

WORKFLOW-IO



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Section 1 - Websites

System overview

These websites ease the workflow of an admin and agent. There are three websites in total:

1. Admin portal: Allows the admin to add or remove a plumber, add an agent and view statistics.
2. Agent Portal: allows the agent to add a new case, close cases that are completed, view statistics and risk factors.
3. Feedback portal: allows the clients to give feedback on the service provided to them.

System Configuration

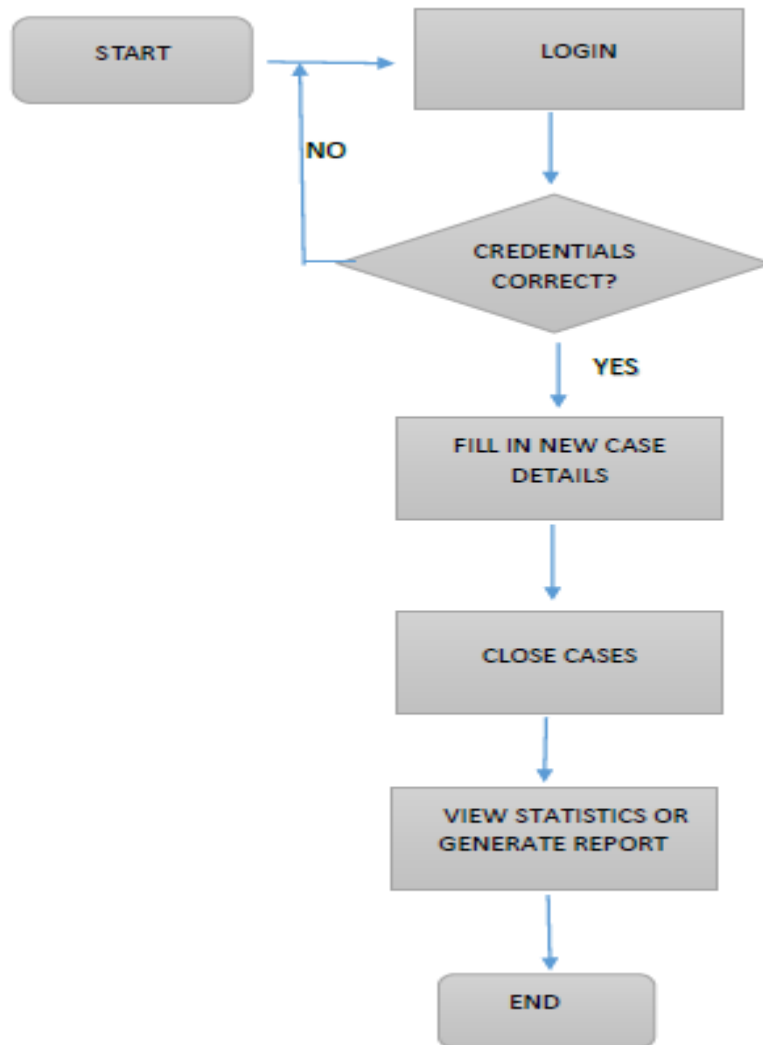
This website works across all the web browsers. Furthermore, it communicates with the database for all events that are performed by the admin. To access this website, internet connection is required.

Website URL

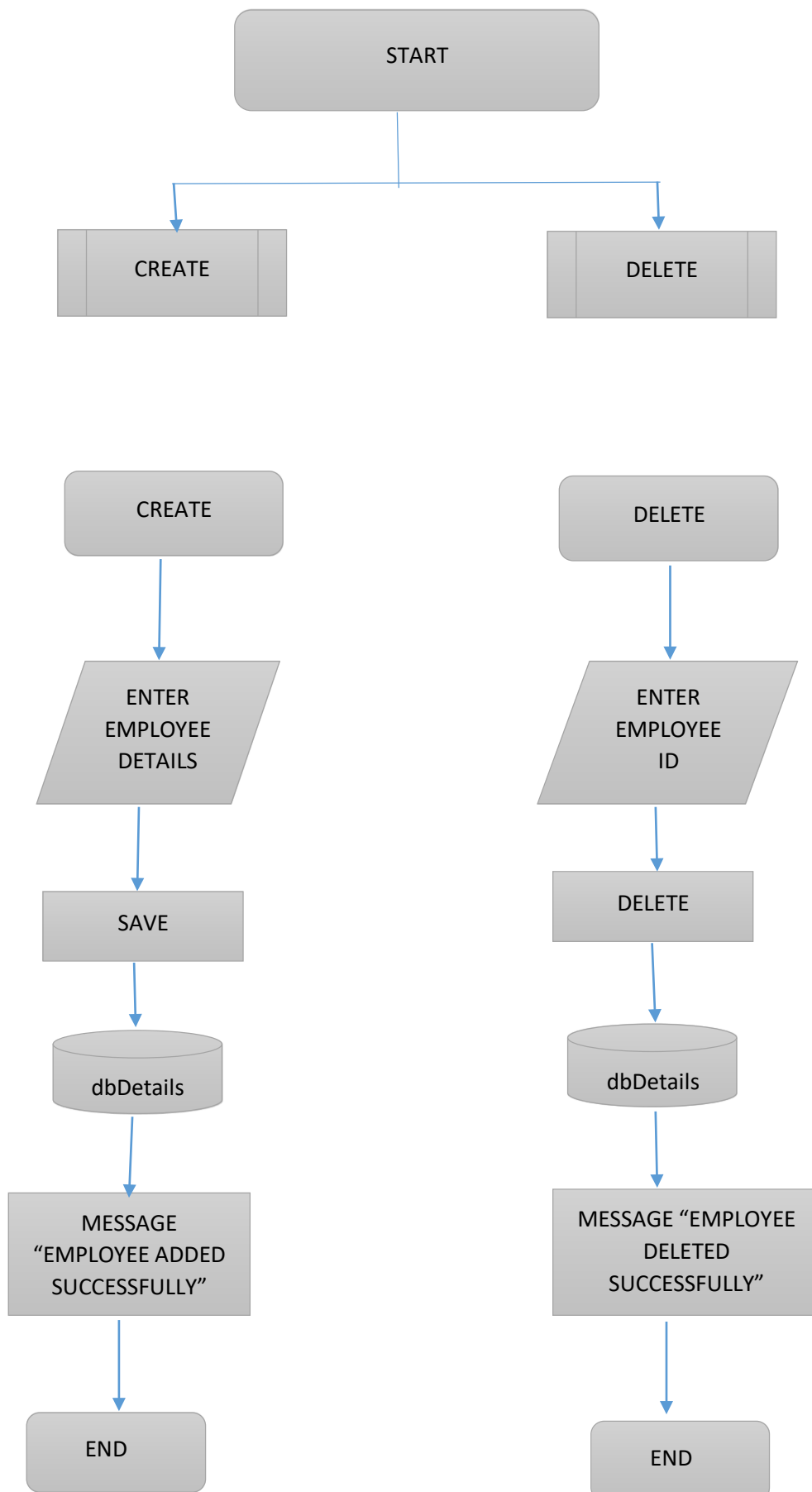
Below is the url to access the website: <https://tk-naidu.github.io>

Getting Started

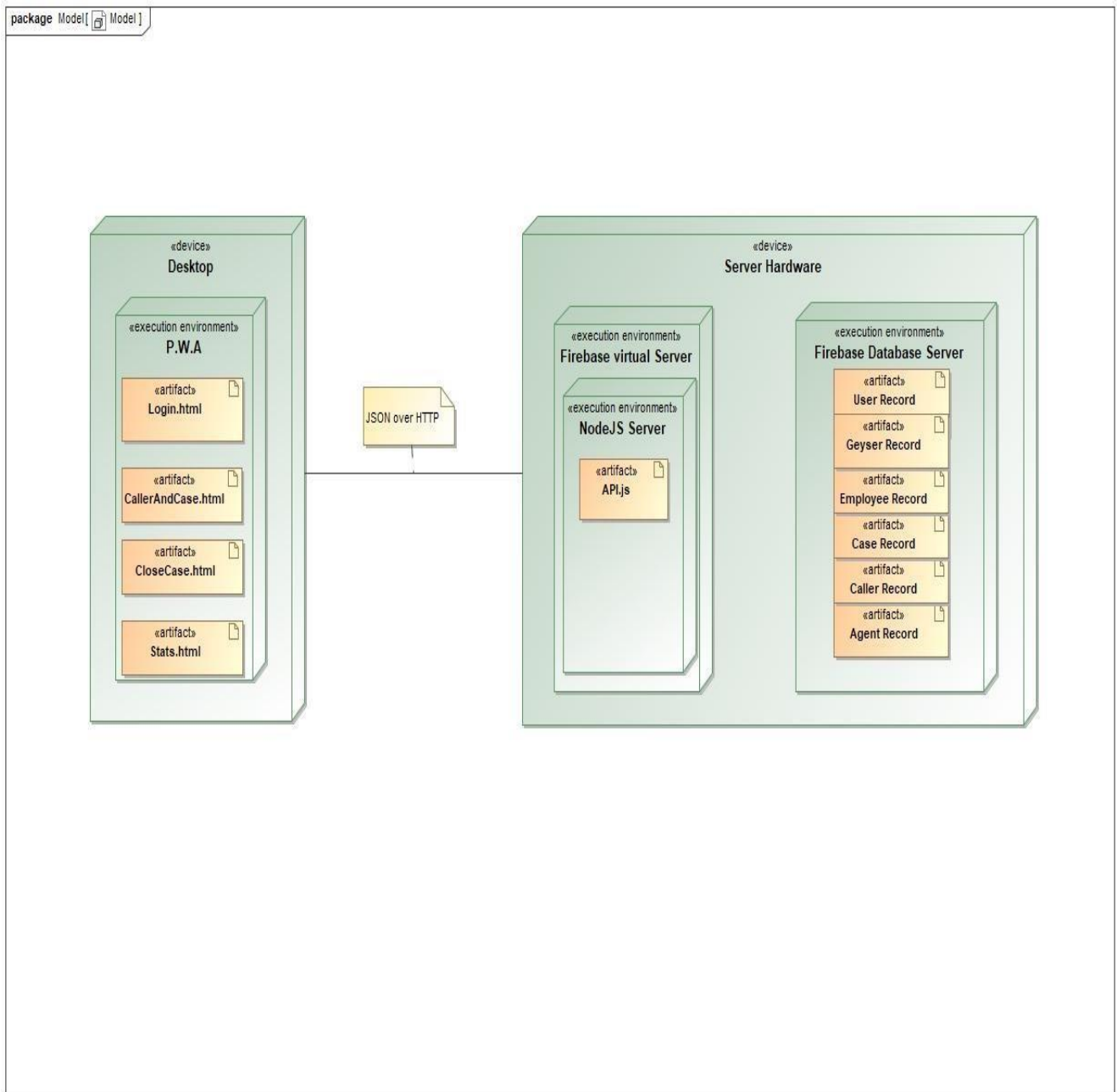
Below is typical walkthrough (in a form of flowchart) of the website:



Workflow to add and delete an employee



Deployment Diagram

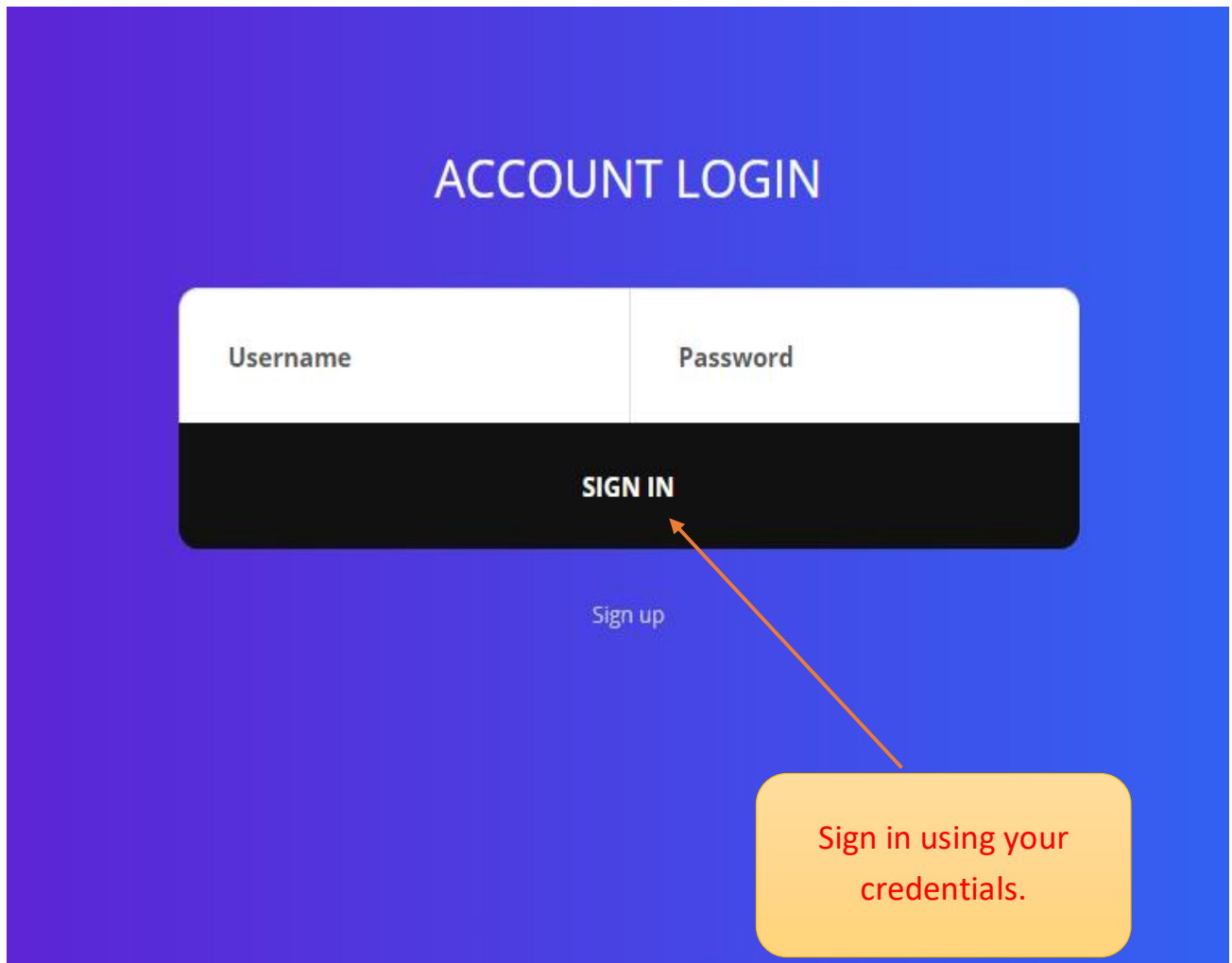


This deployment model basically gives you an overview of the system and what artifacts and technologies are used to deploy this system.

Guidelines as how to use these website

1.Admin Portal

1.1 Login Page: the admin enters his/her credentials. Based on the role, appropriate task will be displayed for the admin to perform.

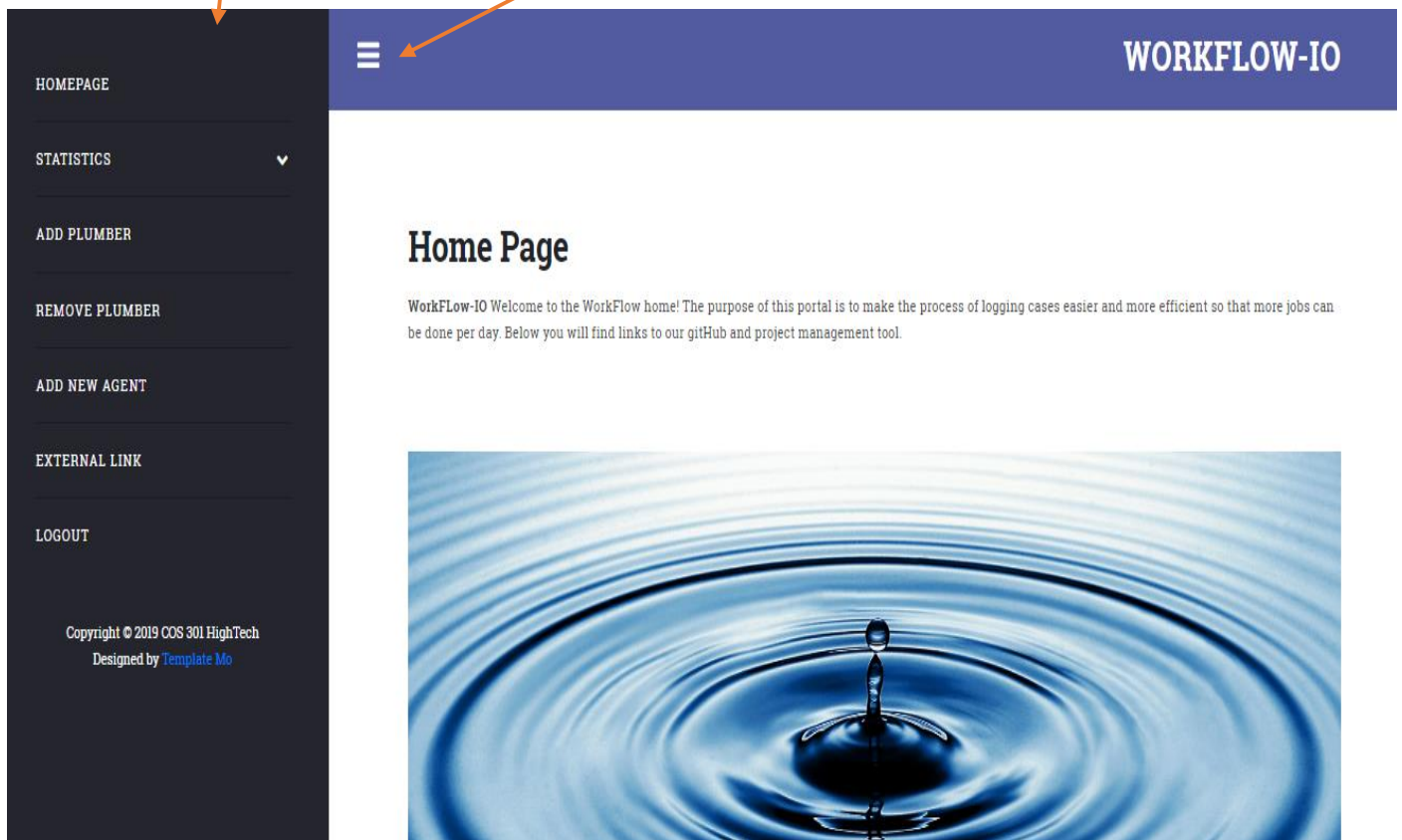


The image shows a login interface on a blue background. At the top, the text "ACCOUNT LOGIN" is displayed in white. Below this is a white form with two input fields: "Username" and "Password". A black button labeled "SIGN IN" is positioned below the form. Below the button is a link that says "Sign up". An orange arrow points from a yellow callout box to the "SIGN IN" button. The callout box contains the text "Sign in using your credentials."

1.2 Home Page : When you login this is the home page that will be displayed.

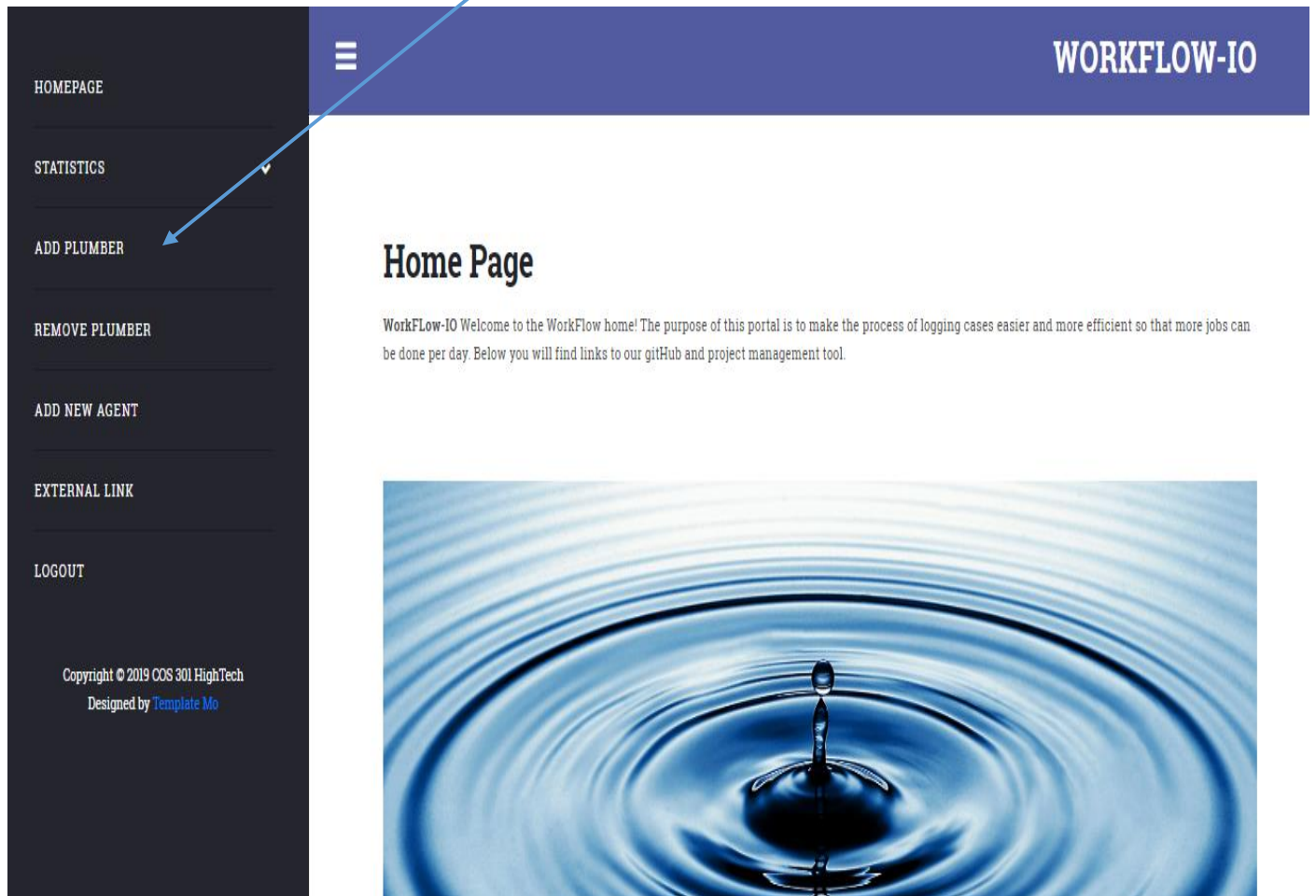
Navigation bar

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



1.3 Adding a plumber

Click here to add
a new plumber.



