

## SWA Technical Documentation

### UI changes (addon-sidebar)

#### Files

in addon-sidebar -> public folder -> js and css has files.

- create app for sidebar in frappe
- in this public menu js folder -> create js file (sidebar logic)
- override the inbuilt sidebar and by targeting class custom sidebar implements.

Sidebar related css and js all are in public folder

#### Dashboard

- hide the editor-js class in url from that url dashboard not display
- home , equipment , and procedure , sop , personnel , general button are display in home page when click to this dashboard not shown
- only when click to process button dashboard is display.
- to add the button in home page by targeting url – in js file write logic to add button.
- in dashboard report is display for this report is create Report List -> create query report
- using js merge this all report and apply css and this js create in addon\_sidebar app.
- to display this dashboard add custom class inside the editor-js class.

### (Backend) test\_lab app craete

#### Process

##### 1. Lead

- in The lead doctype only shown important feild according to requirement , hide other feild.

**Lead Doctype -> click to field setting -> hidden (check).**

- to add the lead from the listview click to “**Add Lead**” button form is open fill up and click to “Save” button, form is saved.

##### 2. Customer

- to add the customer click to “**add customer**” button form open after that click to save.
- in customer doctype , is a linked with Lead doctype.
- in customer -> From lead field is there (display all the lead create)
- when click to lead , some of data automatic fetch by client script like address , customer name etc,
- **for client script -> in search list (write client script List) -> add Client Script -> name of client script , select the doctype name and tick to enable checkbox .if not enable then the script not apply for that particulat doctype.**
- in customer 2 tab is there
  1. Details – where lead selection , customer name and other feild is display.
  2. Address and contact – in this tab address automatic fetch when you select the lead.

**Client Script : lead data fetch into customer (for fetch lead data into customer)**

### 3. Process

- in process part following doctype are create first.

1. TRF
2. Sample Inward Register
3. Worksheet
4. Onsite Sampling datasheet WQ
5. Onsite Sampling Datasheet SQ
6. Onsite Sampling datasheet
7. Air Quality Onsite Sampling
8. Noise Monitoring
9. Test Report Noise
10. Test Report Illumination
11. Test Report
12. Sample Outward Register
13. Proficiency efficiency
14. Retesting Sample
15. Retesting Report

Let's understand the each and every forms

#### 1) TRF

- Test Requisition Form (Parameter selection with categorize sample id number wise)
- in trf 3 type of sample is available Soil , water and air
- all this 3 has different parameter list and different calculation also.

TRF listview:

- in TRF listview chnages. Create trf\_list.js file in your TRF doctypr folder there has already 3 file craete .py , .js , .json.
- also using client script you can apply chnage in TRF
- in client script "Apply to" is there have 2 option Form and List , if you want to apply your chnage in listview then select list , and is you want to apply your chnage in Form then select the Form.
- make sure Only one Listview chnage apply , means if you write logic in client sript from ui and also in js file then only one chnage work.

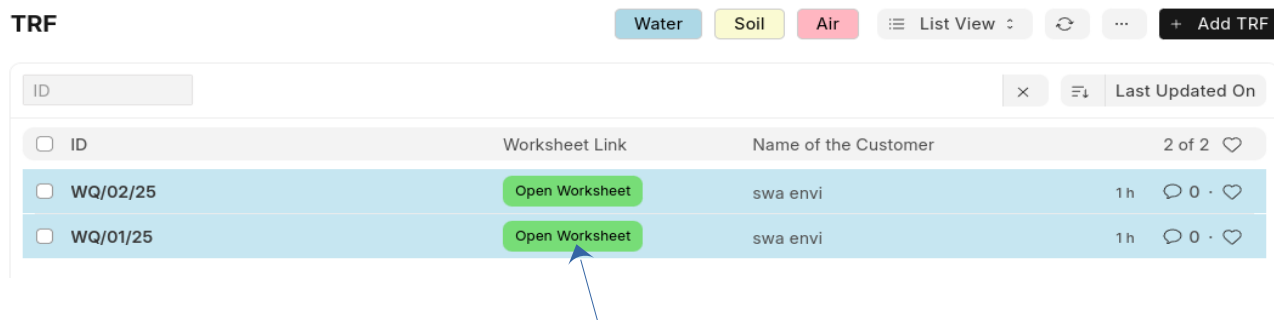
- put your all list view chnage code in

```
frappe.listview_settings['doctype name'] = {  
}
```

- in listview three button is add Soil , water and Air

Desctiption – when click to Soil only the sample id start with SQ record display  
when click to Water only the Sample id start with WQ record display  
when click to Air only the sample id start with AQ record display

- in Listview button id display in each record “Open Worksheet” , when click there for that particular record worksheet is open.



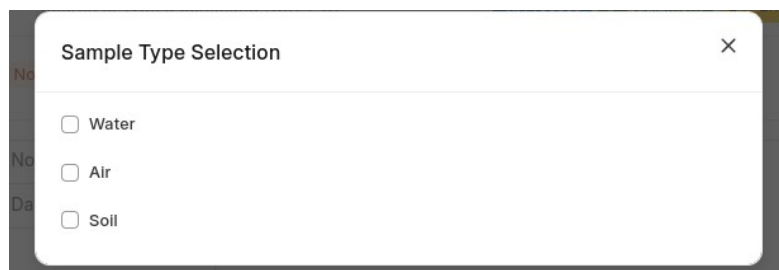
**Note : Sample id generation discuss later.**

- also there is close icon when click all filter is removed and display all record.

- in the sidebar trf menu is there when click list of trf display.

“Add TRF” -> open form for trf.

- when trf form open below popup open will ask to select any one check box for which sample you create



- when you click to water now the sample id generate for generate sample based on check box selection id generate for this in trf.js write the code

- water sample id generate – WQ/01/25

WQ is fix in all water sample after that 01,02....can be incremental and 25 is current year.

-soil water id generate – SQ/01/25

SQ is fix in all water sample after that 01,02....can be incremental and 25 is current year.

-air water id generate – AQ/01/25

AQ is fix in all water sample after that 01,02....can be incremental and 25 is current year.

- Classify each sample with different tables and parametre

1. Water

in water quality first create parent doctype for add the paramerer and method

list of all parent doctype create in frappe by click to Add Doctype.

**Physio-chemical , Microbiological\_test , Organics\_General\_Trace , Heavy\_metals , Toxicological Parameters , Other parameter**

above doctype i create have parameter , method and regulatory limit feild.

Now add the parameter in this doctype category wise.

After create parent doctype create the child doctype for above with different name , because in TRF we can not directly add the parent doctype so create the child table for above each category and then in child table in parameter field give the **link** type and in **option** menu give the parent doctype name for specific child table.

### **Important Notes : when create child table must check is Child table option**

Above is for water category , same like soil create below parent doctype and add the parameter.

