

# IPA

## Insurance Plumbing App



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# **Section 1 - Admin Website**

## **System overview**

This website eases the workflow of an admin since it allows the admin to capture caller details, generate a case report, close cases that are completed, generate reports, add new employee, delete existing employee and generate statistics to give them an overview. This website is only designed for the admin.

## **System Configuration**

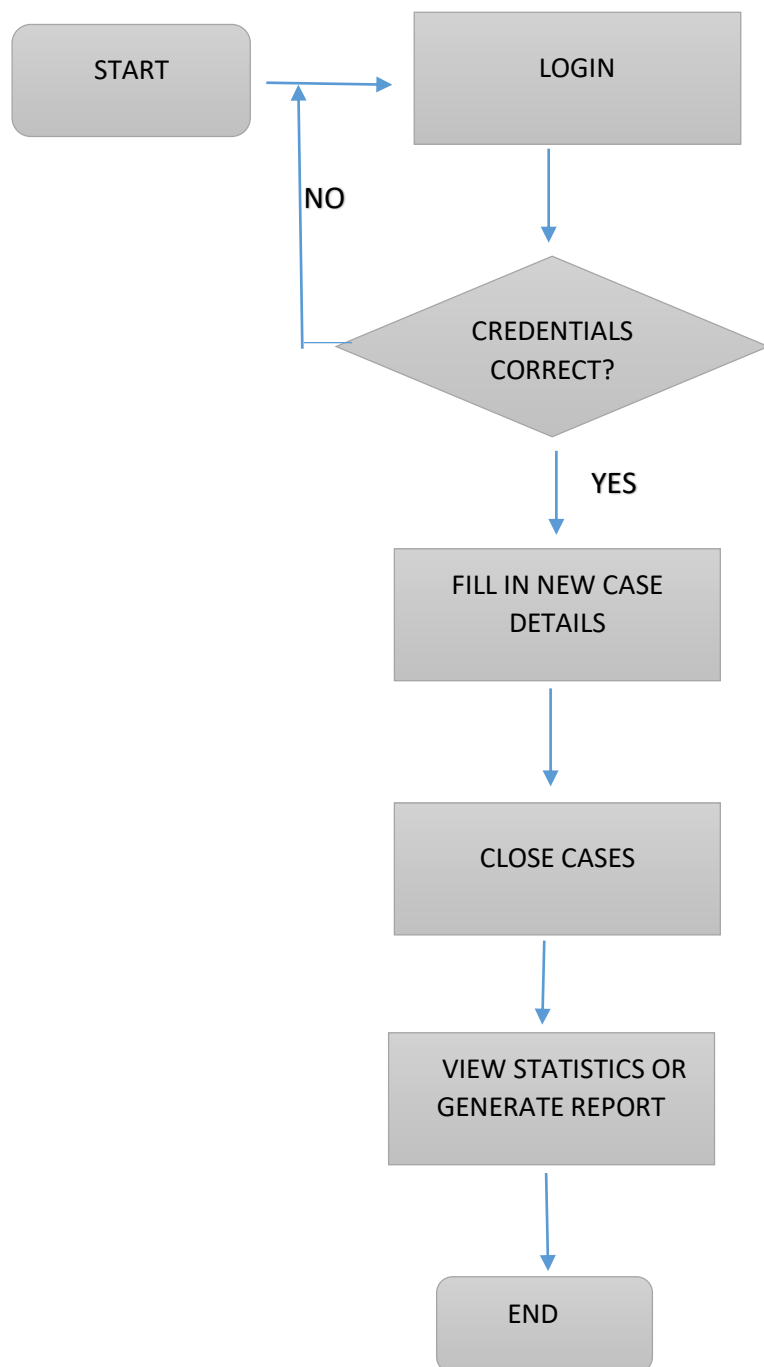
This website works across all the web browsers. Furthermore, it communicates with the database for all events that are performed by the admin. To access this website, internet connection is required.

## **Website URL**

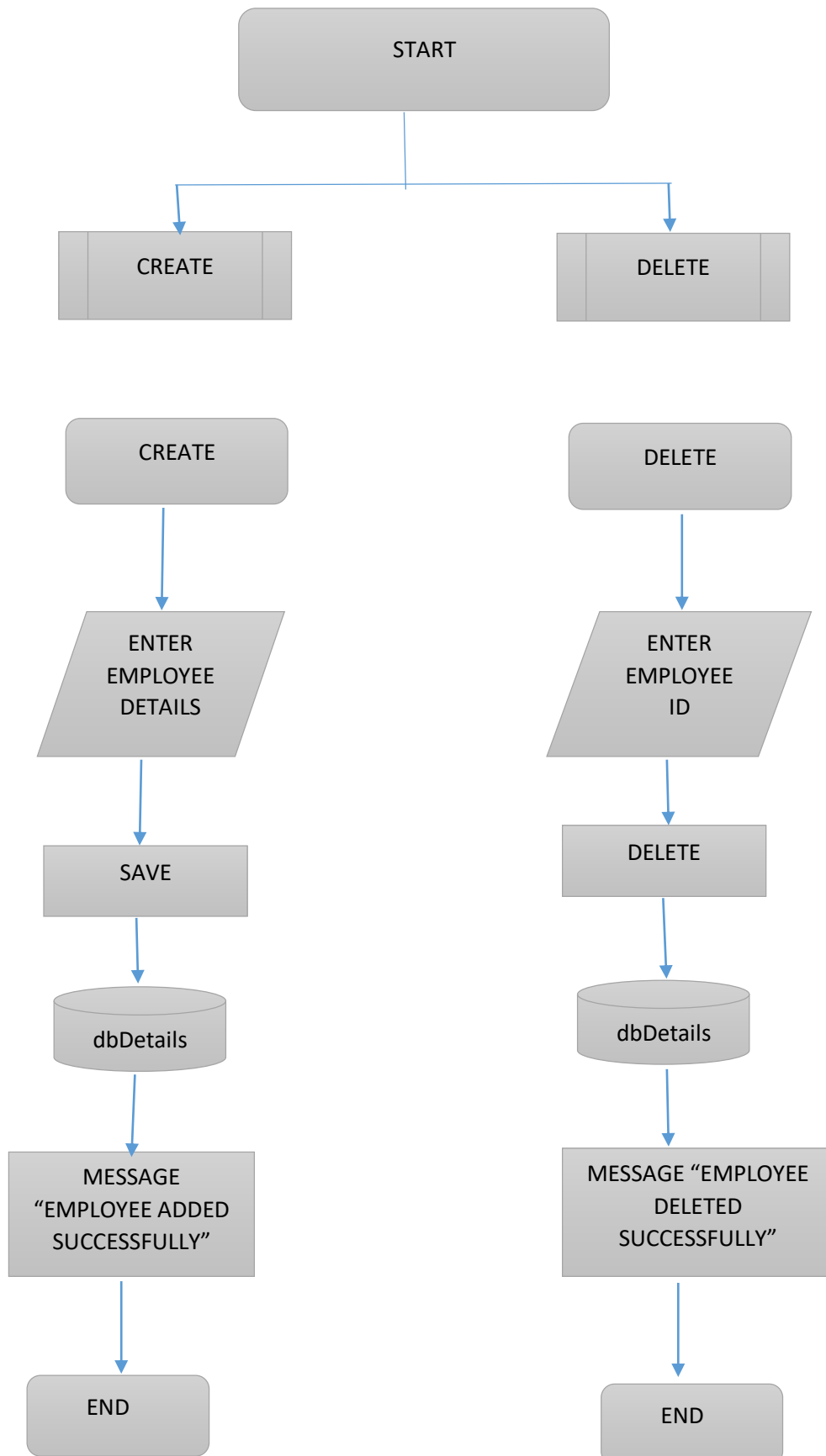
Below is the url to access the website: <https://tk-naidu.github.io>