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

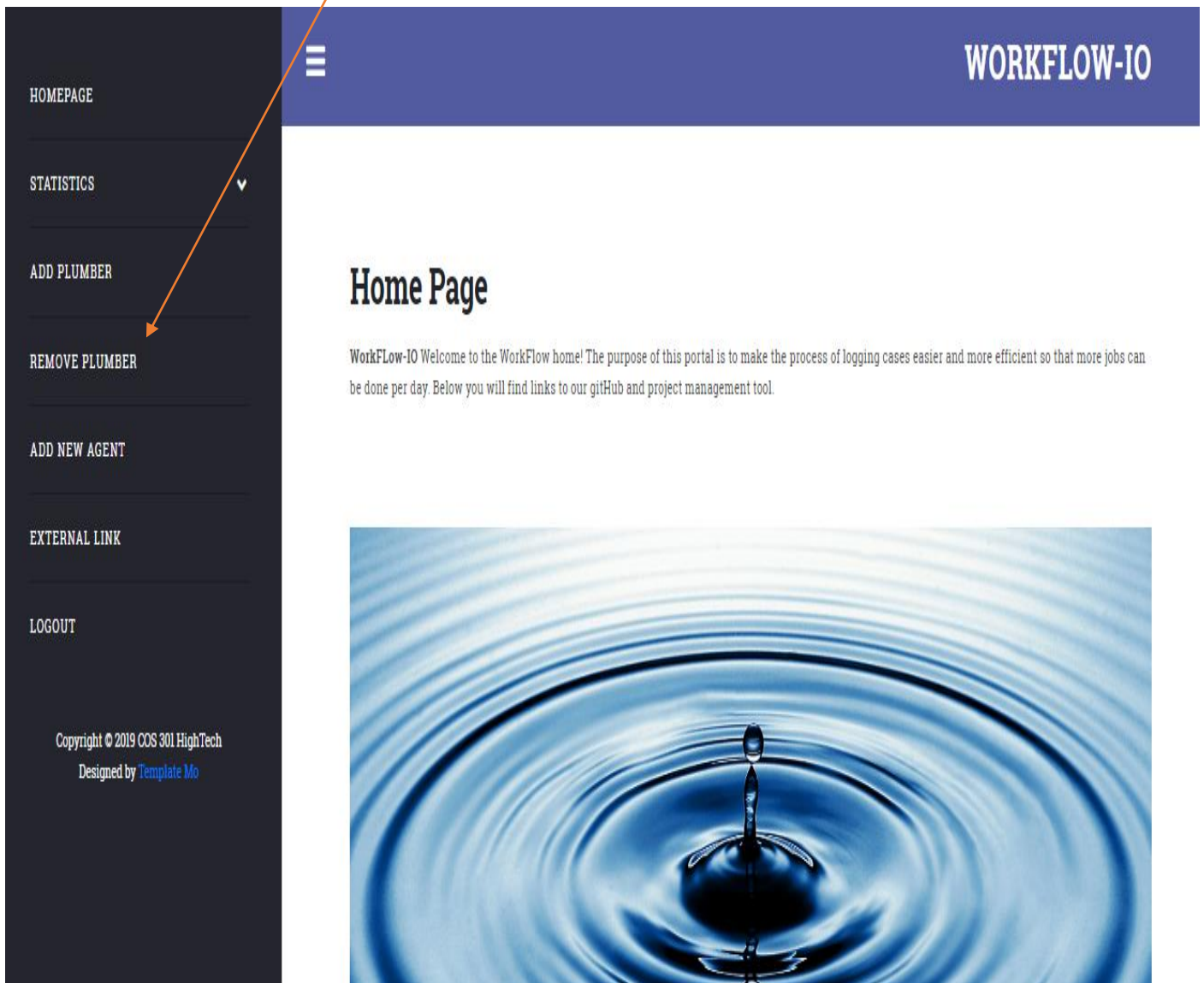
No file chosen

SUBMIT

Click on choose file to
upload supporting
documents for the
new plumber.

1.4 Removing a plumber

Click here to
remove plumber.

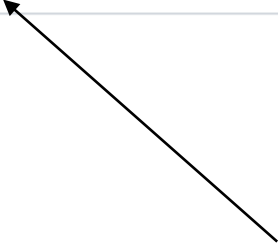


Removing a Plumber

Insert Plumber ID to remove

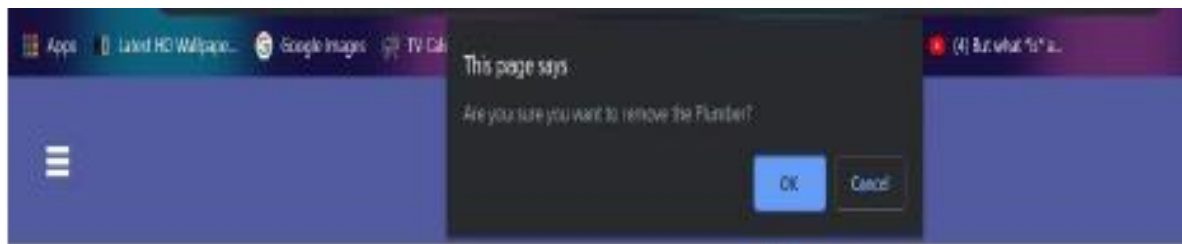
DELETE

clear



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

Example for removing a plumber



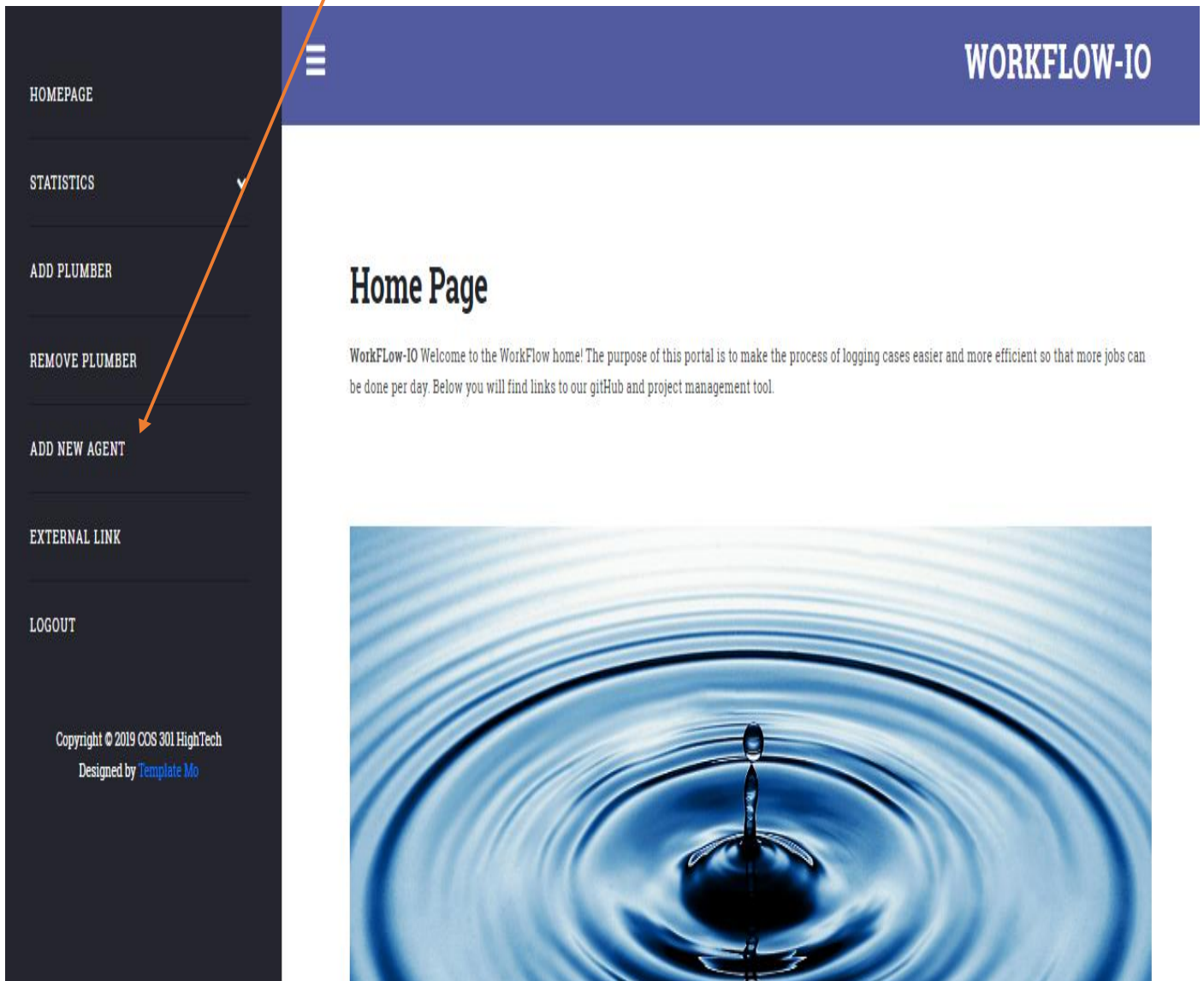
Removing a Plumber

Insert Plumber ID to remove

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.

1.5 Add a new agent

Click here to add a new agent.



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

☐

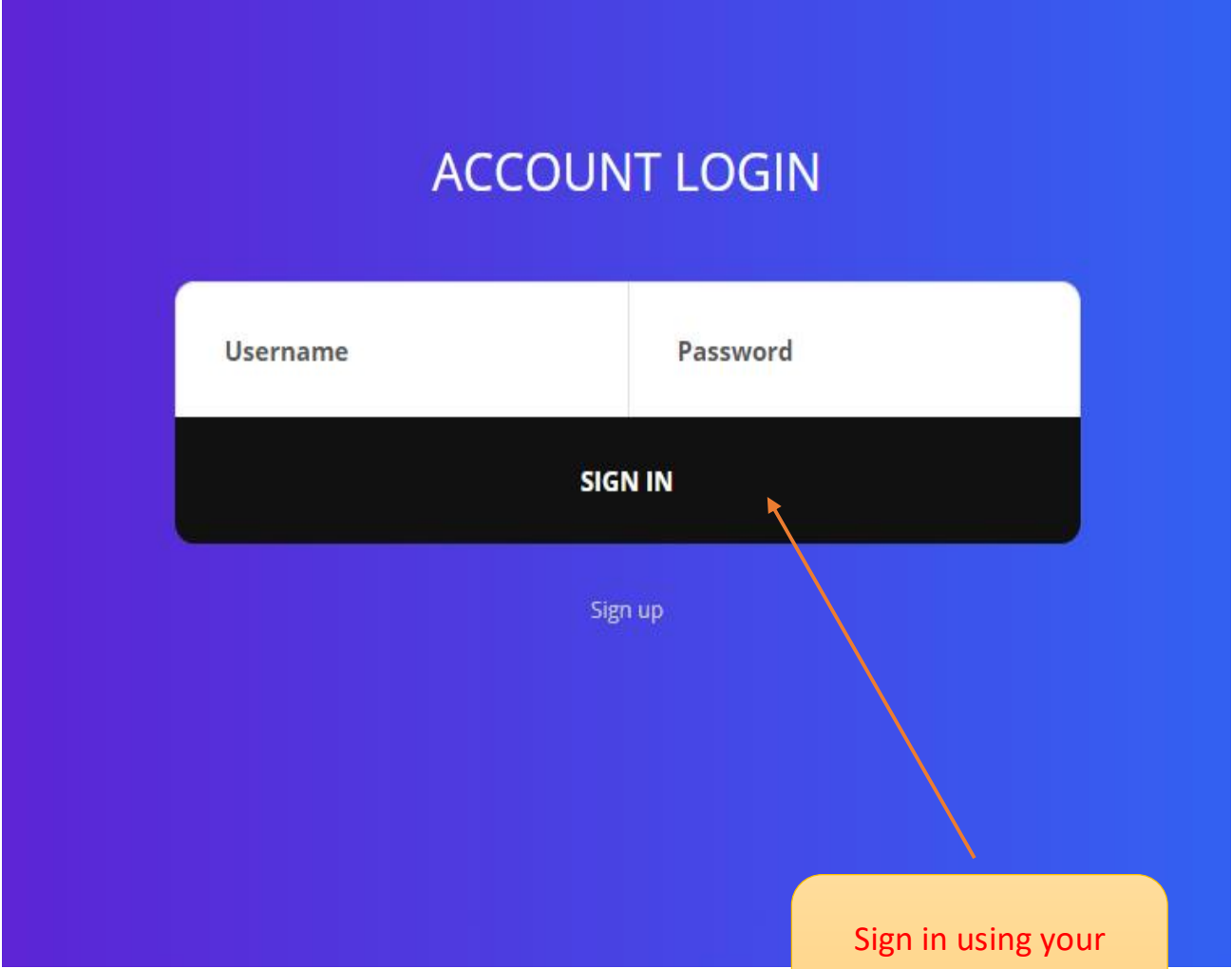
GENERATE AGENT PASSWORD

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.