**Physical Parameters \_Soil\_Sediments\_Solid\_Wastes , Chemical Parameters - Soil\_Sediments \_Solid Wastes , Heavy Metals\_Soil\_Sediments\_Solid Wastes\_SQ , Heavy Metals\_Alkaline\_Earth Metals\_SQ , Other\_Parameter\_sq , Other Parameter**

same like water follow the step , create child and all.

Air category , create the below parent doctype.

**Air Worksheet Parameter 1, Stack Air Quality Worksheet 1, Other Parameter**

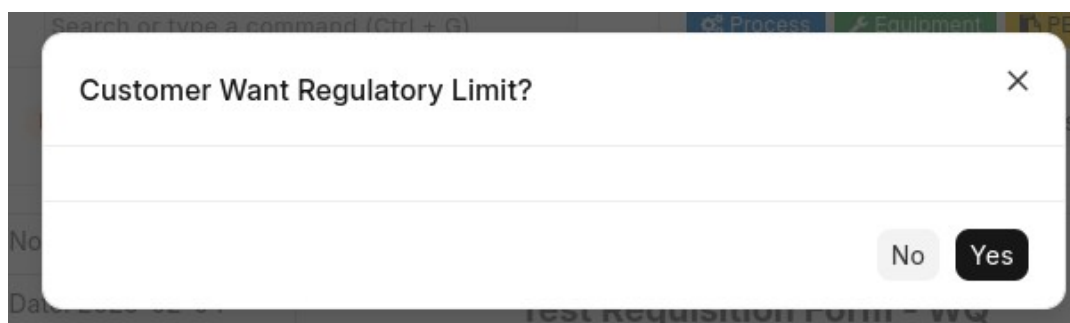
same like soil follow the step and create child table.

After create all child table this all child table have to add on TRF form like  
**in type -> Table , in option menu write the child table**

add all the child table in trf then in TRF form you will be able to select parameter from trf by click to add row button click to parameter all the list of parameter display , which is add on the specific child table's parent doctype.

- in TRF Form also **has Want regulatory limit?** Button is add on click to this button popup open for confirmation yes or no , when click yes from the parent doctype regulatory limit is set that fetch in child table field(regulatory limit) for automatic fetch regulatory limit and method logic written in backen in trf.js file. If click no – is set.

After that save TRF.



- now in TRF also has header which is in all the above listed dictype in process have. In this doc field is display when you save trf automatic it set. And this is fix like if sample id start with SQ then SWA/LAB/PROS/1.2 is doc number set for Air SWA/LAB/PROS/1.3 and for water SWA/LAB/PROS/1.1.

**-amendment and issue setting will discuss later.**

**Conditional forms in TRF:**

- in trf **sample collect by** field is there , have to option customer and Lab Personnel.
- when you save TRF as customer in Soil and Water category no any forms is generate.
- but in soil and water when select lab personnel then respective form automatic craete after save trf. That is onsite sampling datasheet SQ and onsite sampling datasheet WQ.
- in the siderbar both the form link given when click listview is open and form is create by the sample id.

### 1. Onsite Sampling Datasheet SQ

- doc fields is set as static by backend in py file of this form
- in py file of this form api is create for automatic creation of form and call this int trf.js file on save trigger of TRF

API Name – create\_onsite\_datashhet\_sampling (onsite\_sampling\_datasheet\_sq.py)

### 2. Onsite Sampling Datasheet WQ

- doc field is set as static by backend in py file of this form
- in py file of this form api is create for automatic creation of form and call this int trf.js file on save trigger of TRF

API Name – create\_onsite\_datashhet\_sampling (onsite\_sampling\_datasheet\_wq.py)

### 3. When select Air sample

- in Air Sample selection , in TRF 2 table is display both have different parameter.
- **Stack air Quality**
  - when you select parameter from stack air automatic by calling an api from onsite\_sampling\_datasheet.py file record create for **Onsite Sampling Datasheet** after save the TRF.
  - now in above **1 st** and **2 nd** point after save also api call but write logic that type in api that when select parameter from this then only form is create. So here after save 1<sup>st</sup> and 2<sup>nd</sup> is skip.

API Name – create\_stack\_air\_onsite (onsite\_smpling\_datasheet.py)

-Onsite Sampling Datasheet also has calculation write on this form js file after save of this form automatically calculation based value fill up.

#### - Air Quality

- Same like above , when select parameter from this table Air Quality Onsite Sampling form is create after save of TRF .
- create an api in air\_quality\_onsite\_sampling.py file to create this form and also update on the exist one automatic data fetch from trf and set this form.

API Name – create\_air\_quality\_sampling (air\_quality\_onsite\_sampling.py file)

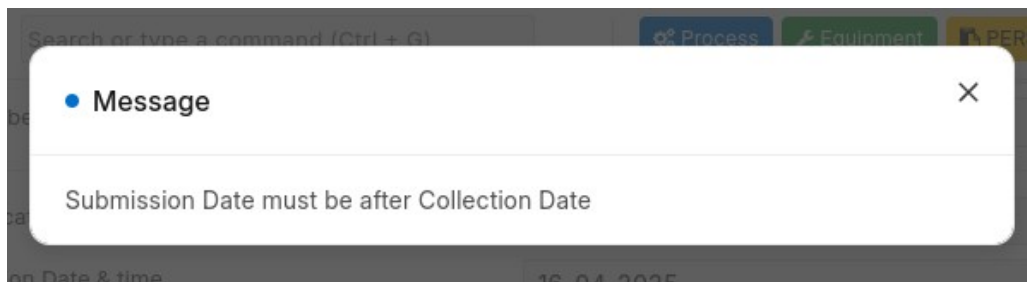
- here there is 1 parameter from this table name “**Noise**” when select from trf no worksheet generate but for this parameter **Noise Monitoring** form is generated.

- In Noise monitoring form also has doc , given static set by api , this form is generate by calling an api , api written in noise monitoring doctype py file and call this into afr save trf where we classified parameter after save trf on that client script (**check frappe msg** – client script name)

- in the noise monitoring form , “**test report noise**” button is there when click report is generate for this form by fetch data automatically from noise monitoring write api in noise monitoring py file and call in this form js file also in test report noise set doc static by call api.

### Fields Condition:

- TRF has sample collection and sample submission date , sample submission date must be after collection date if not then trigger msg.



## **2) Sample Inward Register**

- when you save TRF automatic the Sample inward register is create for the current sample id number. And all feild are automatic fetch from trf and set.

- in sample\_inward\_registre.py – create and api that trigger aftre save trf

- call this api in trf.js after save

API Name – create\_sample\_inward\_register (sample\_inward\_register.py file)

- in sample inward register list view is same as we discuss in TRF.

- here we export all the sample inward data in excel and csv file for this select all the records in listview right side 3 dot is display when click export option is there click there , and from this you will select field according your requirement and then export.

- after click to export file is saved in system in the download folder.