## Getting Started

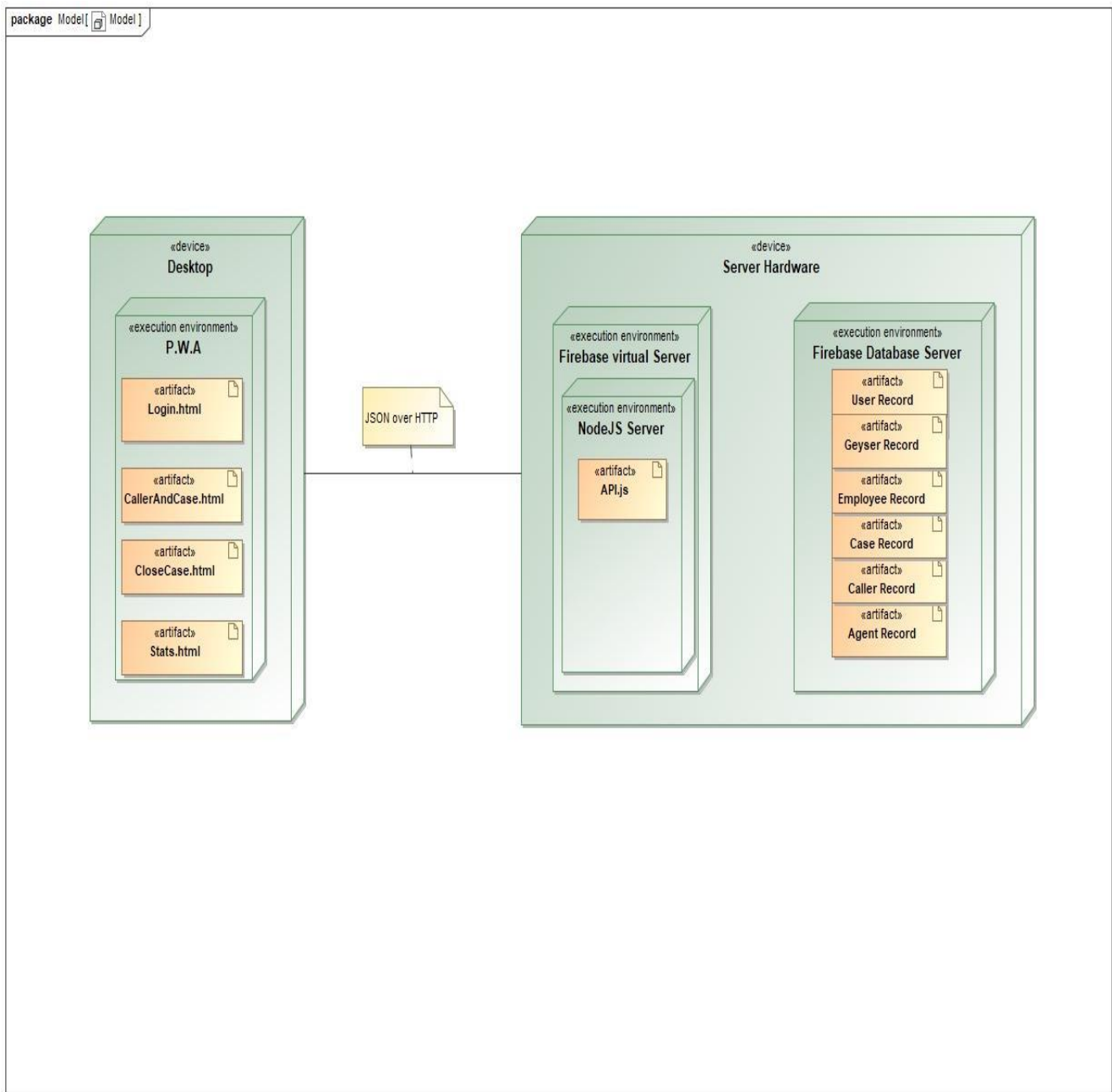
Below is typical walkthrough (in a form of flowchart) of the website:



## Workflow to add and delete an employee



# Deployment Diagram



**This deployment model basically gives you an overview of the system and what artifacts and technologies are used to deploy this system.**

## Guidelines as how to use this website

### Login Page

=> If you are not a new agent then enter your credentials in order to proceed.

The image shows a login interface titled "IPA LOGIN" on a blue background. The login form consists of two white input fields labeled "Username" and "Password", followed by a black button labeled "SIGN IN". Below the form, there is a "Sign up" link. A large black arrow points from a callout box to the "Sign up" link. The callout box contains the text: "If you are a new user click here to generate you credentials."

IPA LOGIN

Username Password

SIGN IN

Sign up

If you are a new user  
click here to generate  
you credentials.

## **Signup Page**

⇒ if you are a new agent, you have to signup first and then login to proceed.

IPA

### Sign Up New Agent

Full name

Agent ID

Note: please click the generate button to create an ID.

GENERATE AGENT ID

### Password

Note: Generate or type your own password.

Show Password

☐

GENERATE AGENT PASSWORD

### Confirm Password

SIGNUP

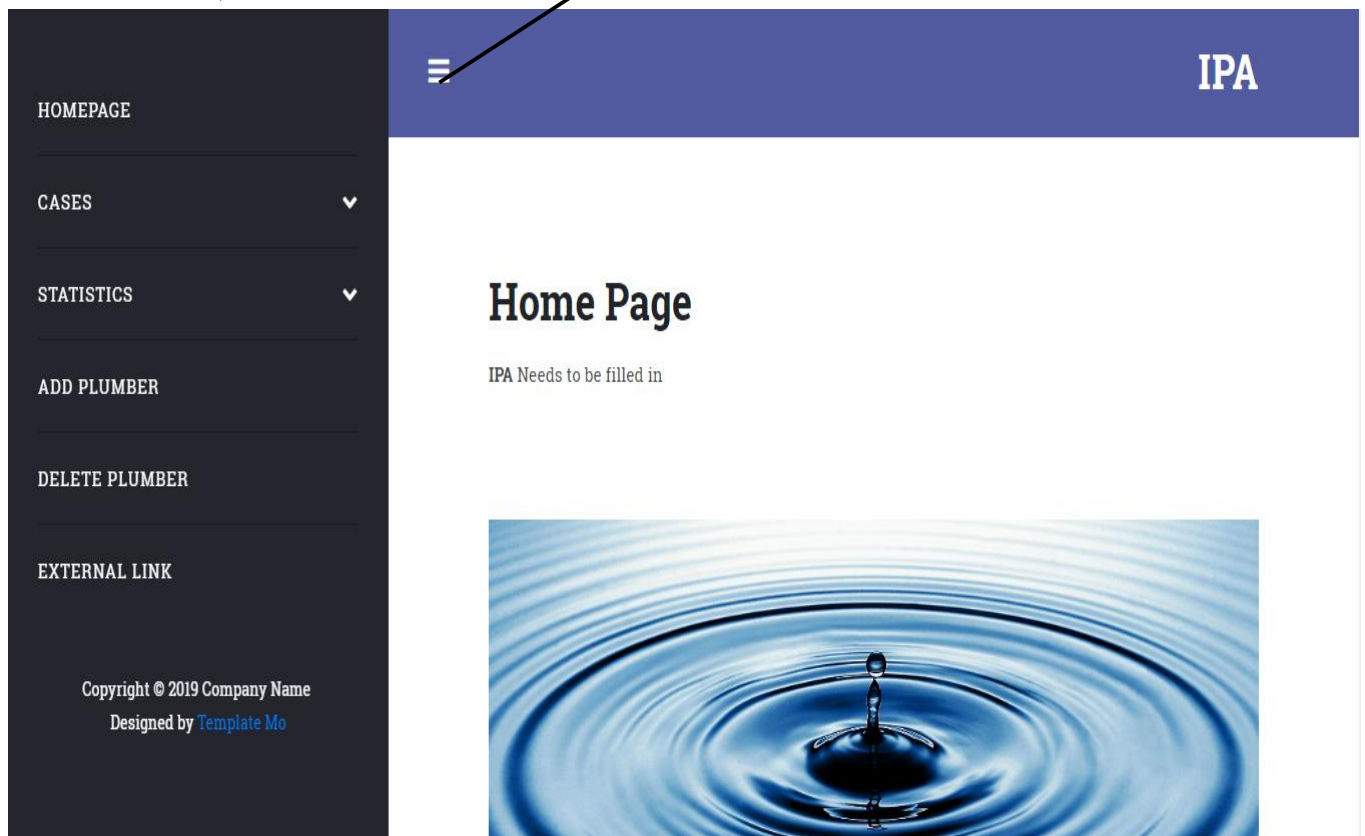
By clicking this button you will get a suggested password which we highly recommend for security purpose otherwise you can create your own password.