2.Agent Portal



ACCOUNT LOGIN

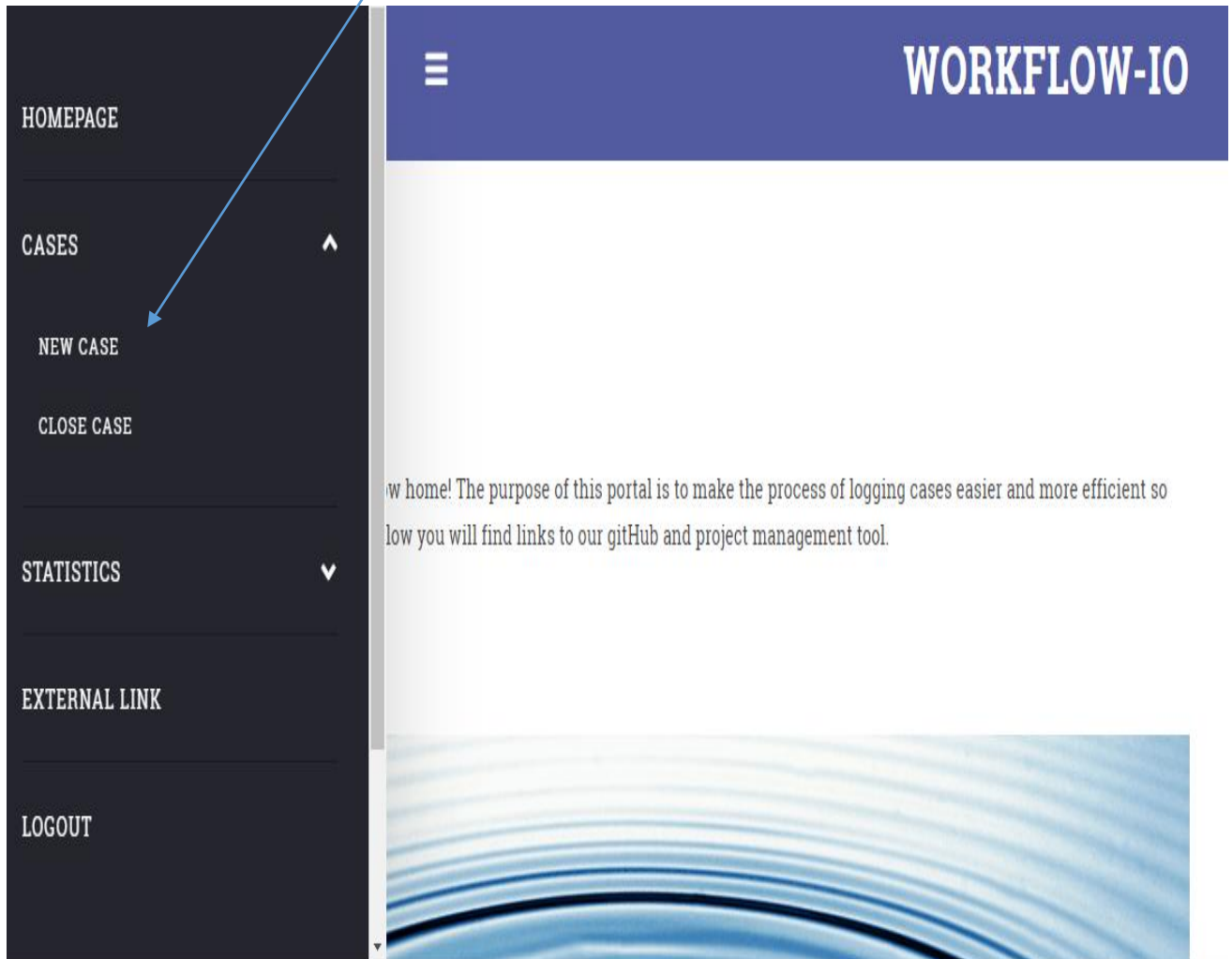
Username	Password
SIGN IN	

[Sign up](#)

Sign in using your credentials.

2.1 Enter new case

Click here to create a new case.



Caller Identification

Note: Paste the client details below

VERIFY THE CONTENT

AUTO FILL

Name

Surname

Address

Cell Number

Call back number

Client Type

Service Type

Reason

Generating Case Report

Case ID

GENERATE CASE ID

Incident Date

GET CURRENT DATE

Case Status

completed

Caller ID

GENERATE CALLER ID

Case Description

Plumber ID

Case Opened by (Agent ID)

SUBMIT

Example of generating a new case report

Caller Identification

Note: Paste the client details below

Name = Janaki
Surname = Patil
Address = eruditi, prospect street, Hatfield, Pretoria, 0028
Cell number = 0123456789
Call back number = 0789456123
Client type = home owner
Service type = installation
Reason = require new geyser

VERIFY THE CONTENT

AUTO FILL

Make sure the format for the client's details is correct. Then click on "verify the content". If you click on autofill nothing will happen because you have to verify the content first and then it will allow you to autofill.

Live Demo: Get Val...Encrypt HTML100%Welcom

Caller Identification

Note: Paste the client details below

Name = Janaki
Surname = Patil
Address = eruditi, prospect street, Hatfield, Pretoria, 0028
cell number = 0123456789
Call back number = 0789456123
Client type = home owner
Service type = installation
Reason = require new geyser

VERIFY THE CONTENT

AUTO FILL

This page says

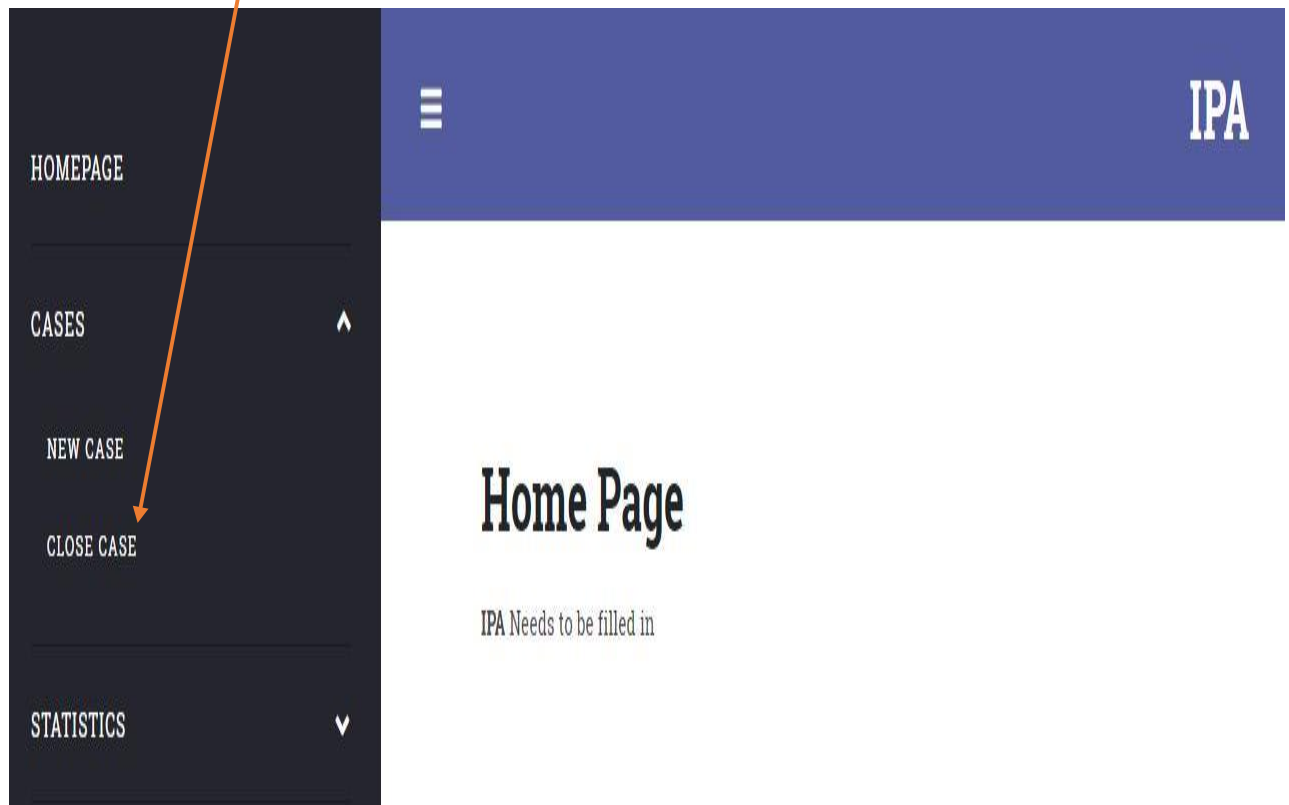
The format is incorrect.

OK

If the format is incorrect, you will receive this alert message.

2.2 Closing a case

To close a case click here:



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

Sign Up New Agent

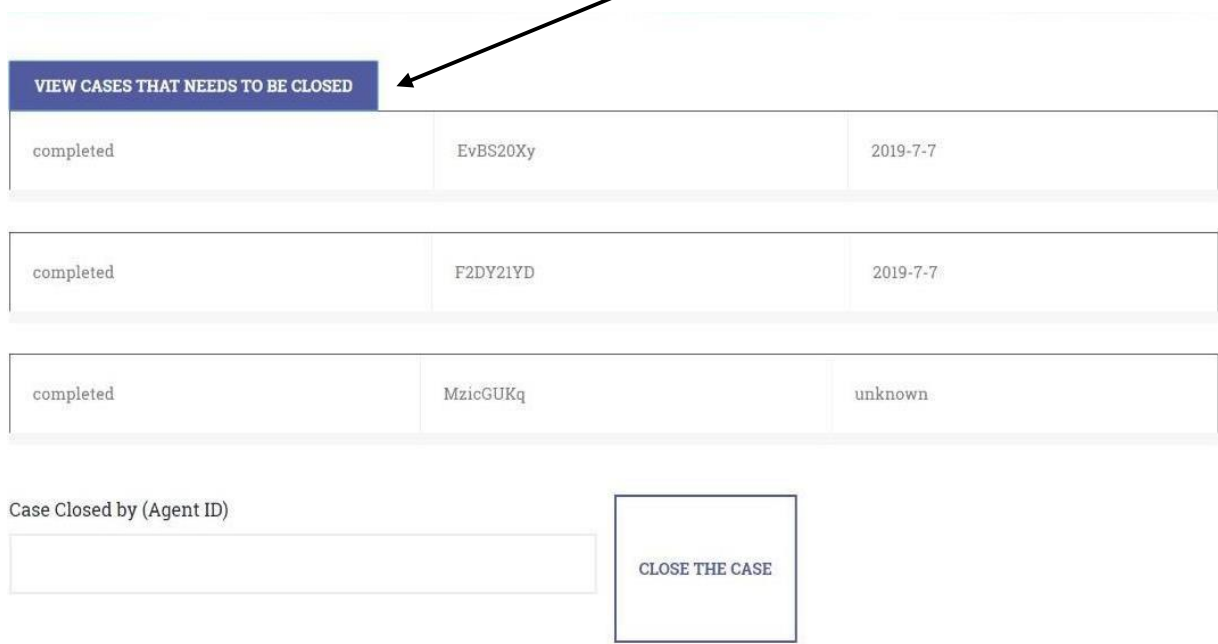
Close a Case

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:



The screenshot shows a web interface with a blue button labeled "VIEW CASES THAT NEEDS TO BE CLOSED" at the top left. An arrow points from the text above to this button. Below the button is a table with three rows of case data. Each row has three columns: status, agent ID, and date. Below the table is a form with a label "Case Closed by (Agent ID)" and a text input field. To the right of the input field is a button labeled "CLOSE THE CASE".