### 3) Worksheet

- in worksheet list view is same as we discuss in TRF.
- in worksheet has doc number is change according to form. Like for water , soil , air and also in air 2 part stack air , air quality logic accoring display (use client script)
- when save trf , worksheet also automatic create for this write the client script.
- here the fields in worksheet is display according to sample id , like in some case some of field only display in water and that not display in SQ and AQ also for this client script written.
- the parameter select from the trf are all display in worksheet.
- all the parameter has difference logic so in system create doctype for each parameter.
- in client script write logic that type from trf to worksheet if this parameter name then display this feild in worksheet.
- after create all the doctype that is in child table, add into worksheet as a table type and in option write the name of that doctype. That has also name feild by target this in worksheet category wise display all.
- also not all added doctype display in worksheet only those parameter is select from the trf only display that relavant table in worksheet for this write the logic in worksheet.js – that if from trf not select this parameter then hide from worksheet.
- now in the each parameter has different formula for this calculation , write logic in worksheet.js file.
- result automatically set in each parameter table feild.

**Editing Row #1**

Parameter	Turbidity
Protocol	APHA 23rd ed. 2130 B: 2017
Date Of Analysis	09-04-2025
Measured turbidity by Turbidity meter (A)	1.00
Dilution factor , 1:10 dilution = 10 factor(D)	2.00
Result	2
Performed by	addon@gmail.com
unit	NTU

☐ Select this result for final report  
☐ Lab Internal Retesting (IQC)



**- In Air sample when parameter is selected from the chils table in trf**

- for stack sir – onsite datasheet sampling is create and for air quality – air quality onsite sampling is create which we discuss above.

- now some of parameter in air has value come from this 2 form so when this form create fill up the detalis , after save the worksheet automatic data fetch feom respective form into the worksheet.

- in worksheet form also Generate test report and lab retesting button we add – discuss later how the work.

- now from trf different form is craete on conditional based which we discuss above.

- so until you not fill that form detail onsite sampling datasheet SQ and onsite sampling Datasheet WQ , worksheet is not accessible to edit.

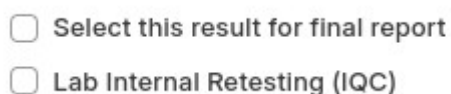
- once fill all the data on that after worksheet is accessible , for this write client script in worksheet.js file

- From TRF in AQ if illumination parameter is select then field is display differnt other is hide automatically in worksheet. And when this select in worksheet 2 child table display first child has attach the file. And second fill up deatild that is display in test Test Report Illumination.

- Now when this parameter in worksheet is there **Generate Test Report** is not display but **Generate Illumination report** is display.

- Worksheet has each parameter common fields list below:

1. select this result for final report
2. lab Internal Retesting(IQC)



☒ Select this result for final report

☐ Lab Internal Retesting (IQC)

- both are check box in each child table of the specific parameter.

- in the child table we can add any number of row from this row is want this row result can be display in test report then tick this option “select this result for final report”

- also when there is same parameter in child table and have multiple row , already select one as a final test report , now tick another row then previous one is automatic untick by client script.

- after save worksheet click to “Generate Test Report” the result automatically fetch by unit wise and display those list of parameter are present in same name worksheet.

- for this create an API in worksheet.py file also all parameter has some limit value given if not under that value then the original test result will no display in test report but that limit BDL(MDL<limit) type display in test report.

**Condition:**

all the parameter has date of analysis field must be after analysis start date if not gives the message.

In analysis completion date field all the parameter has date of analysis among this those parameter has latest date set this in analysis completion date.

#### 4) Test Report

- in Test Report doc number is there in header , set by using client script.
- after save workheet from click to generate test report this report automatically create.
- this is first save in Draft status

**Test Report**

Water Soil Air List View ↕ ↺ ...

ID	Status	Company Name	Last Updated On
<input type="checkbox"/> AQ/05/25	Draft		now 0 · ♥
<input type="checkbox"/> WQ/01/25-R2	Submitted	swa envi	3 h 0 · ♥
<input type="checkbox"/> WQ/01/25-R1	Submitted	swa envi	3 h 0 · ♥

- after that when we submit this form it will automatic convert it into submitted status.
- from test report from print icon also given when click this customize print format.

WQ/01/25 Search or type a command (Ctrl + G) Process Equipment PERSONNEL Procedure SOP General A

WQ/01/25 Submitted + Assign To Share < > Print ... Cancel

Amendment No: 21	<b>Test Report</b>	Issue No: 21
Amendment Date: 2025-02-17		Issue Date: 2025-02-17
Doc. No: SWA/LAB/PROS/1.1		

- after save test report “report\_code” automatic set in sample inward register for the specific sample id number

**API Name** – sync\_test\_parameter\_with\_fetch\_parameter (worksheet.py file)

## 5) Test Report Illumination

- in worksheet save , if illumination is display then from worksheet by clicking to “Generate Illumination Report” report is create with the sample id number.

AQ/03/25

Search or type a command (Ctrl + G)

Process

Equipment

PERSONNEL

Procedure

SOP

General

A

AQ/03/25

Not Saved

Generate Illumination Report

+ Assign To

Share

<

>

...

Save

Amendment No: 15	Worksheet	Issue No: 15
Amendment Date: 05-03-2025		Issue Date: 05-03-2025
Doc. No: SWA/LAB/PROS/4.2		

- in test report illumination doc number is set by backend. (static give)

- also like test report in this form print icon is there by click customize print format for test report illumination is display by fetch all data.

umination > AQ/03/25

Search or type a command (Ctrl + G)

Process

Equipment

PERSONNEL

Procedure

SOP

General

A

AQ/03/25

Not Saved

Refresh

<

>

Print

...

Save

Amendment No: 04	Test Report	Issue No: 04
Amendment Date: 23-01-2025		Issue Date: 23-01-2025
Doc. No: SWA/LAB/PROS/6.2.4		

## 6) Test Report Noise

- test report in this form print icon is there by click customize print format for test report Noise is display by fetch all data.

loise > AQ/02/25

[Process](#) [Equipment](#) [PERSONNEL](#) [Procedure](#) [SOP](#) [General](#) [A](#)

**AQ/02/25** [Refresh](#) [<](#) [>](#) [Print](#) [...](#) [Save](#)

Amendment No: 05	<b>Test Report</b>	Issue No: 05
Amendment Date: 23-01-2025		Issue Date: 23-01-2025
Doc. No: SWA/LAB/PROS/6.2.3		

### Note:

in above all test report has **report\_url\_number** , in this feild automatic generate this url and this url number main among all this 3 doctype.

for example , 1<sup>st</sup> craete test report noise – report url generate after create test report then the url generate here from last url generate in test report noise.

Client script is written for this and add in all this 3 doctype.

Also **report code** is there – generate automatic by client script is a combination of sample id and date of sample receive.

