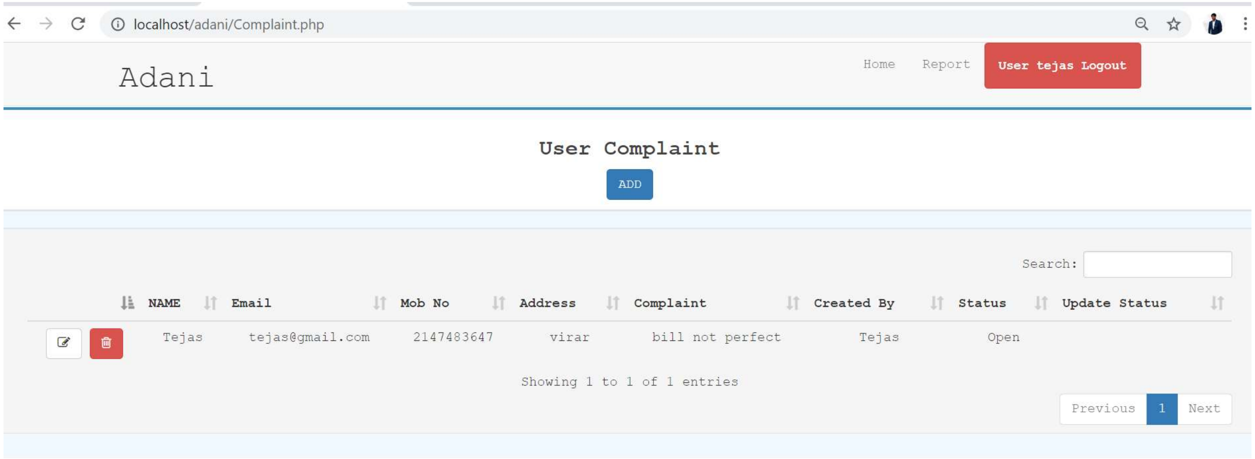


localhost/adani/Complaint.php

Adani

User Complaint

Name	Name
E-Mail	E-Mail
Mobile Number	Enter Mob No
Address	Enter Address
Register Complaint	Enter Complaint