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.

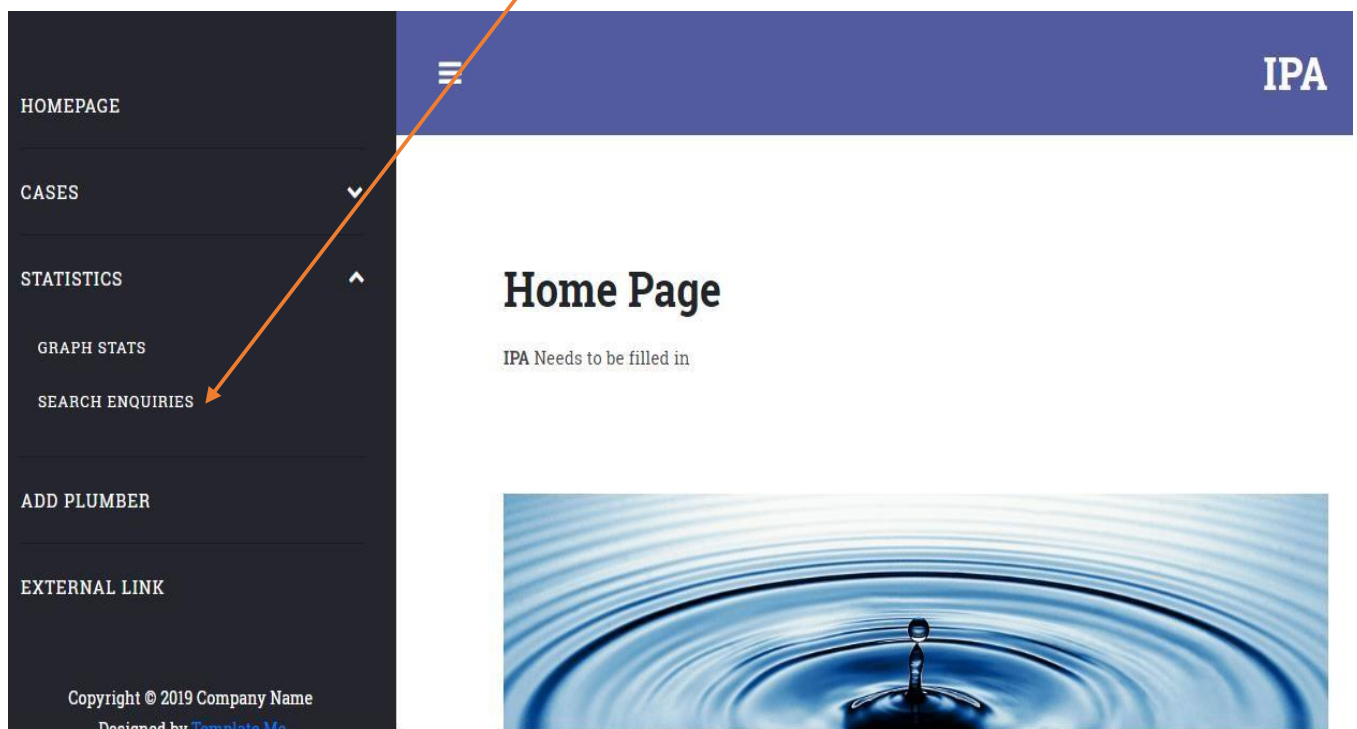


completed	EvBS20Xy	2019-7-7
completed	F2DY21YD	2019-7-7
completed	MzicGUKq	unknown

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

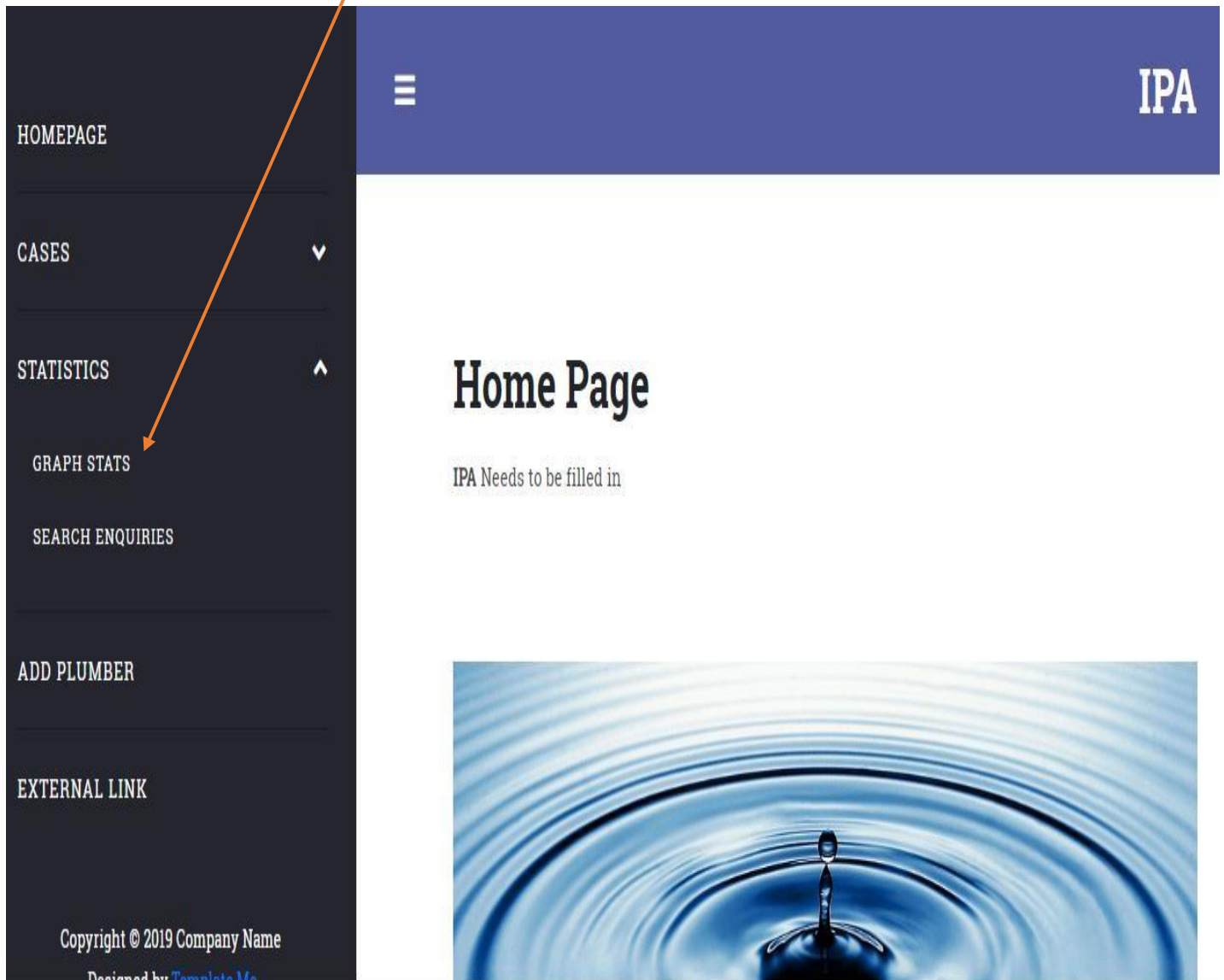
clear

Tables

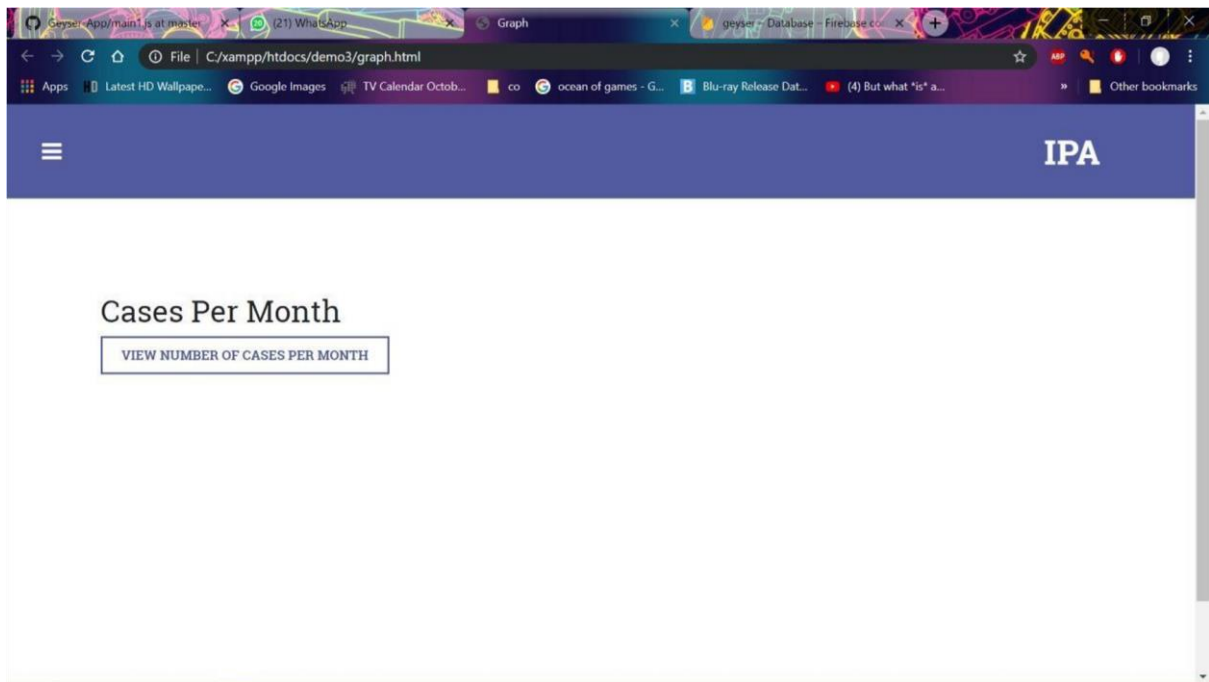
CaseID	Incident Date	Address	Case Status	Description	Caller ID	Agent O	Agent C
EvBS20Xy	2019-9-9	The Fields, Burnett Street, Hatfield, Pretoria, 0028	completed	Same as the reason above	UgEgyuNW	ARvCV6mlk	ARvCV6mlk
MzicGUKq	2019-7-8	1104 Prospect street, Hatfield, Pretoria 0028	completed	Burst valve	ng2bbEEB	AXJXoxUcT	unknown
jAqMKs7W	2019-7-7	House No 1456, Legabe street, unit 1	pending	Same as the reason above	uaWQeEOl	AXJXoxUcT	unknown

Statistics

To view Statistics, click here :