**API Name** – create\_noise\_monitoring (noise\_monitoring.py file)

## 7) Sample Outward Register

- after create test report , 15 days after automatic sample outward create for the specific sample id number , for this written an API.
- written this api by fetch the value from test report into test report to sample outward register in sample outward register py file and call in test report js file after save the report.
- listview is same as discuss in TRF and other doctype.
- also same like sample inward data is export here.

**API Name** – create\_sample\_outward\_register (sample\_outward\_register.py file)

- cron job is implement here every 2 , minute cron job call

## 8) Retesting

- In retesting Sample doctype we create in the starting of document. Is a same like worksheet all the fields are same like worksheet.
- from worksheet we discuss in each parameter table has 2 check box, 2 of them 1 we discuss, that is select this report for final result and the other is Lab Internal retesting (IQC)
- so from worksheet when we have multiple parameter listed from that those is checked by this option and after save worksheet. Click to Lab Retesting button display in Navbar.

WQ/05/25 Not Saved

Generate Test Report Lab Retesting + Assign To Share < > ... Save

Amendment No: 15	Worksheet	Issue No: 15
Amendment Date: 05-03-2025		Issue Date: 05-03-2025
Doc. No: SWA/LAB/PROS/4.1		

Analysis start Date 01-01-1970

- record generate in Retesting sample by selected parameter only.
- this create by call api on click to button "lab retesting" in worksheet py file we write the logic. For this and in js file by click to button call an api.
- retesting sample menu is display in sidebar had dropdown with label "Retesting".
- after this retesting sample create here same as calculation happen like worksheet. Although from worksheet i fetch unit and the original result into retesting sample all this logic written in api.
- in retesting sample when you calculate this all formula save the form. From the backend one more form create retesting record where all the parameter name, who perform this – name of the chemist, previous value (which fetch from worksheet), original value (test in retesting sample) are display, also with logic that this parameter is acceptable or not acceptable by 20% logic automatic set this field also.
- when retesting sample is save automatic in backend retesting record is generate after that only from retesting sample has navbar "Generate Retesting Report" button click there.
- by using api automatically retesting report create here the data fetch from retesting record.py file in backend. And call this api into retesting sample js file by click to button "generate retesting Report".

**Retesting Record Doctype is not Visible work as backend only. When you save the Retesting Sample Doctype In Backend Retesting Record create when this create after only From Retesting Sample Generate Retesting Report record create.**

WQ/01/25 Not Saved

Generate Retesting Report



Save

Amendment No: 03

Amendment Date: 19-02-2025

Doc. No: SWA/LAB/PROS/9.1

### Lab Retesting Sample

Issue No: 03

Issue Date: 19-02-2025

Analysis start Date

22-04-2025

- same like test report has status draft when first time create after save this it converted into submitted format.

**API Name** – fetch\_and\_create\_retesting\_samples (worksheet.py file)



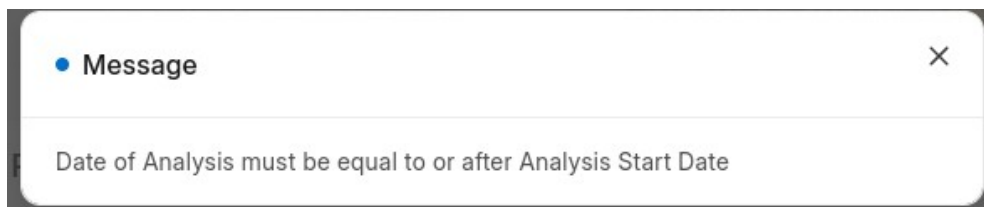
## 9) Retesting Report

- in retesting record automatic create by calling api , in form same like test report print icon is there when click to this print format display , also if print the format when the form is in draft status in format draft watermark written.

Amendment No: 02	<b>Retesting Report</b>	Issue No: 02
Amendment Date: 26-03-2025		Issue Date: 26-03-2025
Doc. No: SWA/LAB/PROS/9.2		

### Condition:

in retesting sample has analysis start date and all the child table has date of analysis must be after analysis start date if not then give the message.



In analysis completion date in retesting sample is set – all the parameter has date of analysis among latest date is set. For this write the client script.

### API Name -

#### 1. After save retesting sampling below api call

fetch\_retesting\_sample\_data (retesting\_sample.py)

#### 2. click to Generate Retesting Report Button below api call

sync\_retesting\_report (retesting\_record.py)

## 10) proficiency testing

- only is create form by click to add button from list view and then save this.

## 11) Print Format

Test Report , Test Report Noise , Test Report Illumination and Retesting Report for this all custom format create.

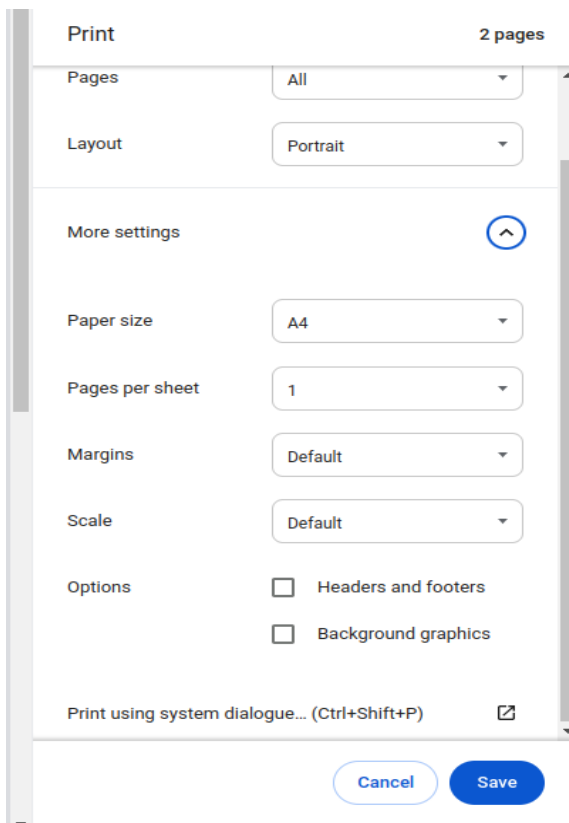
Go to Print Format list -> craete print format -> select the doctype.

Print format type jina.

And using html and css we create custom print format.

To set this print format in particular doctype in the doctype setting default print format is there select the name of specfic print you want to display for that doctype.

When you print that document in pdf file or for print then there is inbuilt header footer come so for remove this when click to print button popup open on the right side of bottom uncheck the Header and footers.



- click ro more setting and in Option uncheck the Headers and footers option.

### 13) Amendment Settings.

All the Form has header amendment number , date , issue no and date , doc number.