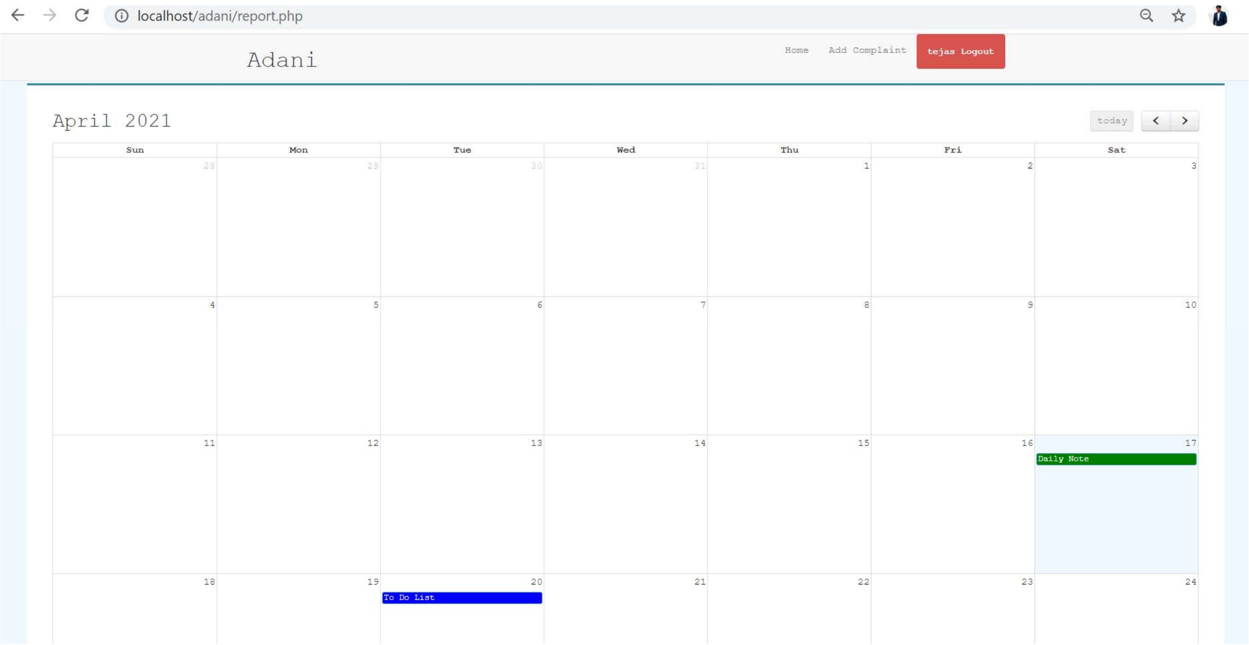
User Complaint

Search:

	NAME	Email	Mob No	Address	Complaint	Created By	Status	Update Status
	Tejas	tejas@gmail.com	2147483647	virar	bill not perfect	Tejas	Open	

Showing 1 to 1 of 1 entries

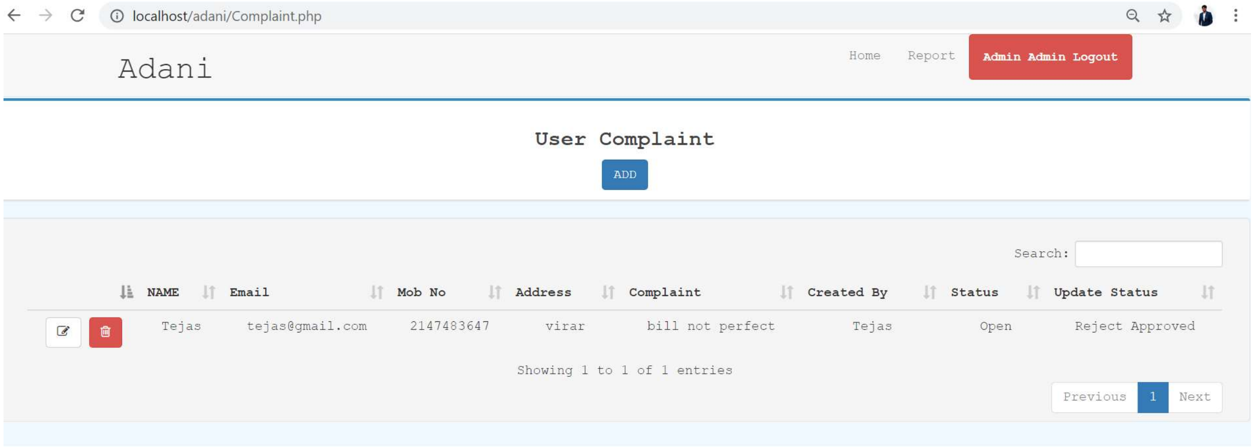
- Report:



April 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17 Daily Note
18	19	20 To Do List	21	22	23	24

- Admin:



localhost/adani/Complaint.php

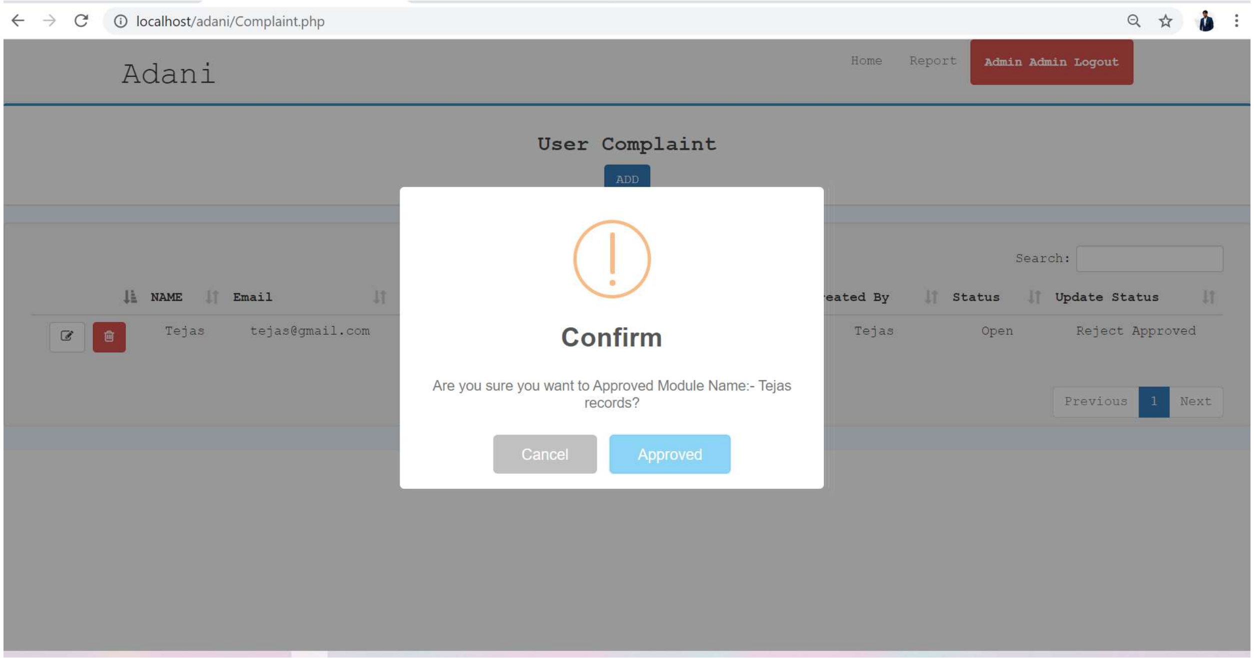
Adani

User Complaint

Search:

	NAME	Email	Mob No	Address	Complaint	Created By	Status	Update Status
	Tejas	tejas@gmail.com	2147483647	virar	bill not perfect	Tejas	Open	Reject Approved

Showing 1 to 1 of 1 entries



localhost/adani/Complaint.php

Adani

User Complaint

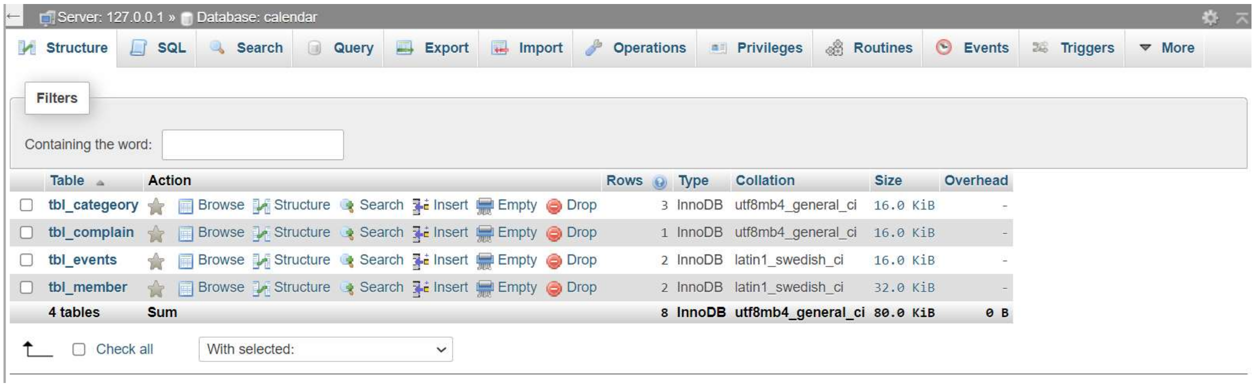
Search:

	NAME	Email	eated By	Status	Update Status
	Tejas	tejas@gmail.com	Tejas	Open	Reject Approved

Confirm

Are you sure you want to Approved Module Name:- Tejas records?