## Home Page

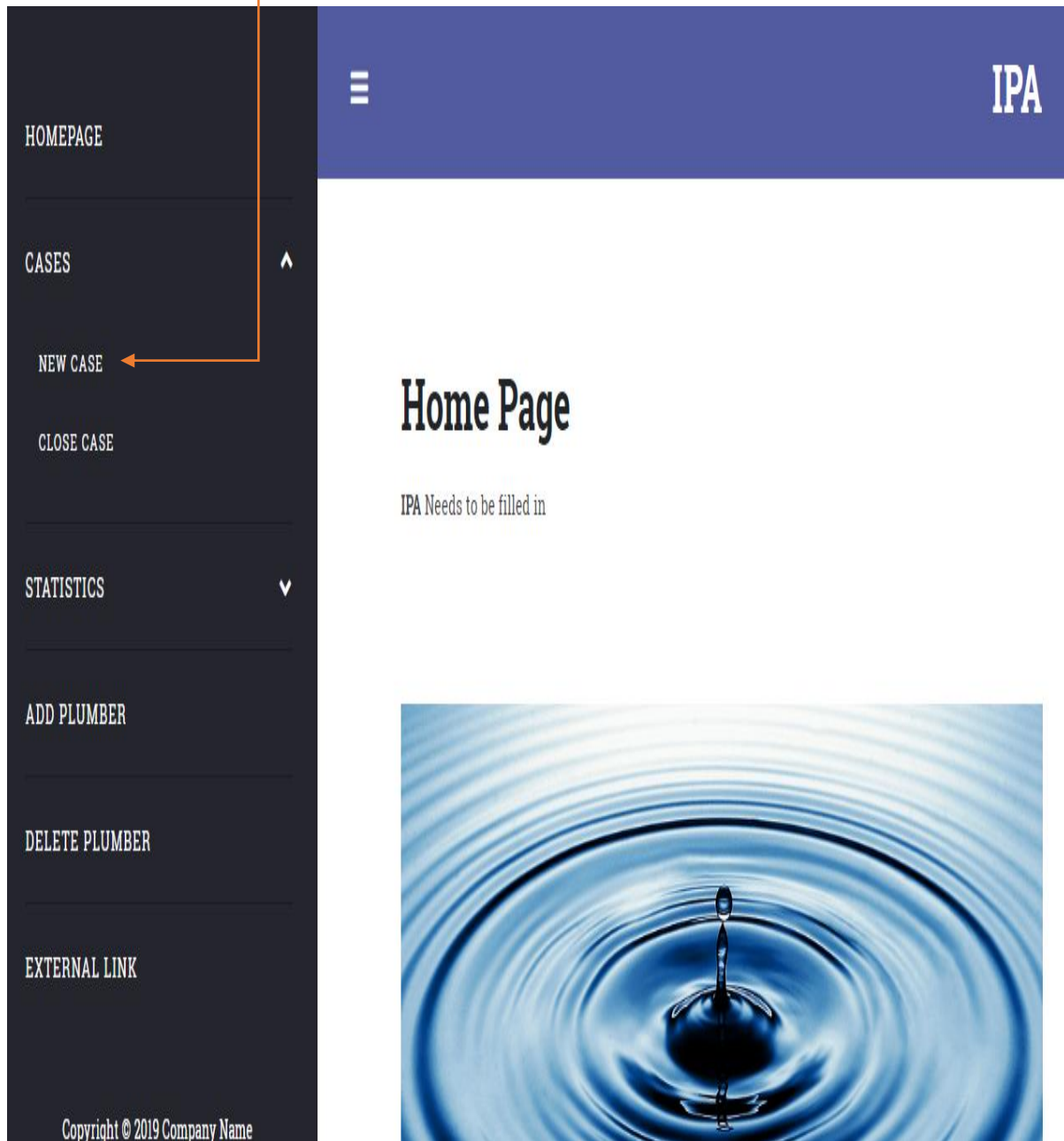
Navigation Bar

By clicking this button it will open up a navigation bar for you to choose the task you want to perform.



## Entering details of a new case

Allows you to enter new case details as well as the caller's details.



Below is the form to fill in the details related to a case.

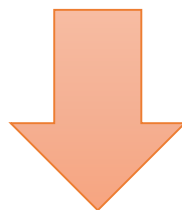
IPA

## Caller Identification

Note: Paste the client details below

AUTO FILL

Paste the client information from the email in this box and then click the button called "autofill", this will fill the form automatically.





Name

Surname

Address

Cell Number

Call back number

Client Type

Service Type

Reason

## Generating Case Report

Case ID

Caller ID

GENERATE CASE ID

GENERATE CALLER ID

Incident Date

Case Description

GET CURRENT DATE

Case Status

completed

Case Status

completed

Plumber ID

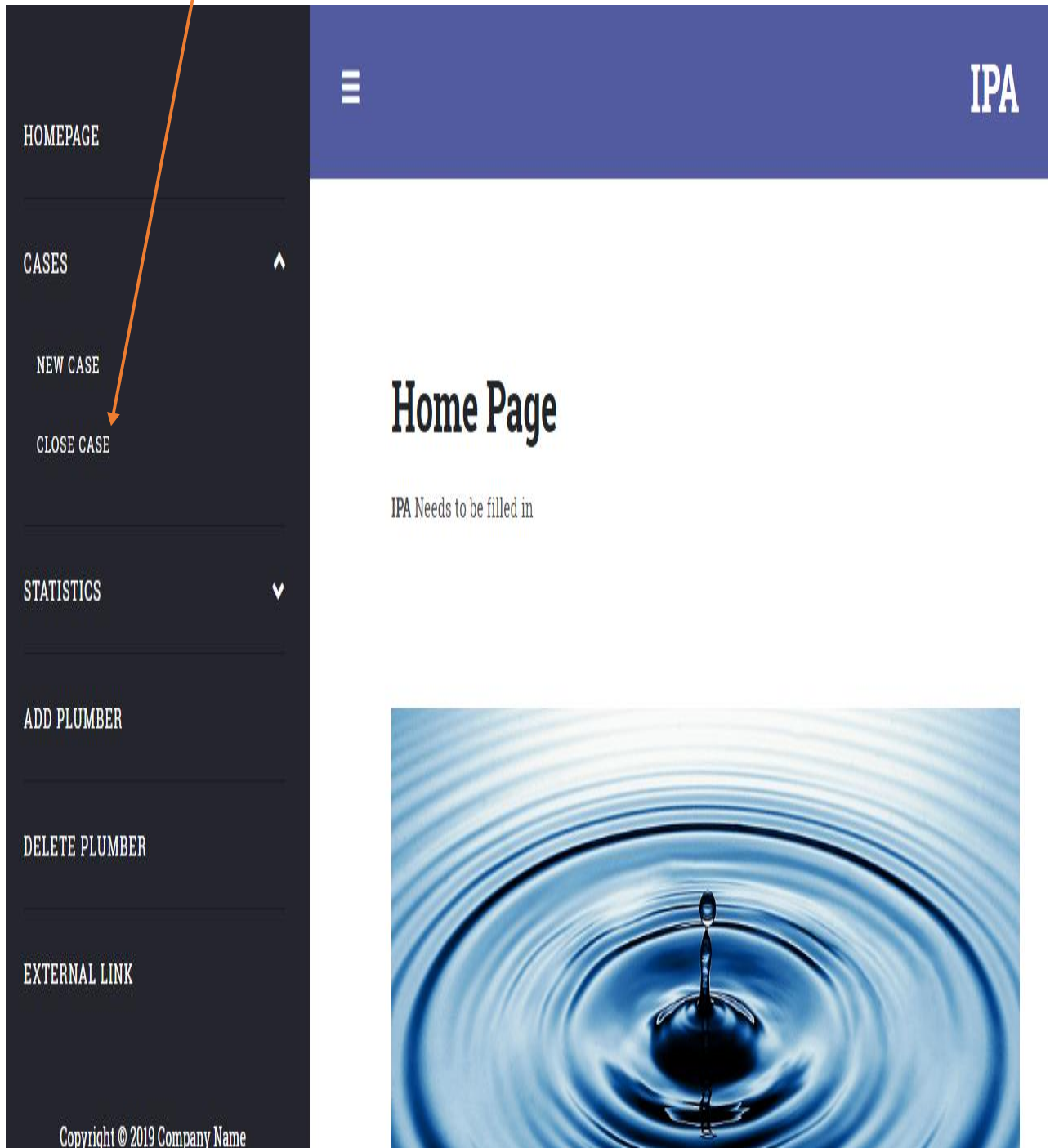
Case Opened by (Agent ID)

SUBMIT

Enter your ID (choose from the dropdown).