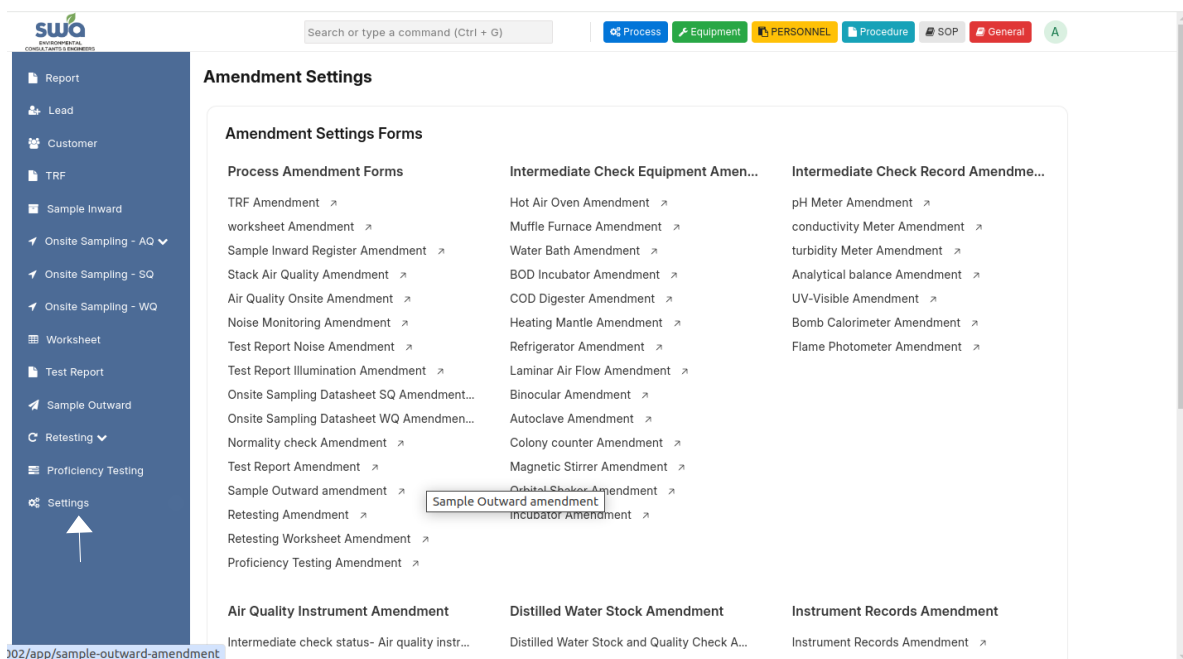
Doc number we discuss in all doctype but rest of we discuss here.

For this 4 field each doctype has create new form like if TRF then create TRF amendment having this 4 feild date type is give in date field like in all other create form.

Create entery in all amenmdnet forms.

In backend logic is written last entry from amendment from is display in header feilds.

In sidebar menu setting click -> all the amendment form is display.



- when click this form after that “add” button display with following form name click there and add data as want then save.

- in date feild , select date from calender as well.

### 14) File list upload from parameter

Illumination parameter in worksheet has child table option attach type when upload file is saved in sidebar menu has onsite sampling-AQ label dropdown has illumination monitoring.

In Soil and Water Sample Heavy Metals category all parameter has attach option when uplaod file api is create for that in specific folder it save file.

Soil – Heavy Metals – SQ Folder in file list

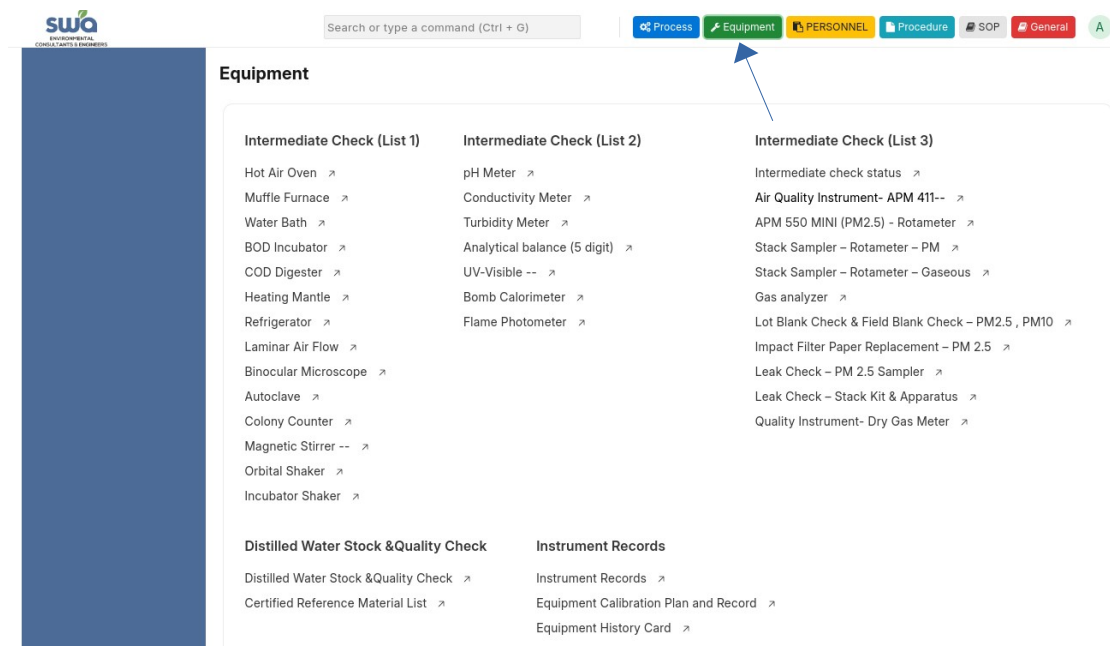
<http://site.localhost:8002/app/file/view/home/Heavy%20Metals%20Documents%20-%20SQ>

Water – Heavy Metals – Water Folder in file list

<http://site.localhost:8002/app/file/view/home/Heavy%20Metals%20Documents%20-%20WQ>

## Equipment

Equipemnt tab is display in all the page in navbar section right side.



### 1. Intermediate Check List 1

- from dashboard on the navbar right side equipment button display when click this all the intermediate checklist form and all other form is display.

- create this all forms as parent doctype and in each form has table structure type form so as a child table create this form and add into respective parent doctype as table type.

- in intermediate check list 1 – all forms has child table and follow the same structure like in all form by click to “add row” row is added.

- **Condition Apply to all forms of intermediate check list 1.**

1.create record by unique name in all document , for example :

- in the form name label is present fill up the name automatically document name should “name value – current year” , name is – oven1 then document name is oven1 – 2025.

2. 1 to 5 th date between entry must be exist , if not then in equipment dashboard alert generate message is display between 6 to 10 date of the current month.

3. create api in each form py file.

4. call this all into the addon sidebar app has js folder -> file name “home\_notification\_equipment\_check.js” for a now 10 minutes interval notification display if no entry made.

## 2. Intermediate Check List -2

create this all forms as parent doctype and in each form has table structure type form so as a child table create this form and add into respective parent doctype as table type.

**Intermediate Checklist - 2** follows a similar structure to **Checklist - 1**, but some forms have a different entry style.