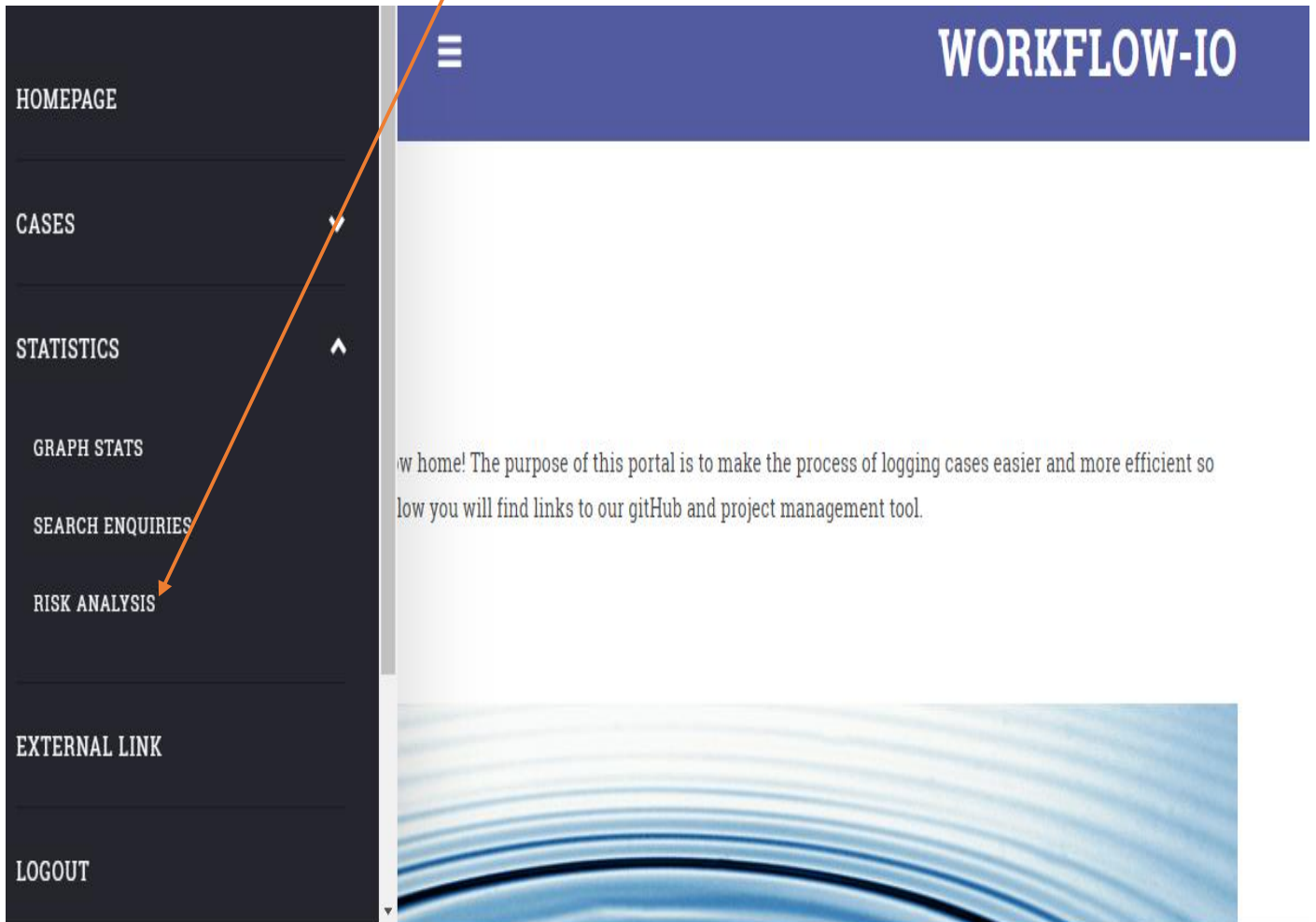


Click on the button called “view number of cases per month “ to get an overview of the cases handled per month.



Risk analysis

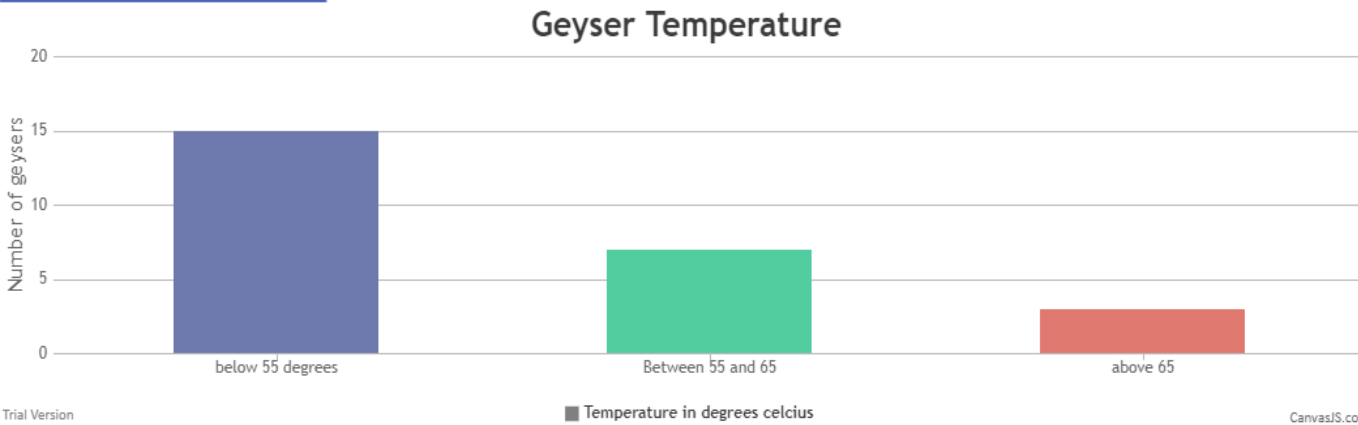
Click here to view risk factors



When you click on geyser temperature button, it will will you the graph and table as shown below. This will tell you which geysers for which caseID are at high risk based on their temperature set.

Geyser Temperature

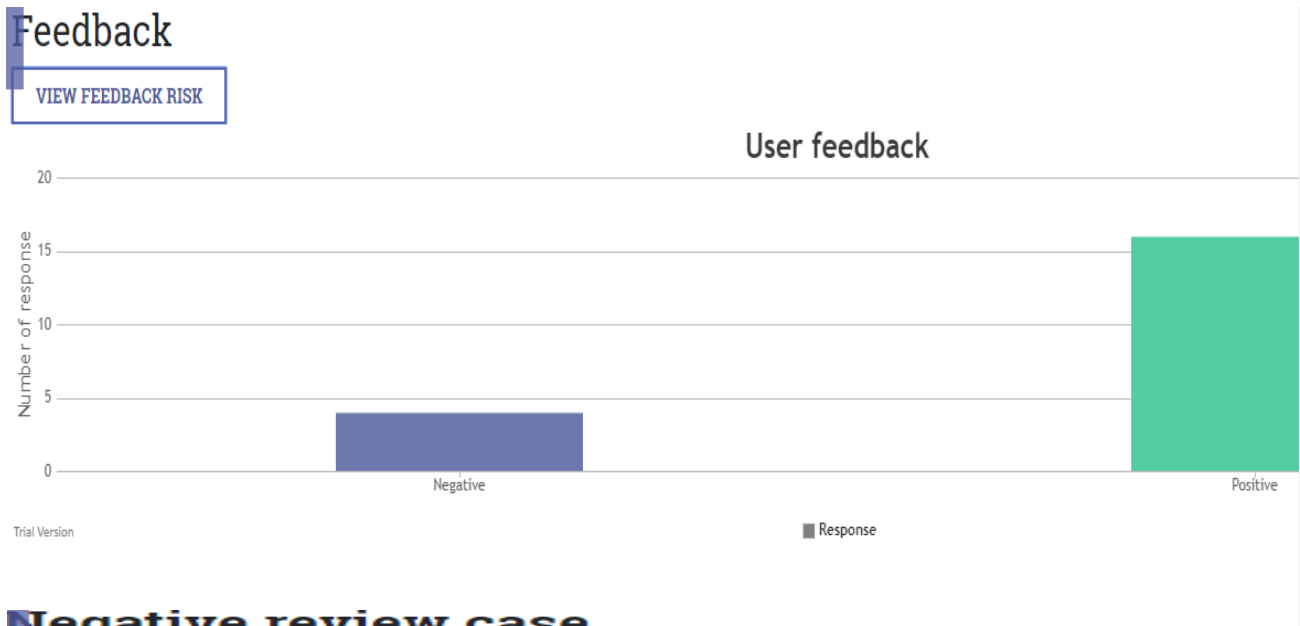
VIEW GEYSER TEMPERATURE



Tables

CaseID	GeyserTemperature	Capacity
0B3Zl2OU	82	150L
FYmyocDF	65	100L
GjuqYOUN	100	250L
3c3oWlEm	63	100L

When you click on view feedback risk button, it will show you how many reviews are negative and positive. Those reviews that are negative, the table below will show you which case this review is coming from.

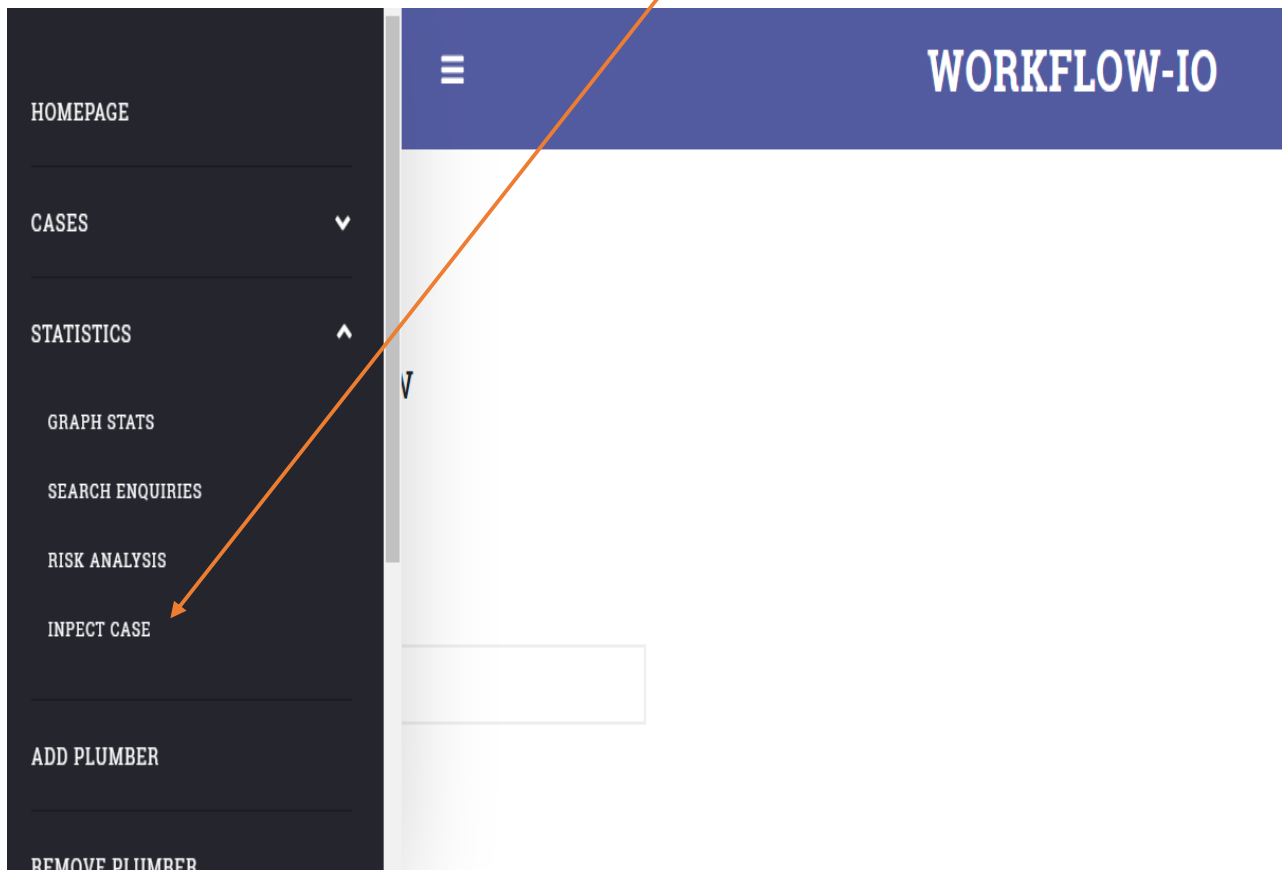


Negative review case

PlumberID	CaseID	CaseOpenedOn
24DbXsyVhZ	F2DY21YD	2019-7-7
24iYRIBgrd	MY9DwdgP	2019-7-7
24N8gqUbzf	cBTQ3I2d	2019-3-18
testID	gINxocMP	2019-7-19

Inspect a case

Inspect a case allows you to view images stored for a specific case (in case there is a fraud).