## Closing a case

⇒ To close a case click here:



The screenshot displays a web application interface. On the left is a dark sidebar menu with the following items: HOMEPAGE, CASES (with an upward arrow), NEW CASE, CLOSE CASE (highlighted by an orange arrow), STATISTICS (with a downward arrow), ADD PLUMBER, DELETE PLUMBER, and EXTERNAL LINK. At the bottom of the sidebar is the text 'Copyright © 2019 Company Name'. The main content area has a blue header with a hamburger menu icon and the text 'IPA'. Below the header, the text 'Home Page' is displayed in a large, bold, serif font. Underneath 'Home Page', the text 'IPA Needs to be filled in' is shown in a smaller, regular font. At the bottom of the main content area is a large image of a water droplet creating ripples on a blue surface.

By clicking on the “view cases that needs to be closed “button, a list of cases will be displayed that needs to be closed and then enter you agent ID in order to close it. Below is an example as how to close a case/cases.

IPA

Close a Case

VIEW CASES THAT NEEDS TO BE CLOSED

Case Closed by (Agent ID)

CLOSE THE CASE

When “view case that needs to be closed” button clicked a list of cases are shown:

VIEW CASES THAT NEEDS TO BE CLOSED

completed	EvBS20Xy	2019-7-7
completed	F2DY21YD	2019-7-7
completed	MzicGUKq	unknown

Case Closed by (Agent ID)

CLOSE THE CASE

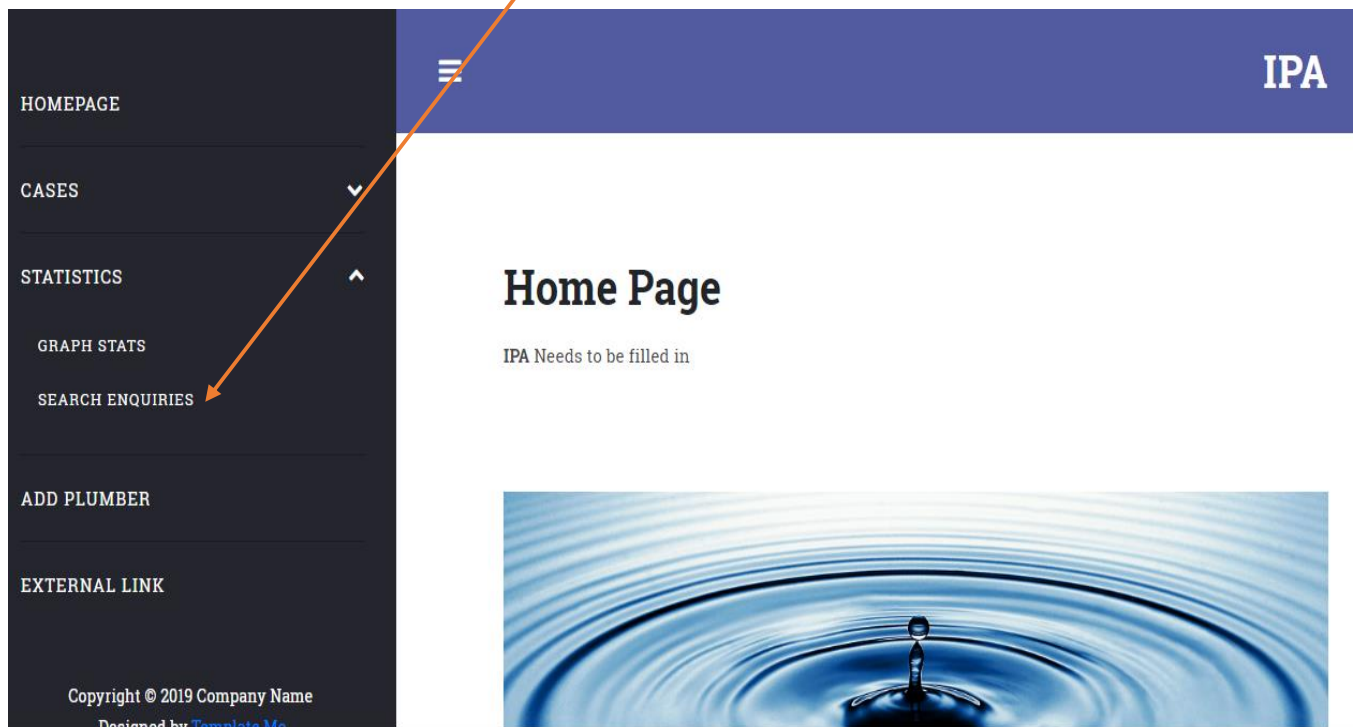
⇒ Choose your agent ID from the drop down and click “close the case” button.

completed	EvBS20Xy	2019-7-7
completed	F2DY21YD	2019-7-7
completed	MzicGUKq	unknown

Case Closed by (Agent ID)

## Searching for cases handled by a specific plumber

⇒ To perform search functionality click here:





Enter the plumber’s ID to get details on the cases handled by a specific plumber.

Search based on various features

Cases done by plumber:

Plumber ID...

SEARCHclear

Tables

CaseID	Incident Date	Address	Case Status	Description	Caller ID	Agent O	Agent C
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=>Example of searching for case handled by plumber ID 24DhAjwRbi

## Search based on various features

Cases done by plumber:

SEARCH

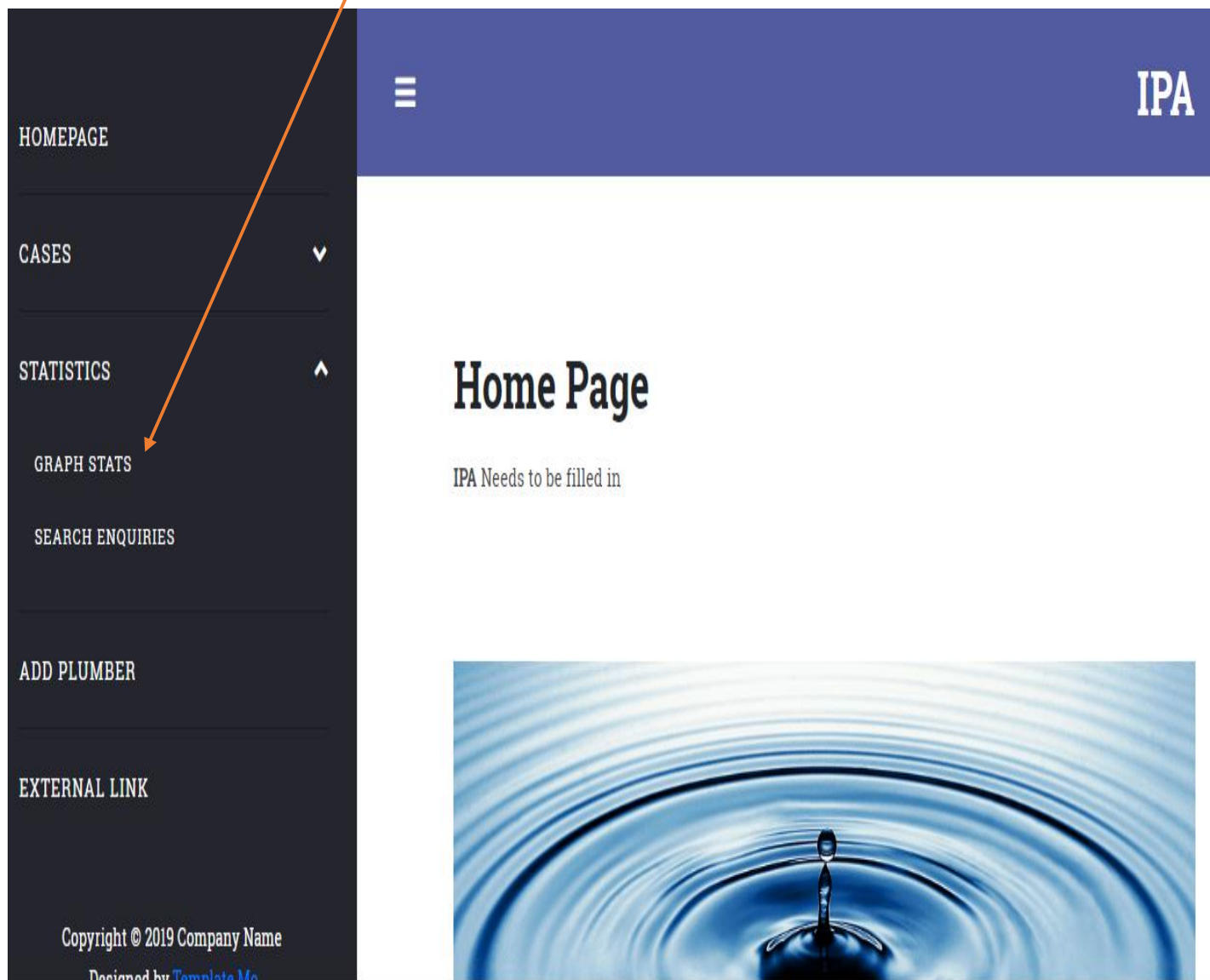
clear

### Tables

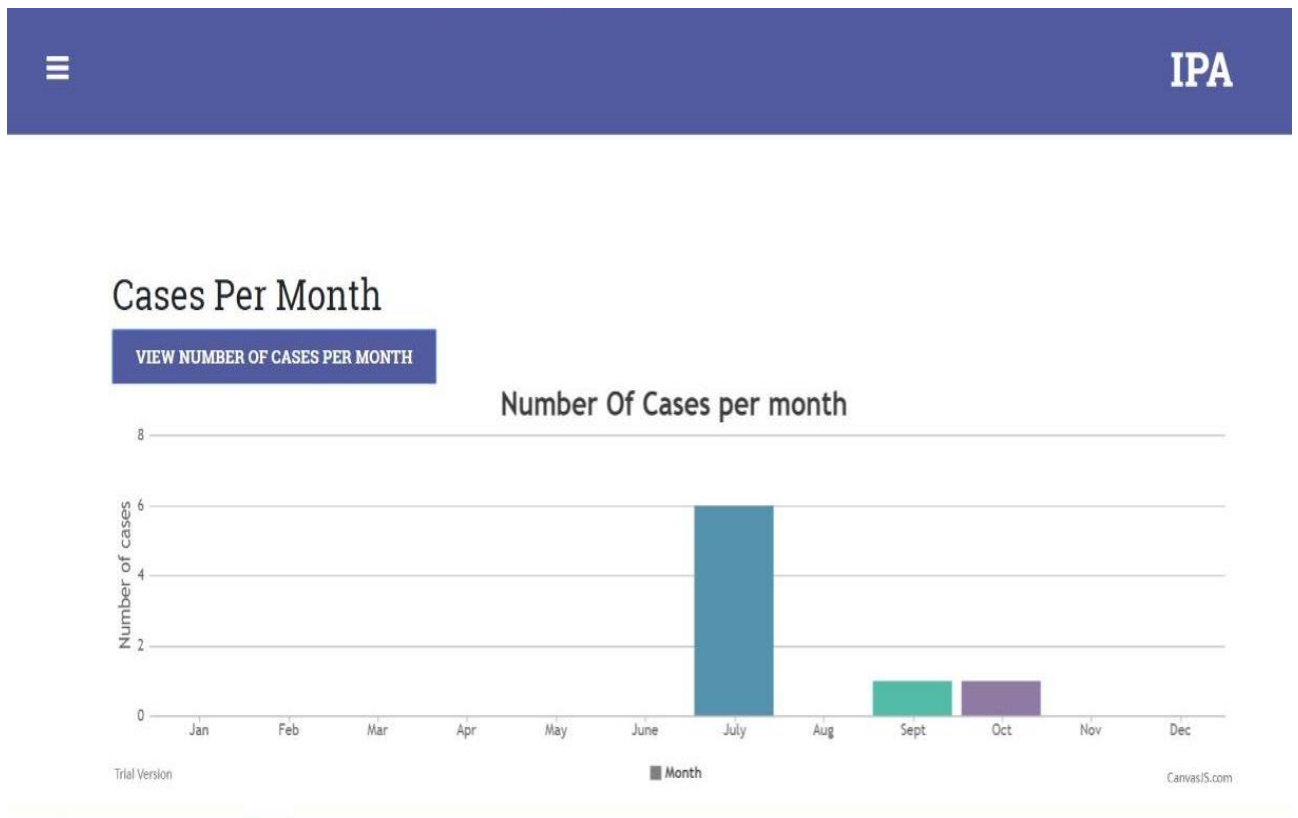
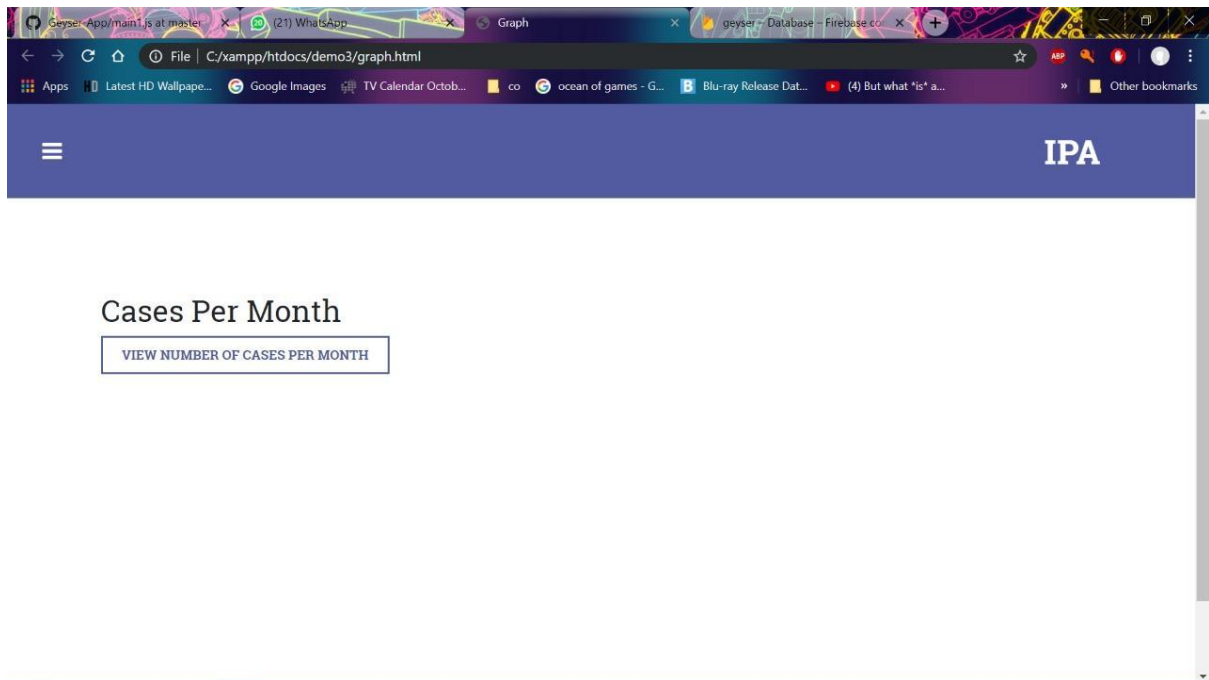
CaseID	Incident Date	Address	Case Status	Description	Caller ID	Agent O	Agent C
EvBS20Xy	2019-9-9	The Fields, Burnett Street, Hatfield, Pretoria, 0028	completed	Same as the reason above	UgEgyuNW	ARvCV6mlk	ARvCV6mlk
MzicGUKq	2019-7-8	1104 Prospect street, Hatfield, Pretoria 0028	completed	Burst valve	ng2bbEEB	AXJXoxUcT	unknown
jAqMKs7W	2019-7-7	House No 1456, Legabe street, unit 4	pending	Same as the reason above	uaWQeEOI	AXJXoxUcT	unknown