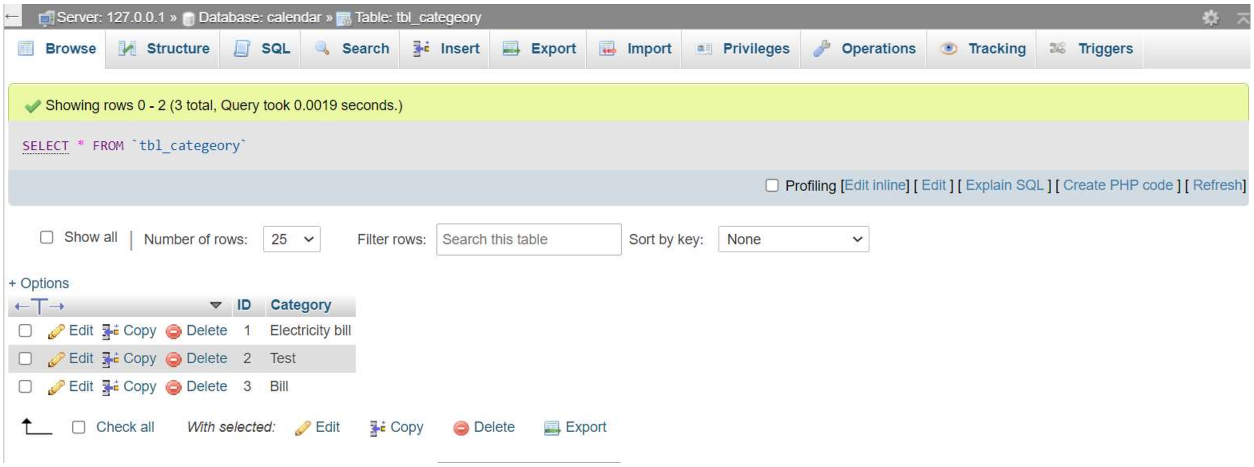
- Database:



Containing the word:

	Table	Action	Rows	Type	Collation	Size	Overhead
□	tbl_categeory	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	tbl_complain	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	-
□	tbl_events	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16.0 KiB	-
□	tbl_member	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	32.0 KiB	-
	4 tables	Sum	8	InnoDB	utf8mb4_general_ci	80.0 KiB	0 B

□ Check all With selected:



✓ Showing rows 0 - 2 (3 total, Query took 0.0019 seconds.)

```
SELECT * FROM `tbl_categeory`
```

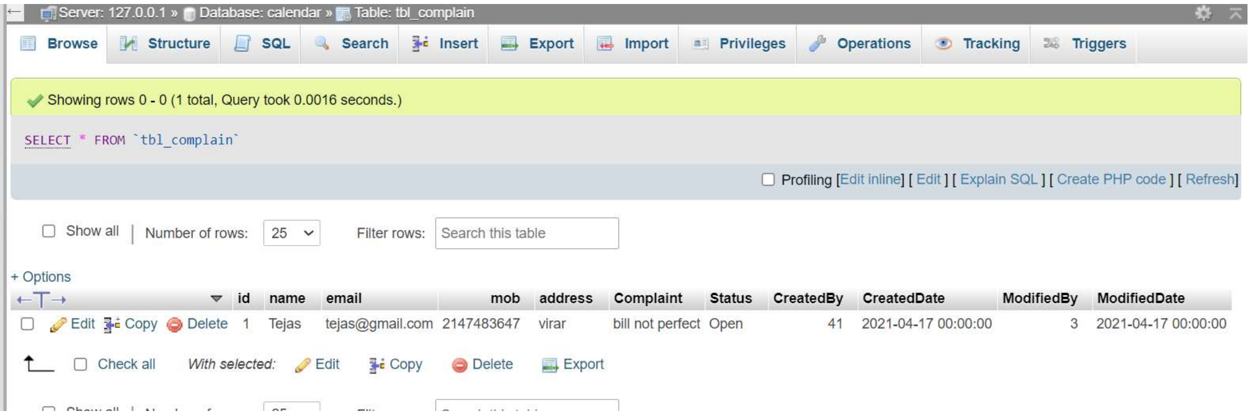
□ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

□ Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

		ID	Category
□	Edit Copy Delete	1	Electricity bill
□	Edit Copy Delete	2	Test
□	Edit Copy Delete	3	Bill