Select case to View

Enter a case number to view installation images for it.

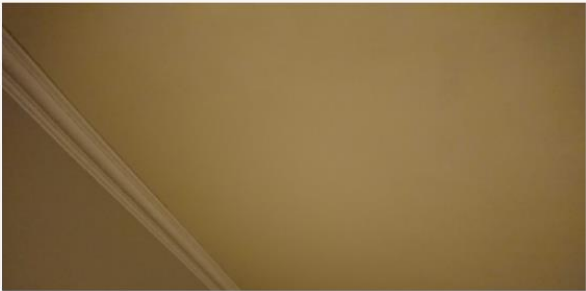
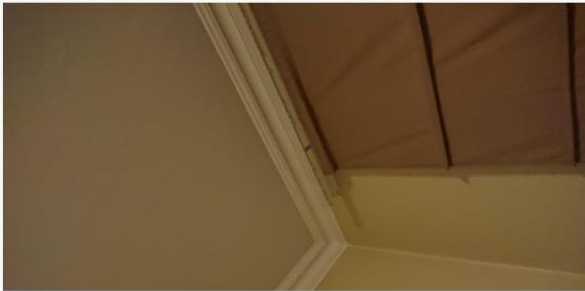
Enter Case ID to view

0mzXSBJo

VIEW A CASE

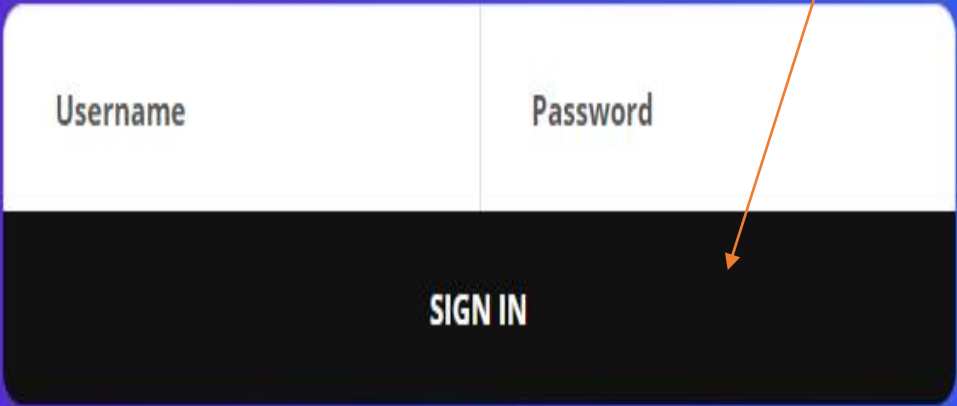
Case ID	Incidente Date	PlumberID	Case Closed By	Number Of Cases For Caller	Review	Review Score	Insurance Status	Geyser Tempture
a	a	a	admin	undefined	a	3	yes	62

Images



3.Feedback Portal

Agents need to give the clients their credentials in order for them to provide a feedback.



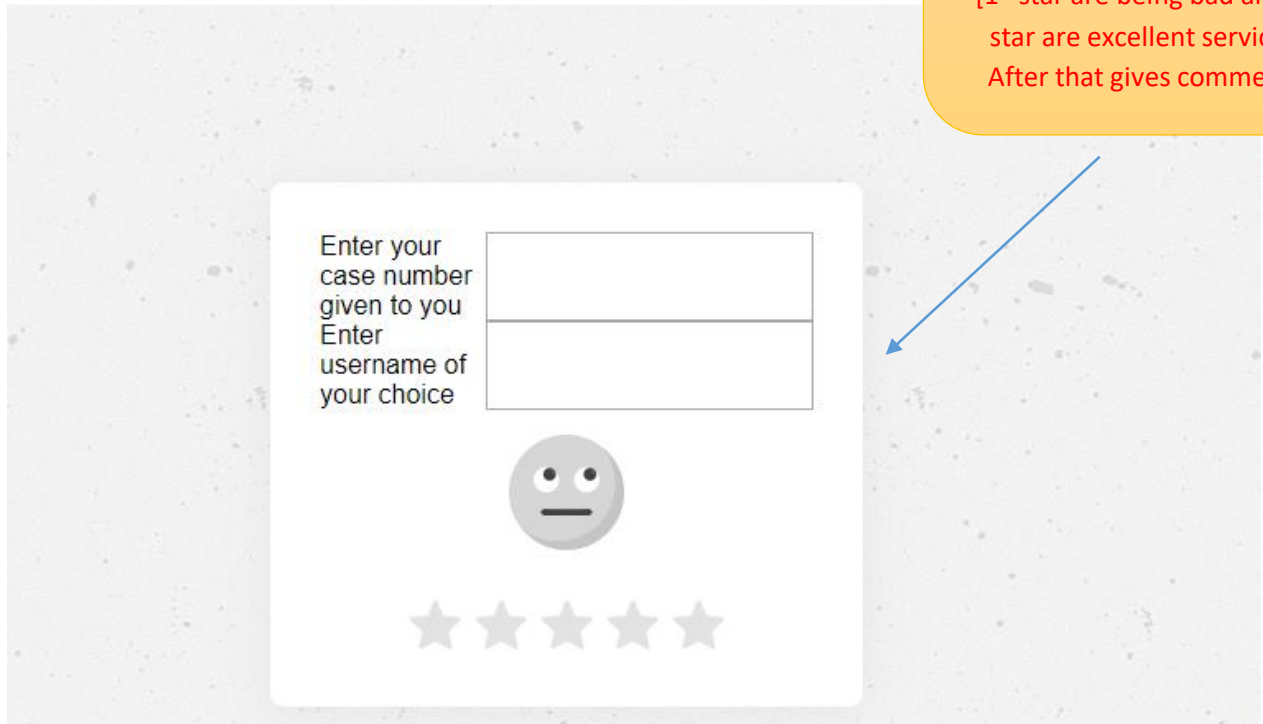
ACCOUNT LOGIN

Username	Password
SIGN IN	

The image shows a login form titled 'ACCOUNT LOGIN' on a blue background. The form has two input fields: 'Username' and 'Password'. Below these fields is a black button labeled 'SIGN IN'. An orange arrow points from the text box above to the 'SIGN IN' button.

Feedback

Client should enter his/her case number and username of their choice. Also rate the service by clicking on the stars [1st star are being bad and 5th star are excellent service]. After that gives comments.



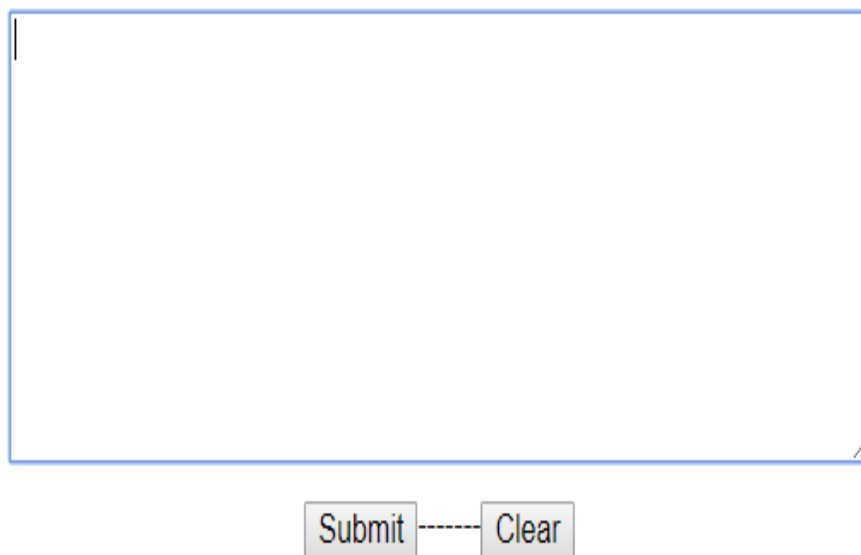
The feedback form is a white rectangular box with a thin gray border. It contains two input fields for case number and username, a neutral face emoji, and five gray stars for rating. A blue arrow points from the text box to the form.

Enter your case number given to you
Enter username of your choice

😊

★ ★ ★ ★ ★

Additional comments on our service provided.




A large, empty rectangular text area with a blue border, intended for additional comments. Below it are 'Submit' and 'Clear' buttons.


Submit Clear

Example of feedback given

Feedback

Enter your case number given to you	cFrgtyn4
Enter username of your choice	tonny





Additional comments on our service provided.

good service provided|

Submit

Clear

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

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.

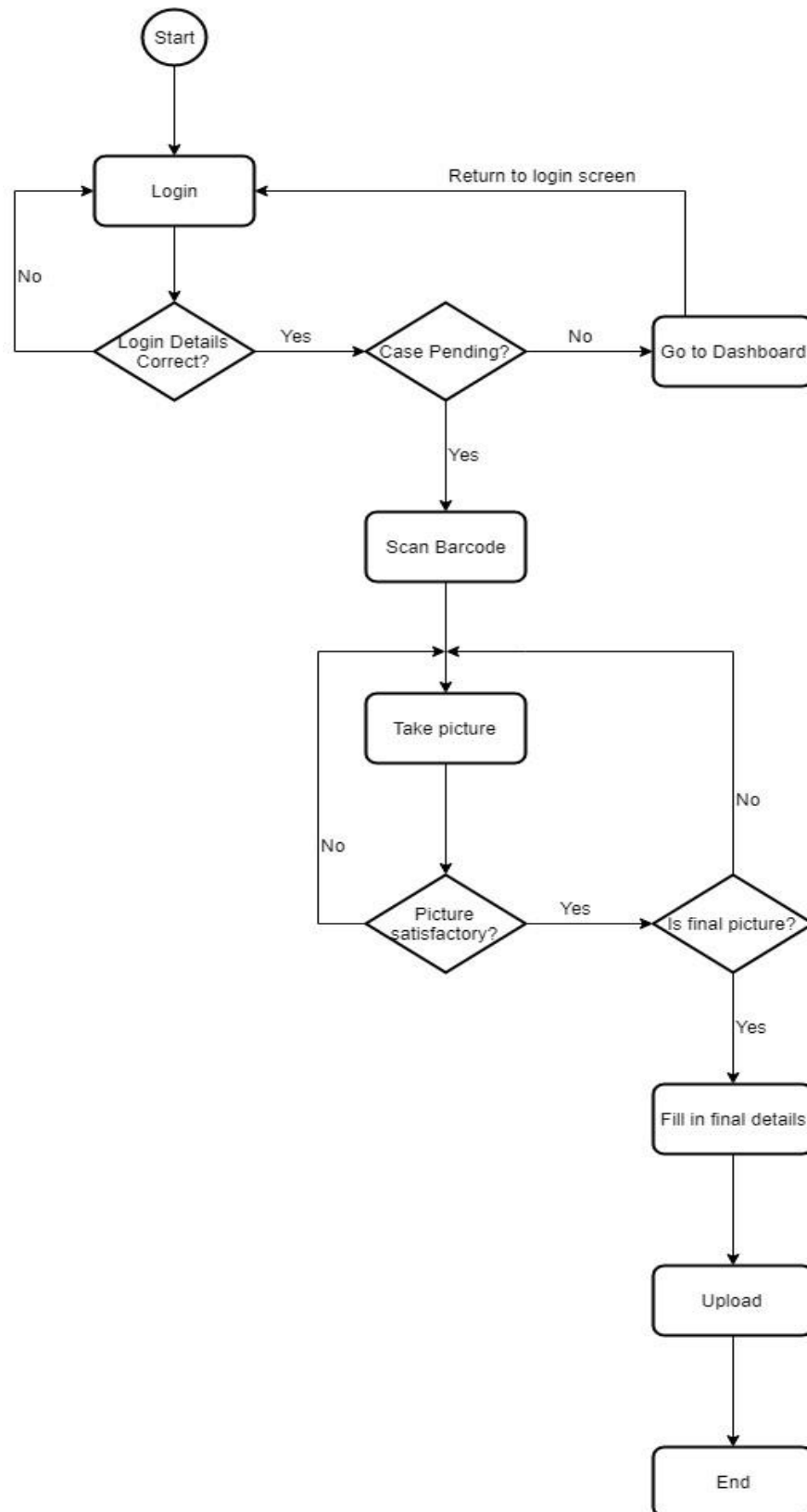
System Configuration

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

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".