## Statistics

To view Statistics, click here :

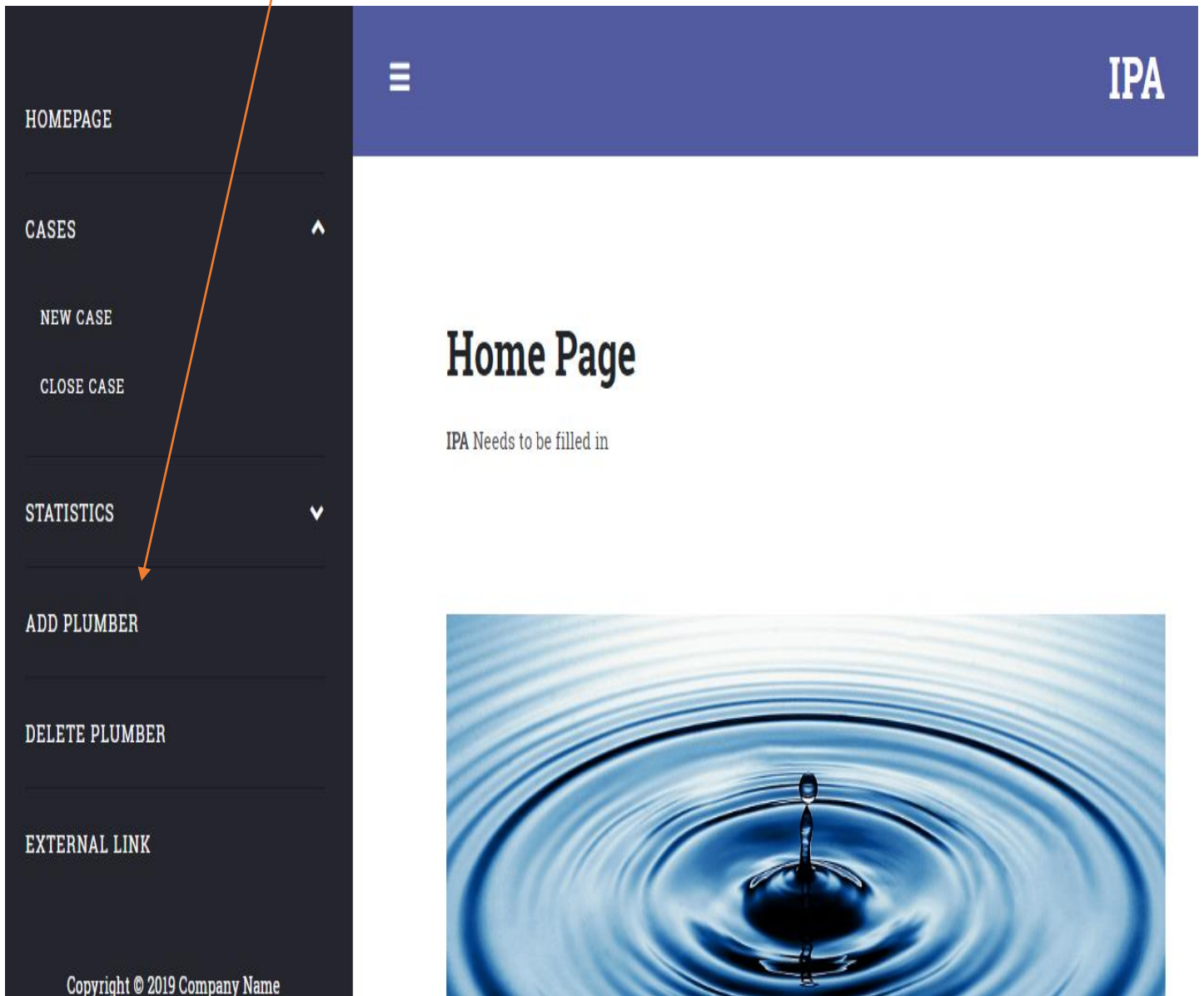


Click on the button called “view number of cases per month “ to get an overview of the cases handled per month.



## ***Adding a new employee***

To add a new employee click here.





## Add New Plumber

**Note:** Plumber's details can be copy-pasted below from the CV else you can manually type it out

AUTO FILL

Name

ID number

Cell Number

Address

Plumber ID

Plumber Password

GENERATE PLUMBER ID

GENERATE PLUMBER PASSWORD

Attach CV

Choose File

No file chosen

Attach ID copy

Choose File

No file chosen

Attach other supporting documents

Choose File

No file chosen

SUBMIT

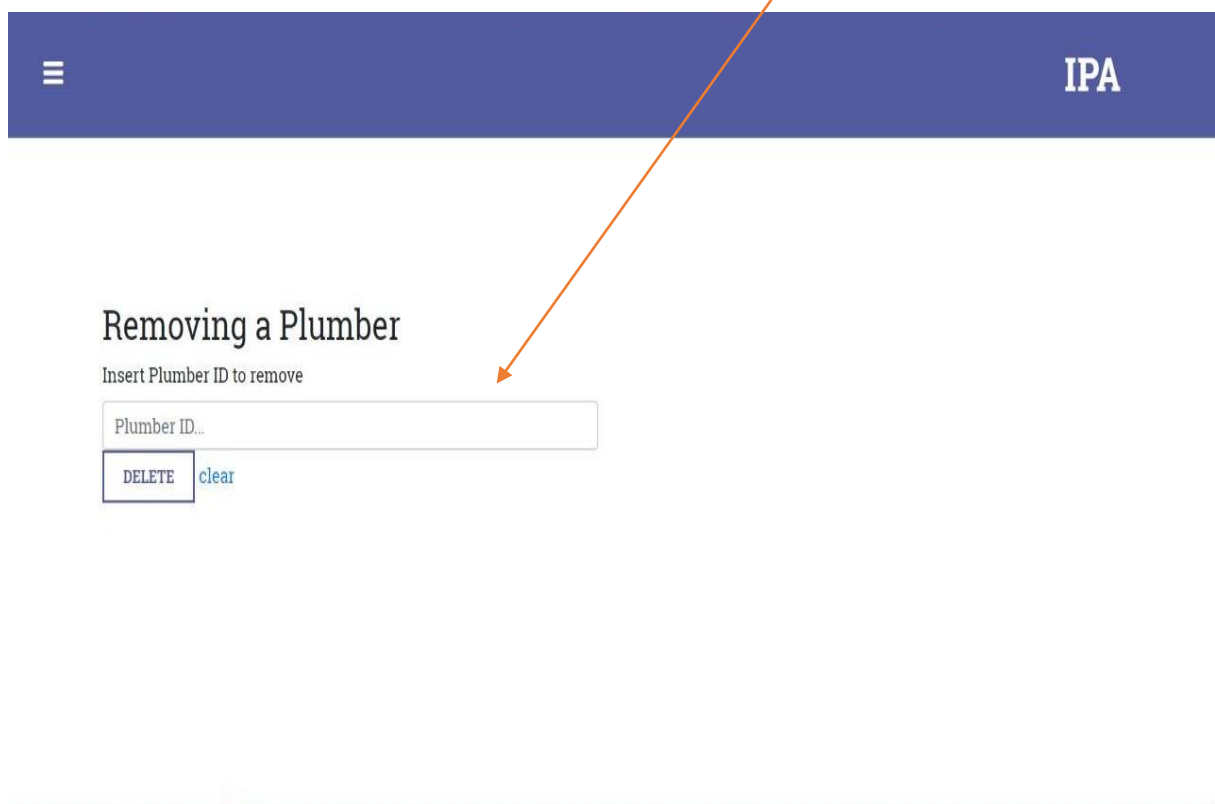
Click on choose file to upload supporting documents of the new employee.

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## Deleting an employee

In order to remove an employee's records from a database, insert the plumber's ID .



