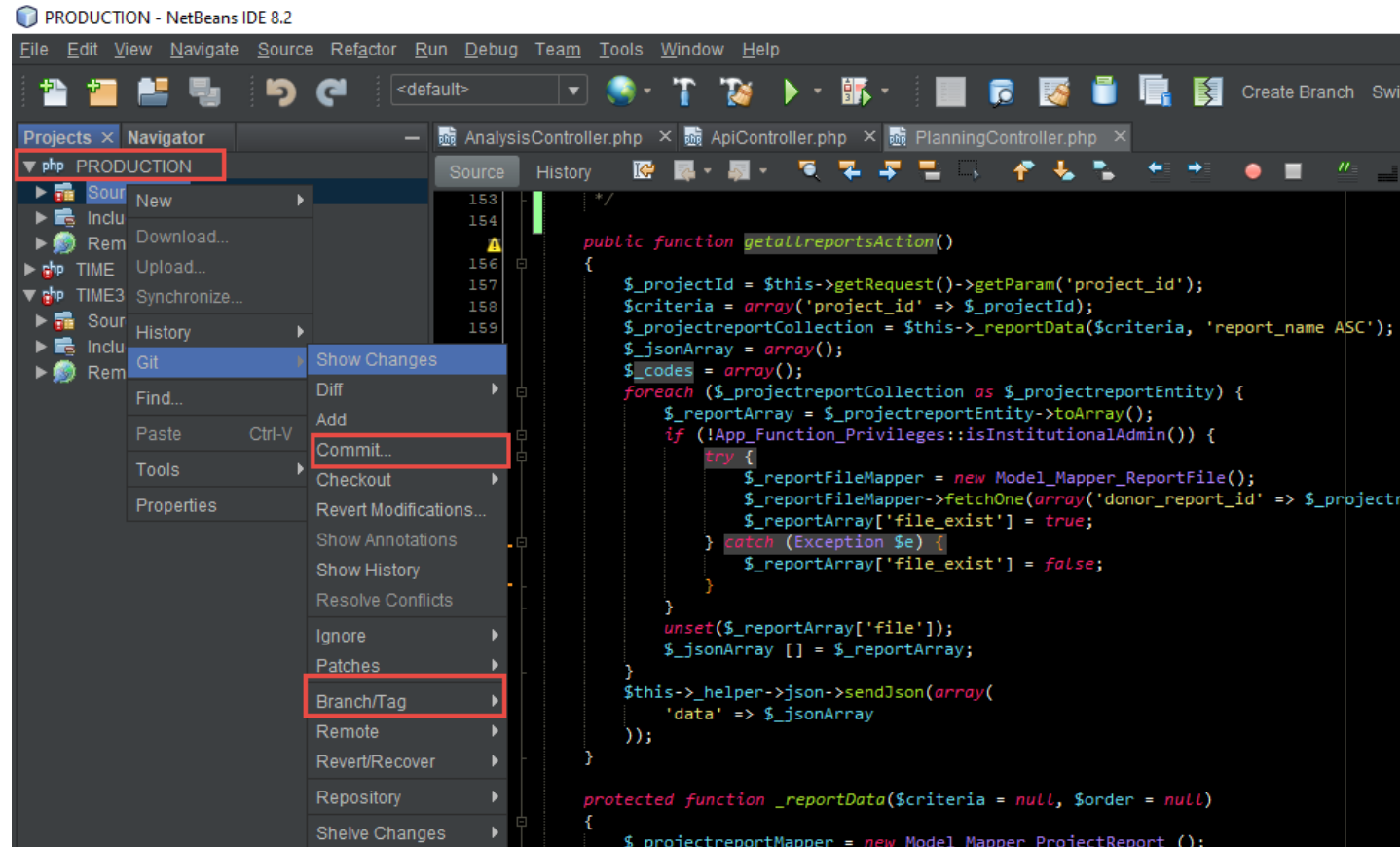


# Item 1: Building the Team and Tools

## Netbeans:

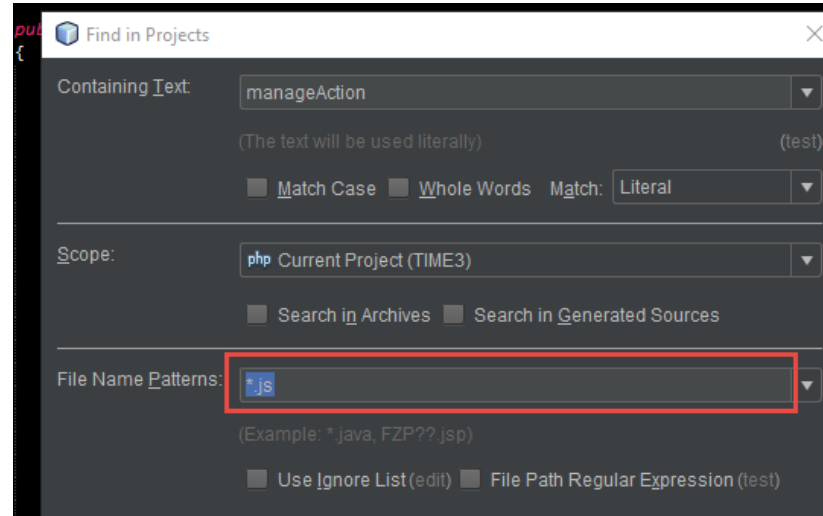
- Plugin that allows: clone repository, create/move branch, commit changes, pull/push to server
- Can set more than one branch if you open another project