These forms follow the same structure as Intermediate Checklist - 1:

1. Intermediate Check Record – pH Meter
2. Intermediate Check Record – Conductivity Meter
3. Intermediate Check Record – Turbidity Meter
4. Intermediate Check Record – Bomb Calorimeter

**Forms with a Different Structure (Only Form Name Differs, Alert Logic is the Same):**

1. Intermediate Check Record – Analytical Balance (5-digit)
2. Intermediate Check Record – UV-Visible Spectrophotometer
3. Intermediate Check Record – Flame Photometer

When you click the "**Add**" button to create a new entry, fill in the form details as required.

Name label is present fill the value. For example you write **Analytical01**

Upon saving, the **form name should follow the format: name - MM/YYYY**, where:

MM = current month (e.g., 04 for April)

YYYY = current year (e.g., 2025)

So the name for document is Analytical1 - 04/2025

Here Per Year has 12 forms is created , per month one record must between 1 to 5 date if not create then alert generate.

- same for each form api written and call in (addon sidebar) app js file mention above in 10 minutes intervals.

## 3. Intermediate Checklist – 3

- create this all forms as parent doctype and in each form has table structure type form so as a child table create this form and add into respective parent doctype as table type.

- in intermediate check list 3 – all forms has child table and follow the same structure like in all form by click to “add row” row is added.

**- Condition Apply to all forms of intermediate check list 3.**

1. create record by unique name in all documnet , for example :

- in the form name label is present fill up the name automatically document name should “name value – current year” , name is – test1 then document name is test1 – 2025.

2. 1 to 5 th date between entry must be exist , if not then in equipement dashboar alert generate message is display.

**3. create api in each form py file.**

4. call this all ino the addon sidebar app has js folder -> file name “home\_notification\_equipment\_check.js” for a now 10 minutes interval notification display if no entry made.

**Only in one form the Entry structure is different:**

**Intermediate check for maintenance Air Quality Instrument - Intermediate check status**

In the above given form only entry per year allow , in the form there is month wise static record exist.

In this form 12 row static there for all the months if there is no entry in current month then the notification is display between 6 to 10 date.

Api logic is different here in one form fetch the month wise result. Write “yes” if want do.

If blank then will display notification

**Month wise static entry example:**

Intermediate check status: Air quality instruments

<input type="checkbox"/>	No.	Item Name	Check	January	February	March	
<input type="checkbox"/>	1	Fine Dust Samplers	Air Flow				
<input type="checkbox"/>	2	Respirable Dust Samplers	Top loading orifice Calibrator				
<input type="checkbox"/>	3	Stack Kits	Air flow – PM/Gaseous rotameter				
<input type="checkbox"/>	4	Dry Gas Meters	Verified against master DGM/another DGM				
<input type="checkbox"/>	5	Lot and Field Blank Check	PM 2.5/10/Thimbles Filters				
<input type="checkbox"/>	6	Fine Dust Samplers	Impact filter paper replacement				
<input type="checkbox"/>	7	Fine Dust Samplers	Leak Check				
<input type="checkbox"/>	8	Stack Kits	Leak Check				

Item Name	Fine Dust Samplers
Check	Air Flow
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

#### 4. Distilled Water Stock and Quality Check

in this form the entry is happen in per month with the id 04/2025 meand 04 is current month/current year .

For above structure create an api to generate the number.

Having 3 child table in this here the logic is that when do entry after 7 days if no entry made then on the 7 day will generate the notification.

Aslo there is 2 child table total soilds and silical have calulation add row there and do calculation on the matching date final resultt is set into first child table also has remark automatic set based on given criteria.

**Api is written in doctype and call in js file mention above.**

#### 5. Certified Reference Material List

- in this form when click to **“Add Ceritifed Reference Material List”** form is open in this form name field is there this is unique for each form.

- In the Certified Reference Material List also has child table like intermediare check list we discuss above , in this child table all the list is there with its expiry date.

- that day before 45 days alert genertae when the expiry date is coming for the given reference material name from all the parent doctype exist in the CRM list in that all child table row check one by one and its date.

**- for this , create an api in backend and call this into js file.**

#### 6. Instrument Records

- in the instruments records when click to **“Add Instrument Records”** form is open and also has the list of instrument in the child table with its instrument name.

- all the Parent doctype has child table and mention with name of instrument and its expiry date.

- from that date one month before if any instrument expire then notification display in the equipment dashboard.
- in instruments record create any number of list of instruments from the list.
- **api written in instrument\_records.py file**

## 7. Equipment Calibration Plan and Record

- this work same like “**certified reference material list**” have the name field in form is a unique for each.
- in Equipment Calibration Plan and Record has child table has the “**name of instruments**” and it’s “**expiry date**” if expiry coming soon then the date before one month ago , notification is generate.
- **In api written in equipment\_calibration\_plan\_and\_record.py file.**

## 8. Equipment History Card

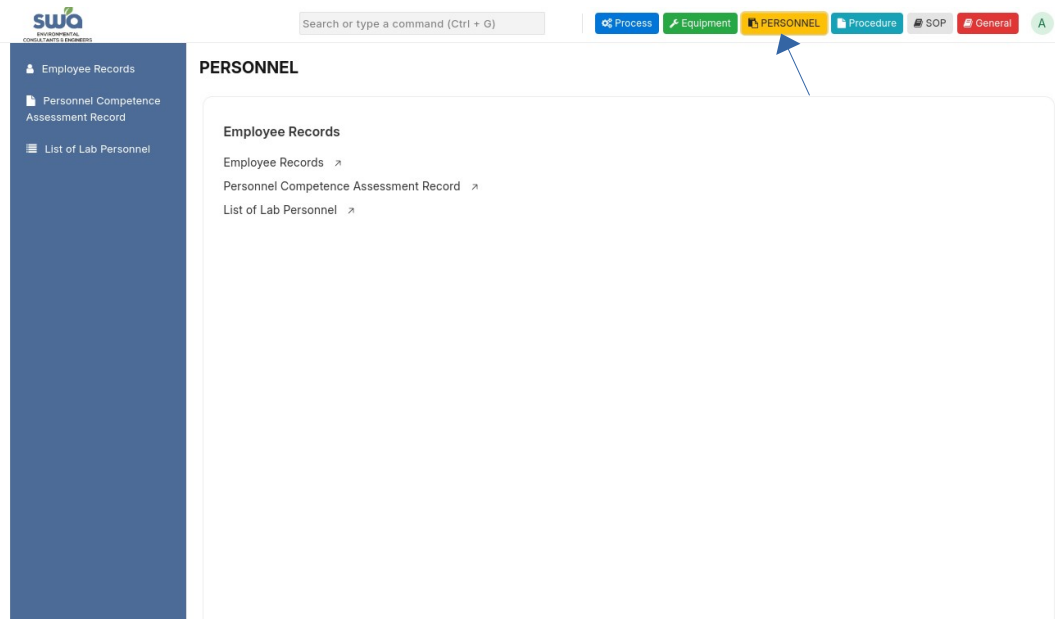
- when click to “**add equipment history card**” form is open fill up the details and save the data has been save.
- there is no notification alert generate here.
- series wise record create in equipment history card form
- the series is 01/04/2025

explanation – 01 is incremental number , 04 – is current month , 2025 – is current year.