□ Check all *With selected:* Edit Copy Delete Export



✓ Showing rows 0 - 0 (1 total, Query took 0.0016 seconds.)

```
SELECT * FROM `tbl_complain`
```

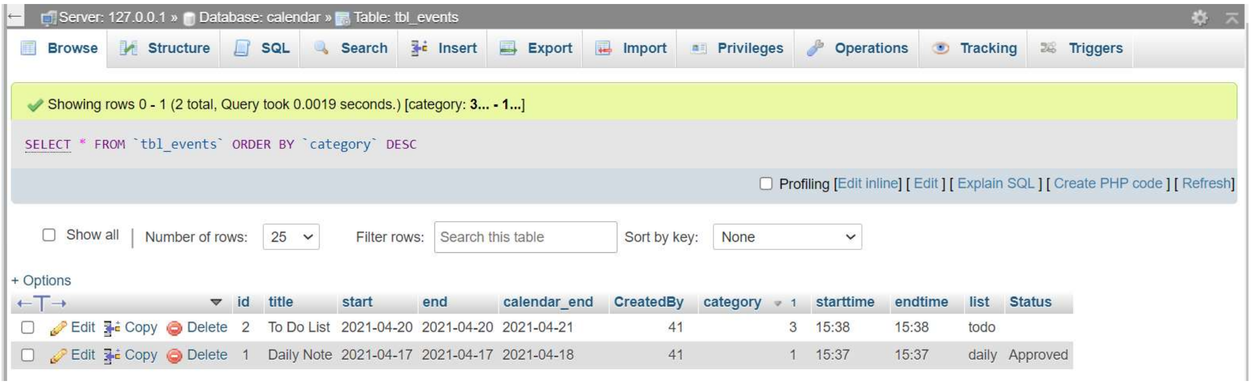
□ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

□ Show all | Number of rows: 25 Filter rows: Search this table

+ Options

		id	name	email	mob	address	Complaint	Status	CreatedBy	CreatedDate	ModifiedBy	ModifiedDate
□	Edit Copy Delete	1	Tejas	tejas@gmail.com	2147483647	virar	bill not perfect	Open	41	2021-04-17 00:00:00	3	2021-04-17 00:00:00

□ Check all *With selected:* Edit Copy Delete Export



✓ Showing rows 0 - 1 (2 total, Query took 0.0019 seconds.) [category: 3... - 1...]

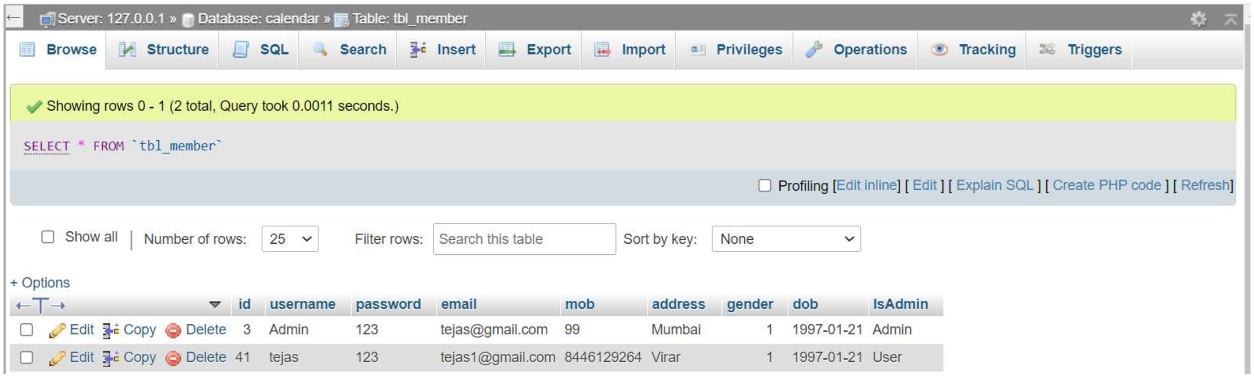
```
SELECT * FROM `tbl_events` ORDER BY `category` DESC
```

□ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

□ Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

		id	title	start	end	calendar_end	CreatedBy	category ▼ 1	starttime	endtime	list	Status
□	Edit Copy Delete	2	To Do List	2021-04-20	2021-04-20	2021-04-21	41	3	15:38	15:38	todo	
□	Edit Copy Delete	1	Daily Note	2021-04-17	2021-04-17	2021-04-18	41	1	15:37	15:37	daily	Approved



Server: 127.0.0.1 » Database: calendar » Table: tbl_member

✓ Showing rows 0 - 1 (2 total, Query took 0.0011 seconds.)

```
SELECT * FROM `tbl_member`
```

□ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

□ Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

+ Options

		id	username	password	email	mob	address	gender	dob	IsAdmin
□	Edit Copy Delete	3	Admin	123	tejas@gmail.com	99	Mumbai	1	1997-01-21	Admin
□	Edit Copy Delete	41	tejas	123	tejas1@gmail.com	8446129264	Virar	1	1997-01-21	User

3 SYSTEM DESIGN:

- FLOW CHART

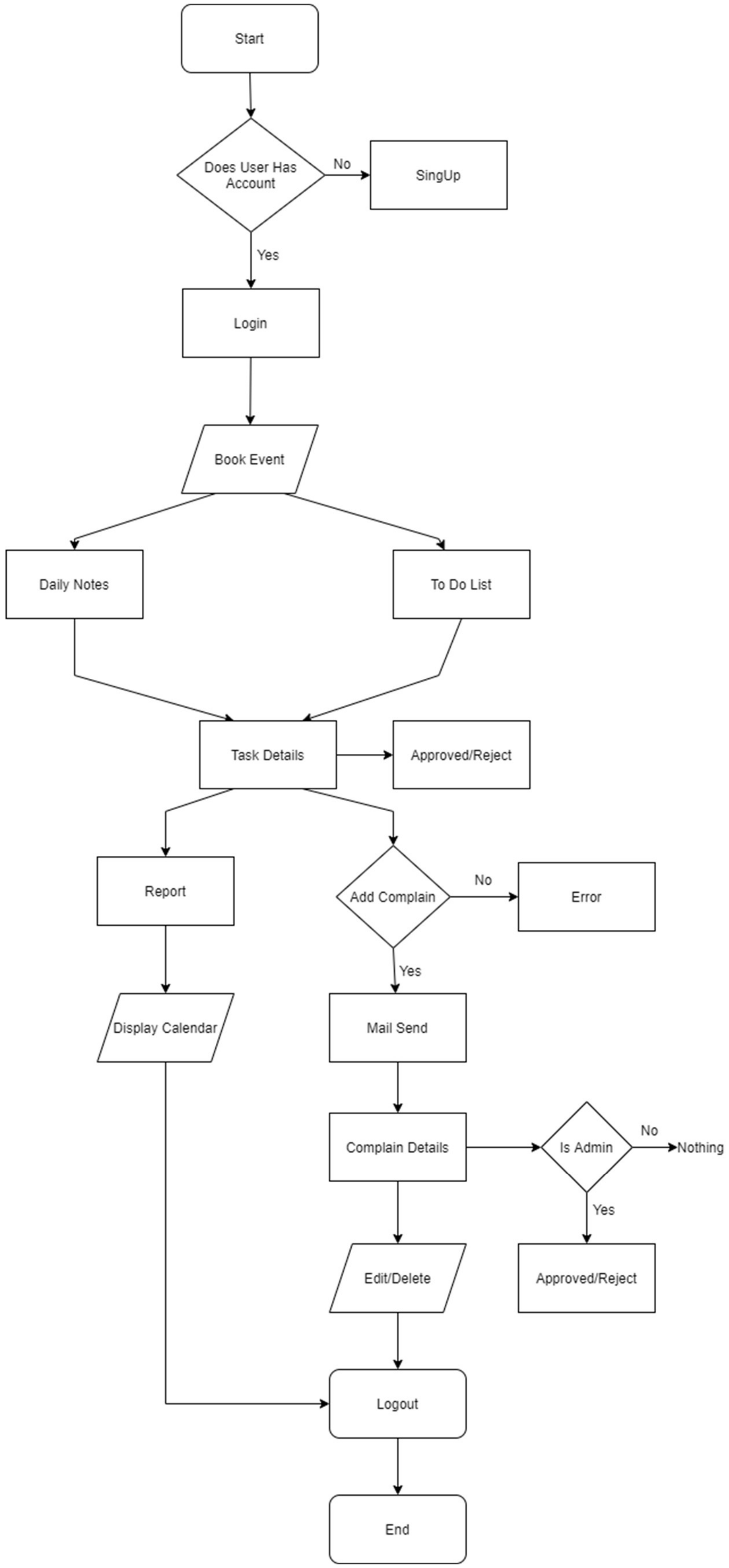
A flowchart is a diagram that depicts a process, system or computer algorithm. They are widely used in multiple fields to document, study, plan, improve and communicate often complex processes in clear, easy-to-understand diagrams