IPA

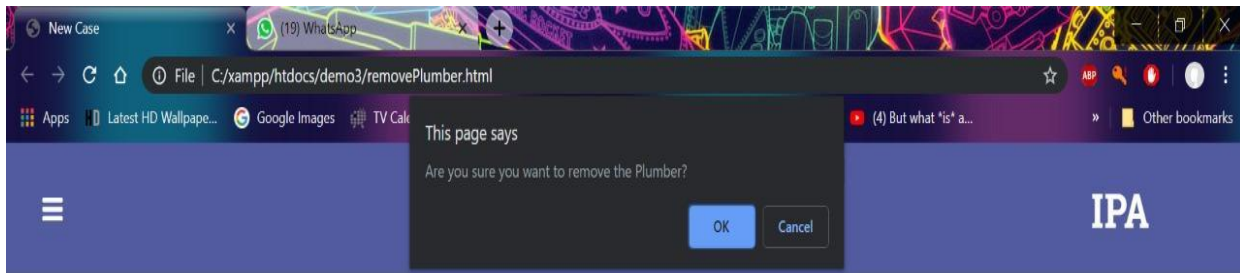
### Removing a Plumber

Insert Plumber ID to remove

[clear](#)



***Example of deleting an employee's record from the database.***



## Removing a Plumber

Insert Plumber ID to remove

DELETE

clear

Confirmation message before deleting an employee's record. If you think you have entered the wrong plumber's ID then click on cancel else click on ok.

## **Troubleshooting**

Error messages will appear if required fields that need to be filled in have been left blank. In this instance an error message in red will appear underneath the required field. This occurs when filling in case details, new employee's details, login and sign up page. This can be avoided by filling in the required fields.

## **Section 2 - Plumber app**

### **System Overview**

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Summary: Information about the geyser and its installation, including relevant documents, are recorded and kept on a database in order to ease the installation process.

Plumbers: The app intends to help the user through any documentation a they might do for a geyser installation/repair.

Homeowners: The app intends to provide a way for users to access information about their registered geyser(s).

Administrators: User data is stored online in a remote, secure database for any queries that the admin requires data for.

### **System Configuration**

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This app works on all mobile devices running an Android Operating System, minimum version Oreo. The app communicates with the database on two occasions, one for a login process and once more when either retrieving or sending records from the database for an installation/repair or a data query. The application requires any internet connection to work.

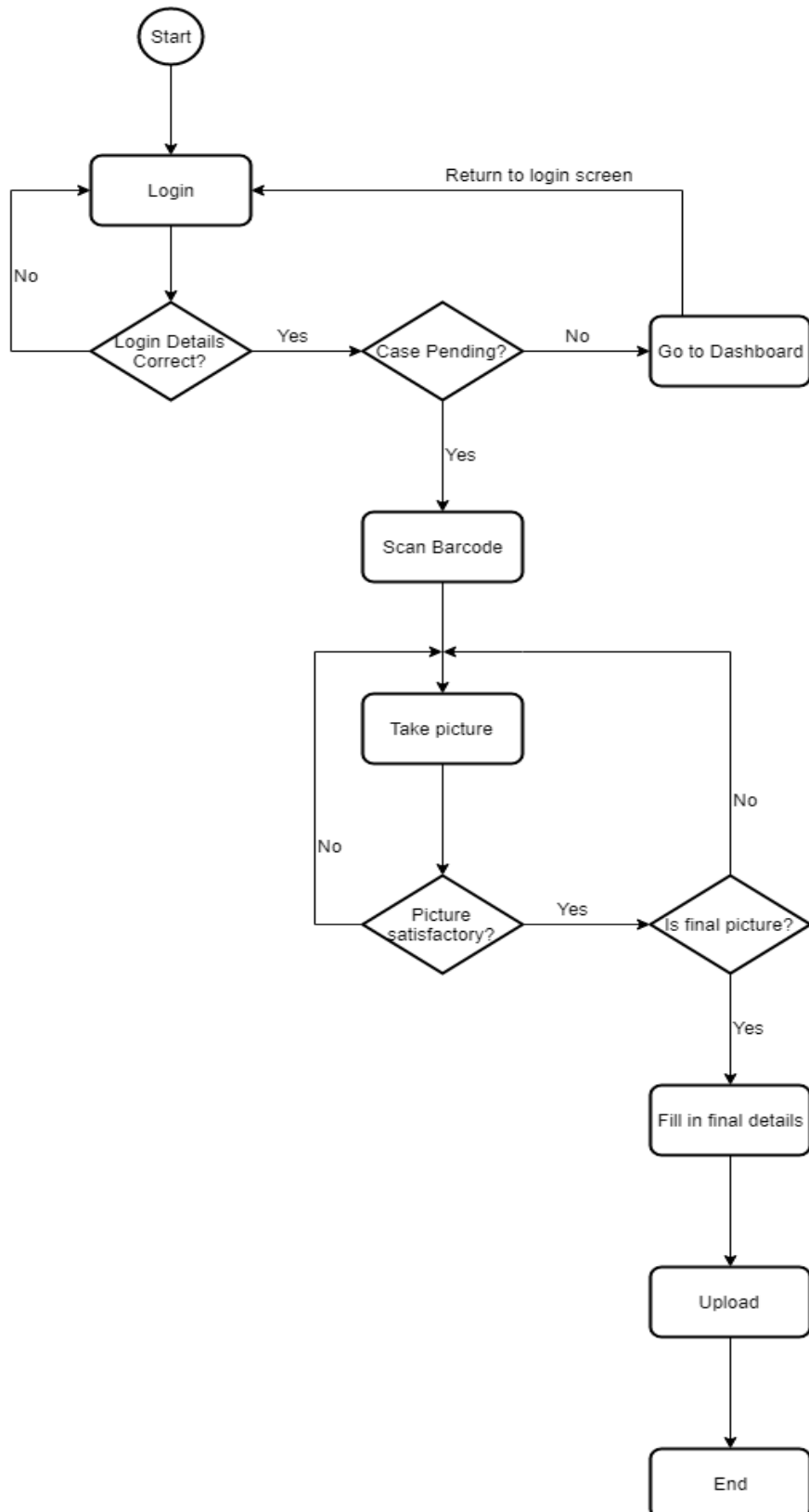
### **Installation**

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This software is provided by the administrator. The APK for installation can be found on our project Github page under the "Build" folder. To install simply run the apk on the device and when prompted whether sure or not press "install anyways".

## Getting Started

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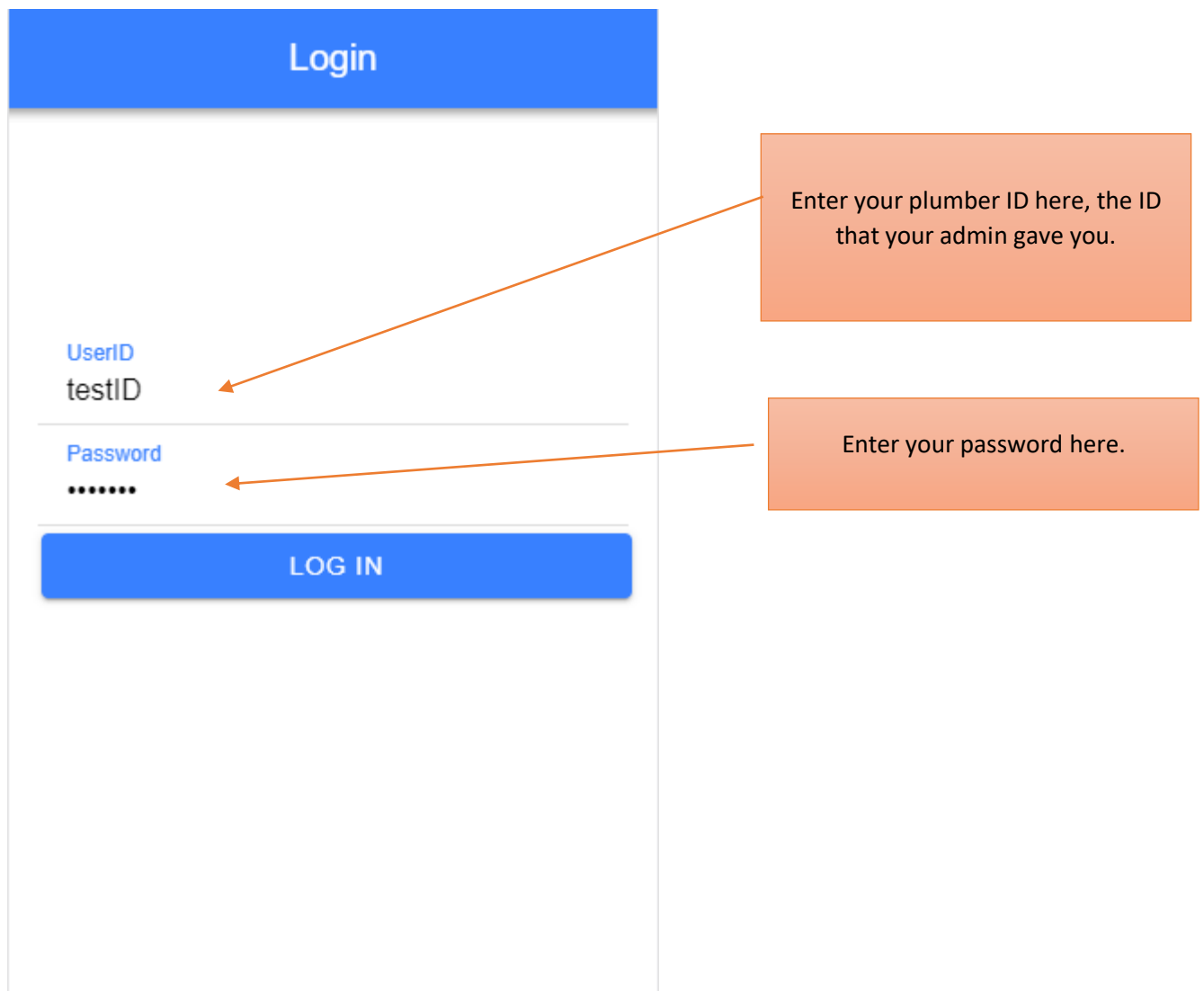