## Personnel

- above given 3 tab is display in dashboard page on the navbar right side.



- when click to Personnel have 3 form

### 1. Employee Record

### 2. Personnel Competence Assessment Record

### 3. List Of Lab Personnel

#### 1. Employee Records

- when click to “Add Employee Record” button from the list view form is open have the multiple fields , after click to save button data is saved.

- here the id is unique generate by api -

series wise – 01/04/2025 (01 – increamental number , 04 – current year , 2025 – current year)

- when the the employee record save , api written in employee\_records.py file after save event for “list of lab personnel” form create automatically also , update functionality implement here , if already record exist in list of lab personnel then it update the exist one.

- for update it match with number feild in both the form have same value enter.

#### 2. List of Lab Personnel

- after save employee records , list of lab personnel form create automatically and have some data that is automatically fetch from **employee records** and set in to the **list of lab personnel**.

- same as employee record id is generate unique and with the same id number in employee records while save the employee records.

### **3. Personnel Competence Assessment Record**

- is a form from list view when click to “Add Personnel Competence Assessment Record” button form is open , fill up the details and save the data. The record is display in the list view.

- the id is generate unique each form wise

for example – 01/04/2025 (01 – increamental number , 04 – current month , 2025 – current year)

## SOP , Procedure , general

- this above given tab is display in the dashboard and all the page in the navbar

The dashboard shows the following data:

Sample Status	Sample Count
New Sample	1
Pending	1
Overdue	2
Under testing	6
Completed	4
Final Report	0

Type of Sample	Sample Count
No of samples tested - Water	1
No of samples tested - Air quality	1
No of samples tested - Soil	0
Total no samples tested (Monthly)	2
Total no samples tested (Yearly)	2
Average testing time (Days)	0

Condition	Status
If TRF prepared and for 2 days old sample inward	New Sample
Sample older than or equal to 3 days	Pending
Sample testing not completed after 7 days	Overdue
Worksheet any 1 parameter tested and entered	Under testing
Worksheet saved and all parameters done as per TRF	Completed
Final report saved	Final report

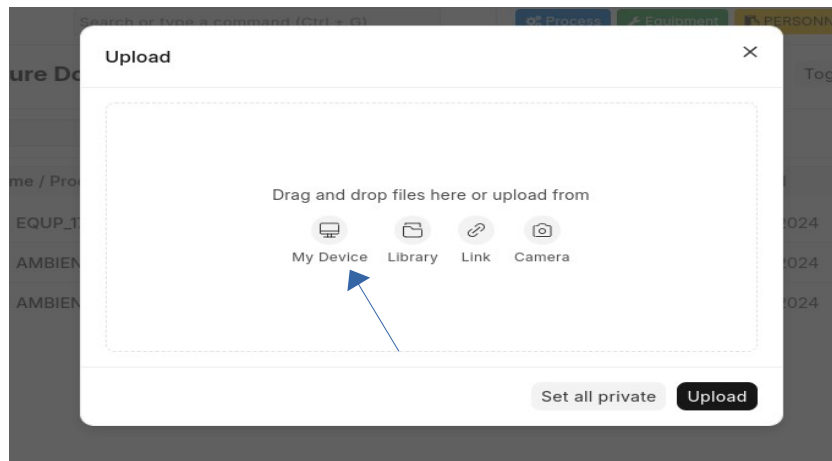
- SOP , Procedure and General tab work the same

- from this 3 tab only have to upload the file , when click to tab “add file” button is there by click there popup open from this popup from your system we can upload the file , and then click to upload button . Here is below steps :

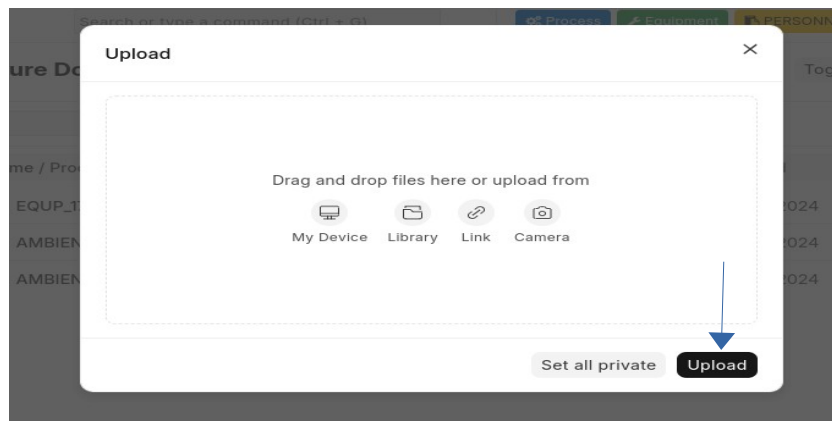
The 'Procedure Documents' page shows a table of files with the following data:

ID	File Name	File Type	Attached To DocT	Last Updated On
<input type="checkbox"/>	Home	Size	Type	Created
<input type="checkbox"/>	EQU_17_INTERMEDIATE CHECK Fi	43.02K	DOCX	06-12-2024
<input type="checkbox"/>	AMBIENT_AIR_120424.xlsx	40.13K	XLSX	03-12-2024
<input type="checkbox"/>	AMBIENT_AIR_120424.xlsx	40.13K	XLSX	03-12-2024

The 'Add File' button is located at the top right of the document list.



- click to my device
- select the file and upload



Report

Lead

Customer

TRF

Sample Inward

Onsite Sampling - AQ

Onsite Sampling - SQ

Onsite Sampling - WQ

Worksheet

Test Report

Sample Outward

Retesting

Proficiency Testing

Settings

Procedure Documents

Toggle Grid View

...