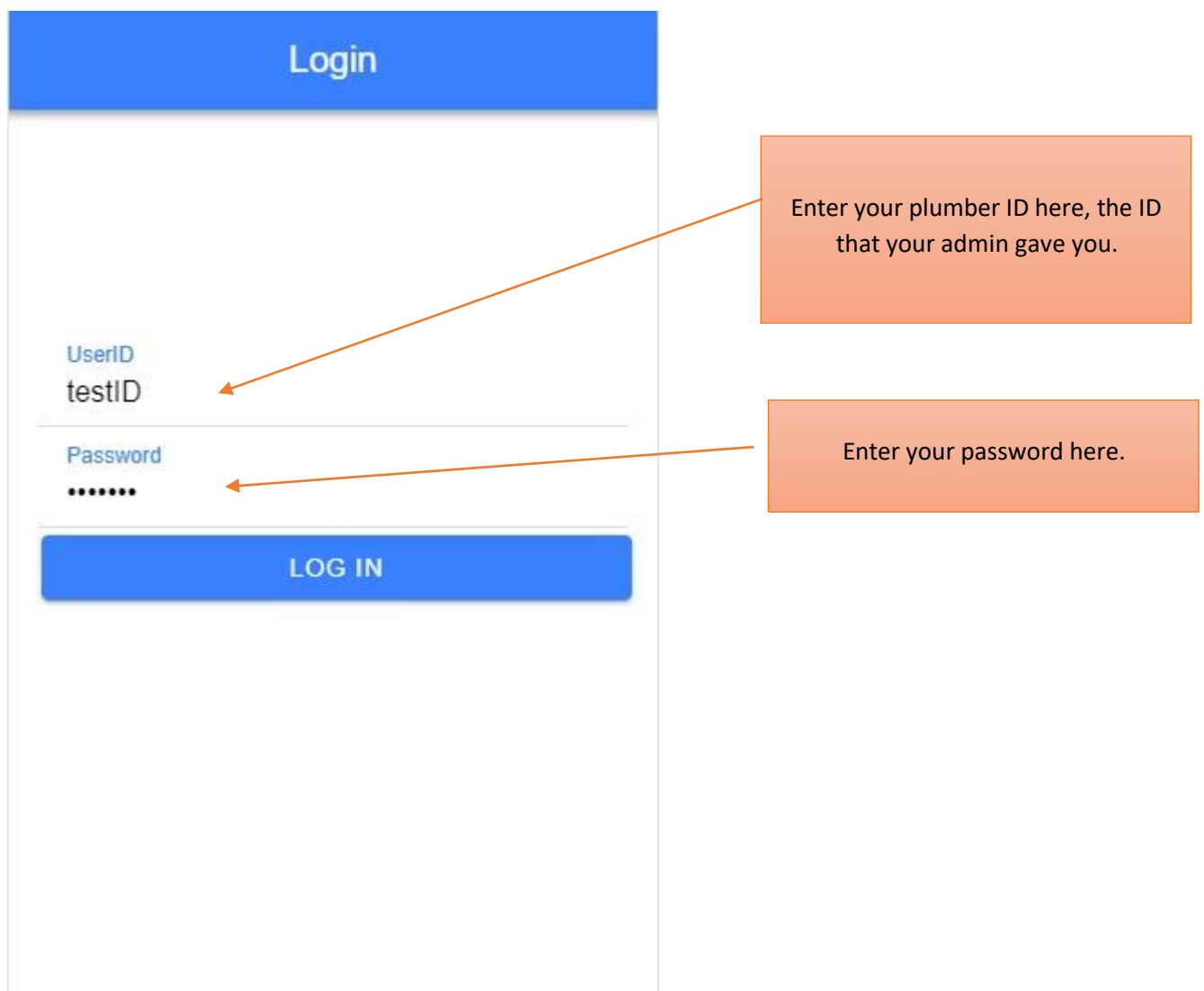
Getting Started



Using the System

Logging in

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



The image shows a login interface with a blue header bar labeled "Login". Below the header, there are two input fields. The first field is labeled "UserID" and contains the text "testID". The second field is labeled "Password" and contains seven dots. Below these fields is a blue button labeled "LOG IN". Two orange callout boxes with arrows point to the input fields. The first callout box points to the "UserID" field and contains the text "Enter your plumber ID here, the ID that your admin gave you." The second callout box points to the "Password" field and contains the text "Enter your password here."

Login

UserID
testID

Password
.....

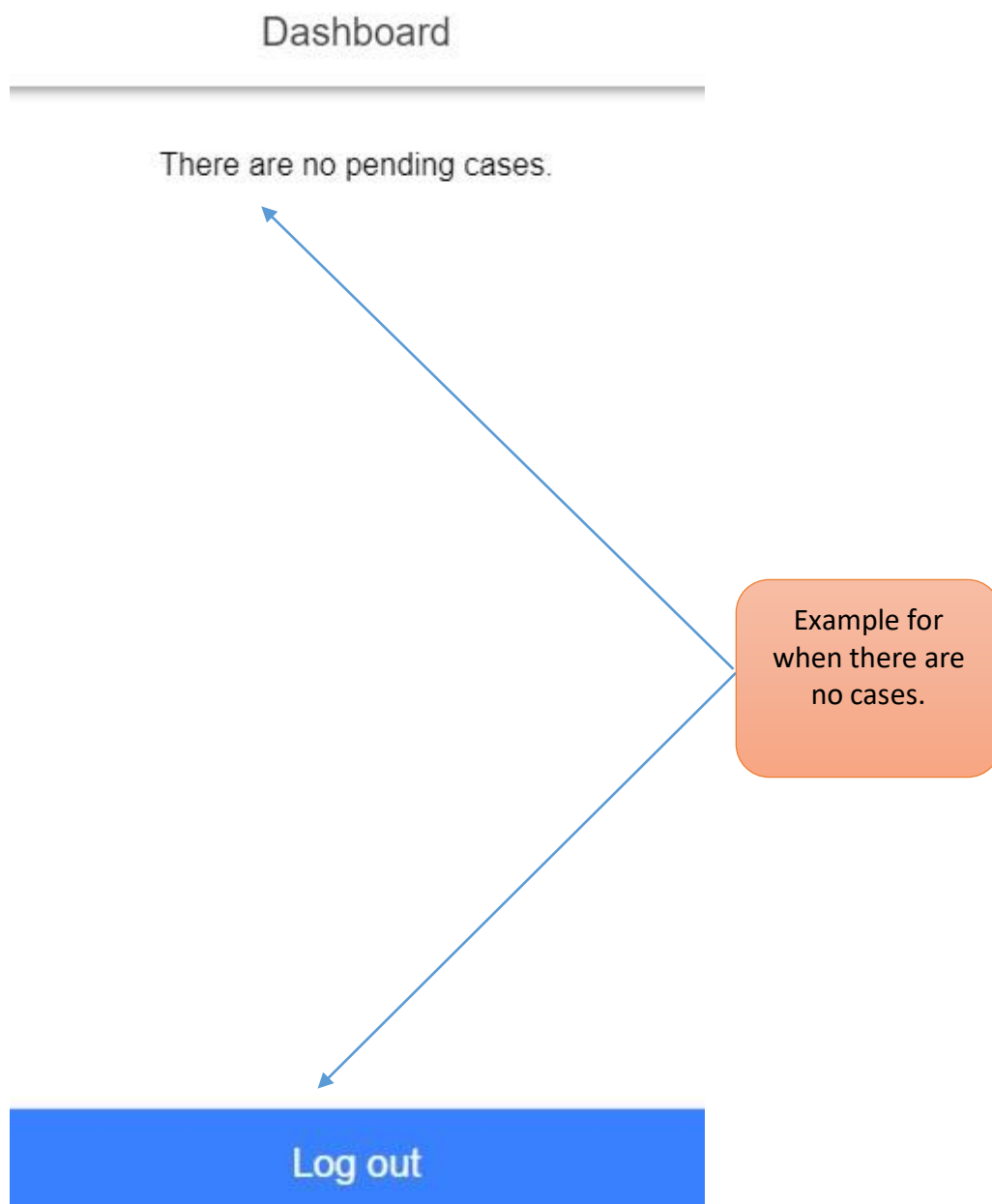
LOG IN

Enter your plumber ID here, the ID that your admin gave you.

Enter your password here.

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

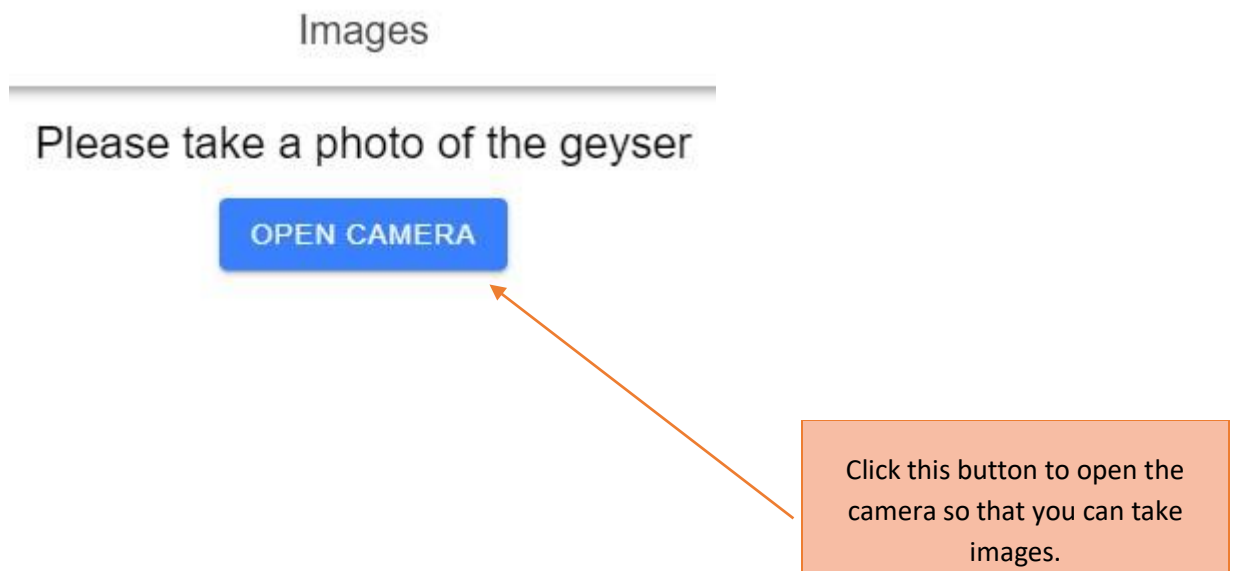
Press Button To Scan

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.



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


Temperature

 30  100

Has insurance?

Select One ▼

CONFIRM



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 on the login page and on the details page. This can be avoided by filling in the required fields.