Flowcharts, sometimes spelled as flow charts, use rectangles, ovals, diamonds and potentially numerous other shapes to define the type of step, along with connecting arrows to define flow and sequence.

Below are some of the common flowchart symbols.

TERMINAL/TERMINATOR	
PROCESS	
DOCUMENT	
DATA, OR INPUT/OUTPUT	
FLOW ARROW	

Tejas Mane


Start
Does User Has Account
No
SingUp
Yes
Login
Book Event
Daily Notes
To Do List
Task Details
Approved/Reject
Report
Add Complain
No
Error
Yes
Display Calendar
Mail Send
Complain Details
Is Admin
No
Nothing
Yes
Edit/Delete
Approved/Reject
Logout
End

4 TESTING:

- SYSTEM TESTING
  - Testing Methods: Software testing methods are traditionally divided into white- and black-box testing. These two approaches are used to describe the point of view that a test engineer takes when designing test cases.

- **White box testing** is when the tester has access to the internal data structures and algorithms including the code that implement these.
  - Types of white box testing
  - The following types of white box testing exist:
  - API testing (application programming interface) - testing of the application using public and private APIs
  - Code coverage - creating tests to satisfy some criteria of code coverage (e.g., the test designer can create tests to cause all statements in the program to be executed at least once)
  - Fault injection methods - improving the coverage of a test by introducing faults to test code paths
  - Mutation testing methods
  - Static testing - White box testing includes all static testing

- **Black box testing** treats the software as a "black box"—without any knowledge of internal implementation. Black box testing methods include: equivalence partitioning, boundary value analysis, all-pairs testing, fuzz testing, model-based testing, traceability matrix, exploratory testing and specification-based testing.

- **TEST CASES**

Registration Page:

Sr No.	Feature	Description	Steps to Execute	Test Data / Input	Expected Results
1	User Interface	Check all the text boxes, Drop-down, buttons, etc	1. Click on drop-down buttons, buttons and dropdowns	N/a	UI should be perfect

2	Required fields	Check the required fields by not filling any data	1. Do not enter any value in the field. 2. Click on the Register button.	N/a	It should show a mandatory symbol (*) on mandatory fields.
3	Required fields	Check user should Register by filling all the required fields	1. Enter valid values in the required fields. 2. Click the Register button.	N/a	1. Users should be registered successfully. 2. A successful registration message should show. 3. Mail should send to the user
4	Email validation	• Check the Email text field that has an Email address without @ symbol. • Check the Email text field that has a random string instead of a real email. • Check the Email text field that has @ symbol written in words. • Check the Email text field that has a missing dot in the email address.	1. Enter Invalid Emails 2. Click on the Register Button.	1.testAtgmail.com 2.test@gmailcom 3.test@gmail 4.@gmail	It should show the validation message for valid email
5	Email validation	Check all the valid emails	1. Enter valid Emails 2. Click on the Register Button.	1.test.22@gmail.com 2.test@gmail.com	It should not show any validation message
6	Phone Number validation	Check the phone number when passing alphanumeric data	1. Enter alphanumeric data in phone field 2. Click on Register button	1. dada5$7567#7	It should show the validation message 8 for Phone Number
7	Phone Number validation	Check the phone number when not pass country code	1. Enter valid phone number without country code 2.Click on Register button	1. 8446129264	It should show the validation message for country code is required
8	Password Validation	Check the password limit when enter value less than min	1. Enter value which is alphanumeric but less than 8. 2.Click on Register button	1. Password	It should show validation message
9	Password Validation	Check the password limit	1. Enter alphanumeric value but more than 32.	Any Random string with numbers	It should show validation message