+ Add File

ID

File Name

File Type

Attached To DocT

Last Updated On

Home / Procedure

Size

Type

Created

3 of 3

EQU\_17\_INTERMEDIATE CHECK F

43.02K

DOCX

06-12-2024

4 months ago

AMBIENT\_AIR\_120424.xlsx

40.13K

XLSX

03-12-2024

4 months ago

AMBIENT\_AIR\_120424.xlsx

40.13K

XLSX

03-12-2024

4 months ago

20

100

500

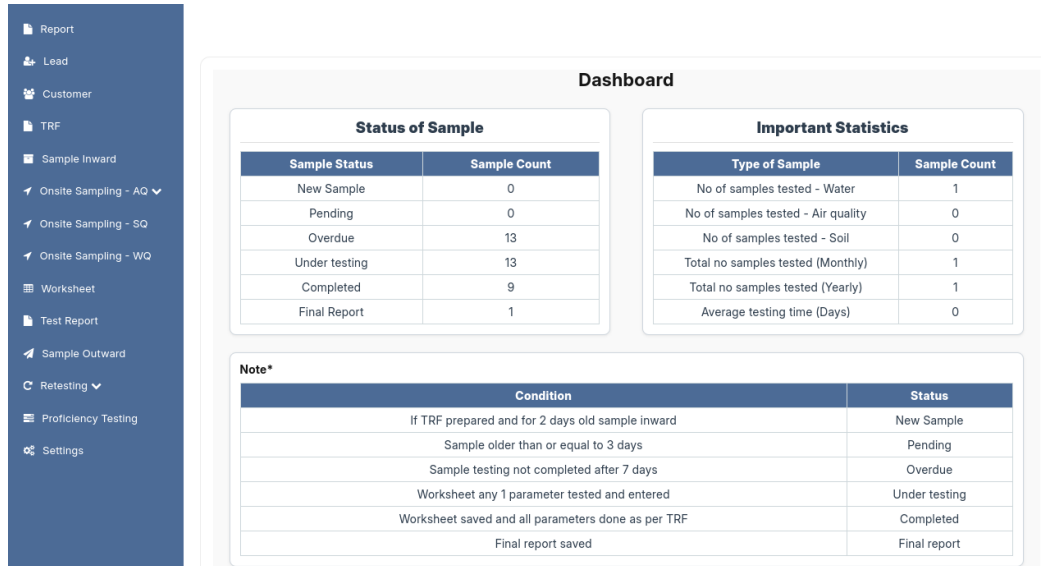
2500

- the uploaded file list out in the file list , same like SOP and General steps follows:

## Dashboard

- when click to icon or the process button below dashboard is display that has sample count , yearly create , monthly create , category wise create , average time for test (in days).

- also condition wise sample count display in dashboard with condition notes.



- in this all data come through query written in report list:

1) Status and 2) important statistics  
from the above given 2 report data come.

- this both report i merge and call this in js file wich is under addon\_sidebar js file -> dashboard.js

## Import Bulk Data In Worksheet

- From listview Worksheet has button name **Import excel** in navbar.
- Function of this button:
- Using this button we can import multiple data of the parameter from the excel sheet.
- for this import api written in worksheet.py file and call on click of button(worksheet\_list.js) file.
- API Name – **import\_child\_table\_data** (worksheet.py file)
- the sheet format is ready :

just put the data where sr.no is incremental number ,  
trail no. - column is there (this number is same as number written in child table in worksheet has  
No. Column) then that row match and data add or update.

All other fields add as per your requirement.

### - final report Column work:

just write 0 or 1 value if want to check the “Select this for final Report” then write 1 value , if not  
want to check then write 0.

### - lab (IQC) Column work:

just write 0 or 1 value if want to check the “Lab Internal Retesting (IQC)” then write 1 value , if not  
want to check then write 0.

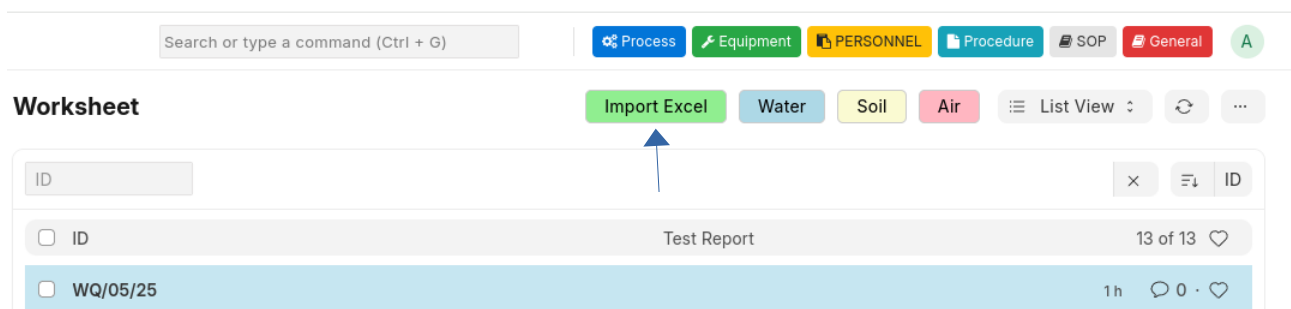
### - Unit

must be select one from the list in child table unit field

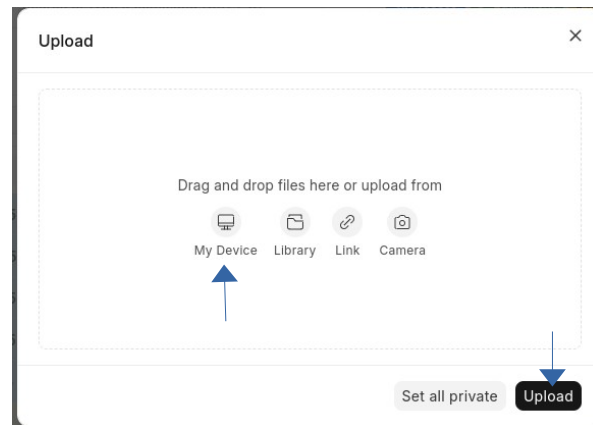
### - Performed By

must be select one from the list in performed by field

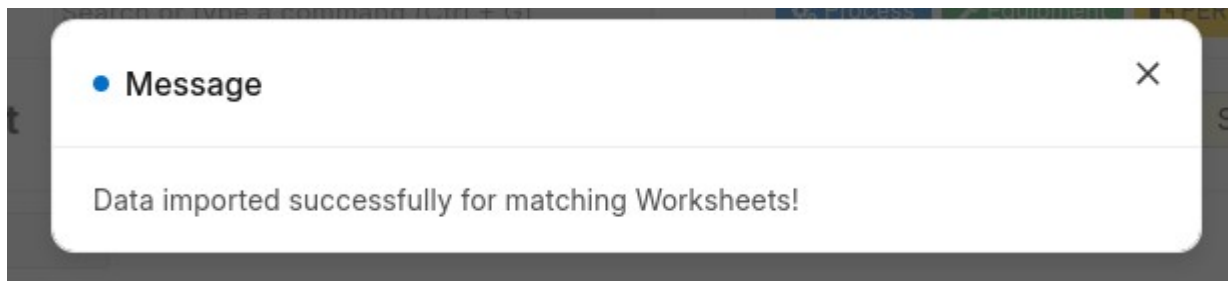
Follow the Step:



click to import excel -> below popup open -> click to “My Device” -> select Excel File -> click  
to “upload”



- After Upload file Wait some time when data is imported it display message.



- after this message all data automatically get imported

To disable local storage because of data payload more than 5mb give error

```
frappe.model.set_in_localstorage = function (doctype, docs) {
  // Disable caching in localStorage

  // Do not store anything in localStorage
};
```

### **Check Report file and Client Script if not found in file**

In UI level Client Script list