# Using the System

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## Logging in

In order to proceed with the app you will have to login using your credentials given to you by your admin.

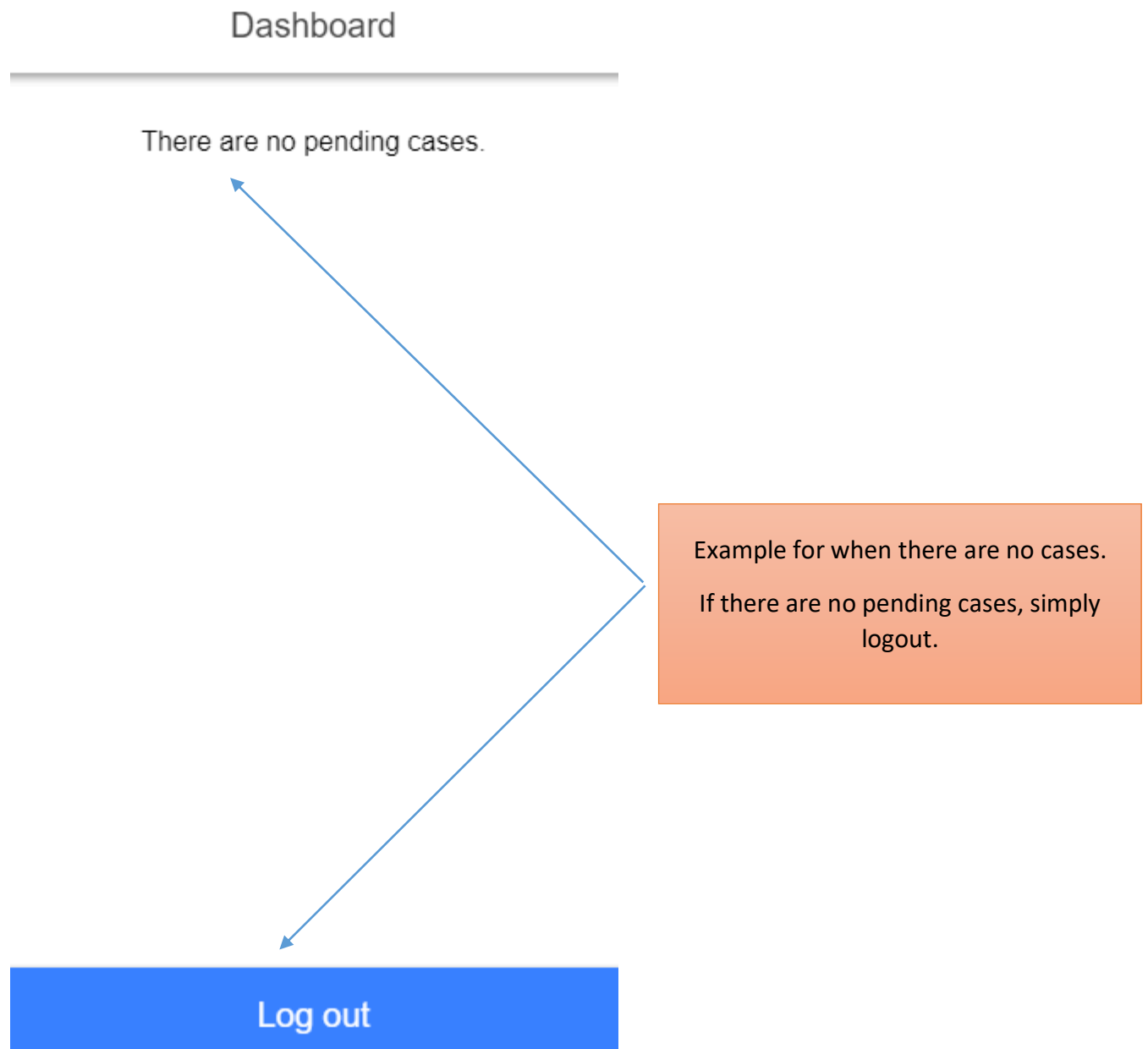


The diagram illustrates a login form with the following components and annotations:

- Login Header:** A blue bar at the top of the form containing the word "Login".
- UserID Field:** A text input field labeled "UserID" in blue. The example text "testID" is entered. An orange arrow points from the field to an annotation box on the right.
- Password Field:** A text input field labeled "Password" in blue. The password is masked with seven dots ".....". An orange arrow points from the field to an annotation box on the right.
- LOG IN Button:** A blue button at the bottom of the form with the text "LOG IN" in white.
- Annotation Box 1:** An orange box on the right with the text "Enter your plumber ID here, the ID that your admin gave you." connected to the UserID field by an orange arrow.
- Annotation Box 2:** An orange box on the right with the text "Enter your password here." connected to the Password field by an orange arrow.

## **Dashboard**

This is the Dashboard. Should the user have a pending case to work on the dashboard will be skipped and the process for installation/repair will automatically begin, else the user will be told they have no pending cases and can log out.



## Barcode Scanner

There is only button here and it is the "Scan code" button. This identifies the geyser that the user will be working on.

### Barcode Scanner

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Press Button To Scan

SCAN CODE

Press this button to open the barcode scanner and place the barcode within the field to scan it.

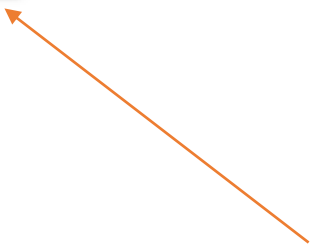
## **Camera**

This screen prompts the user to take pictures of the corresponding geyser part. Pressing the "Open Camera" button will open the camera to take a picture. Once a picture has been taken the user will be given a preview of the picture and the option to retake the picture using the "Retake picture" option depicted below. If the user is satisfied with the picture they can press the "Confirm" button to proceed to the next image.

### Images

Please take a photo of the geyser

OPEN CAMERA



Click this button to open the camera so that you can take images.



## **Geyser Detail Capture**

All details from top to bottom: Capacity, Model, Manufacturer, Insurance must be filled out and are required in order to be able to press the "Confirm" button and send the details to the database. This is especially important as this is the step where the data is sent to the database. The actual sending only happens after pressing "Confirm". An alert will inform the user that the details were sent. Capacity is a drop down list to conform to database values.

### Capture Details

#### Geyser Details

Capacity

Select One ▼

Model

Manufacturer

Insurance

CONFIRM

## Troubleshooting

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Error messages will appear if required fields that need to be filled in have been left blank. In this instance an error message in red will appear underneath the required field. This occurs on the login page and on the details page. This can be avoided by filling in the required fields.