		when enter value greater than max	2.Click on Register button		
10	Password Validation	Check the password when passing only numbers	1. Enter a value in numbers which is in between 8-32 2.Click on Register button	1. 12345678	It should show validation message
11	Password Validation	Check the password when passing valid data	1. Enter value in alphanumeric which is in between 8-32 2.Click on Register button	1. Pass123456	It should not show any validation message
12	Required Fields	Verify if blank spaces are passed in required fields.	1. Go to the Site. 2. Passed blank spaces in required fields. 3. Click on the Register button	N/a	Those Blank spaces should trim and Validation error message for required fields should visible.
13	Required Fields	Verify user can verify its Email ID	1. Go to the Email. 2. Click on the verification link.	test22@gmail.com	User should get a verification link and able to verify his/her Email ID.
14	Phone Number Validation	Verify if the length of the phone number is incorrect i.e. less than 10.	1. Enter phone number less than 10 digits. 2.Enter all required fields. 3.Click on Register Button	91901122	It should show the validation error message for phone number length.
15	Password Validation	Verify if the password required rules are not satisfied in the password	1. Enter the password which not satisfies the required rule. 2.Click on Register button	passw	It should display error with required rules for password value (like it should contain a special character, a small case, a number)

Login Page:

Sr No.	Feature	Description	Steps To Execute	Expected Results

1	User Interface	Check all the text boxes and buttons	Check Page	• UI should be perfect • Text boxes and button should be aligned
2	Required Fields	Check the required fields by not filling any data.	1. Enter invalid username 2. Enter correct password 3. Click on Login Button	User should not log in and should show proper error message
3	User Login	Check When passing a correct username and invalid password	1. Enter valid username 2. Enter incorrect password 3. Click on Login Button	User should not log in and should show proper error message
4	User Interface	Check Keeping Password	1. Enter valid username 2. Do not enter password 3. Click on Login Button	User should not log in and should show proper error message
5	User Login	Check when pass correct email and password	1. Enter valid username 2. Enter valid password 3. Click on Login Button	User should log in
7	Signup Option for new users	Check whether the signup link for the new user is working	Click Signup link	Clicking signup link takes the user to signup page successfully
14	Required Fields	Verify if blank spaces are passed in required fields.	1. Go to the Site. 2. Passed blank spaces in required fields. 3. Click on the Login button	Those Blank spaces should trim and Validation error message for required fields should visible.
15	Welcome Email	Verify new users should get the welcome email once after the login.	1. Go to the Email. 2. Enter Login Email.	Users should get a welcome email on his/her email id.
16	User Login	Verify when passing incorrect Email and correct password	1. Enter incorrect Email. 2. Enter the correct password. 3. Click on the Login Button.	User should not be able to log in and the error message should be displayed.
17	User Login	Verify when passing both incorrect Email and password	1. Enter incorrect Email. 2. Enter the correct password. 3. Click on the Login Button	User should not be able to log in and the error message should be displayed.

5 FUTURE ENHANCEMENT:

As the condition of Customer is very bad, future enhancement includes developing the following as stated below:

- To include more Features as per the requirements.
- The proposed system provides more user friendly.
- In the future we build Comment session, like button for each product.
- When customer registered to website, he/she will get update on mobile phone.

6 CONCLUSION:

This project is designed to meet the requirement of Customer Service Management Portal. It has been developed in BOOTSTRAP, PHP, AJAX and MYSQL keeping in mind the specification of the system for designing the system we have used simple data flow diagrams.