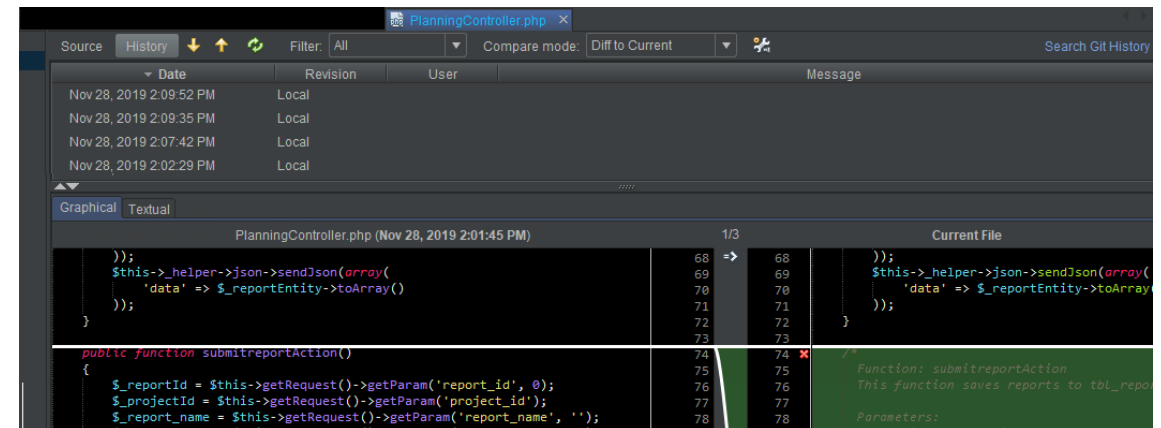
# Item 1: Building the Team and Tools

## Netbeans:

- Can search in a project a part of code, using an extension for a file:



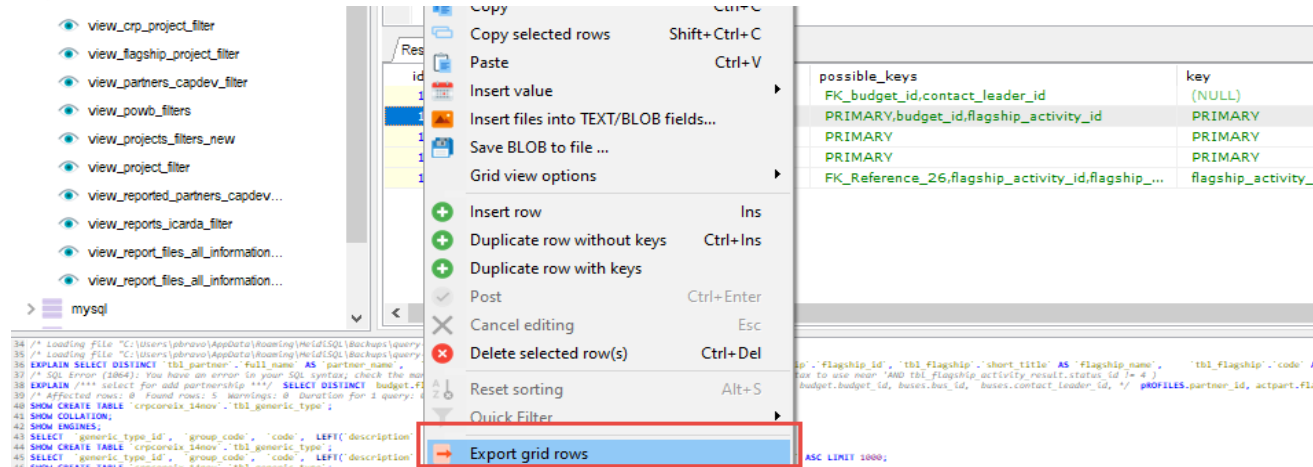
- Review a history of changes were doing:



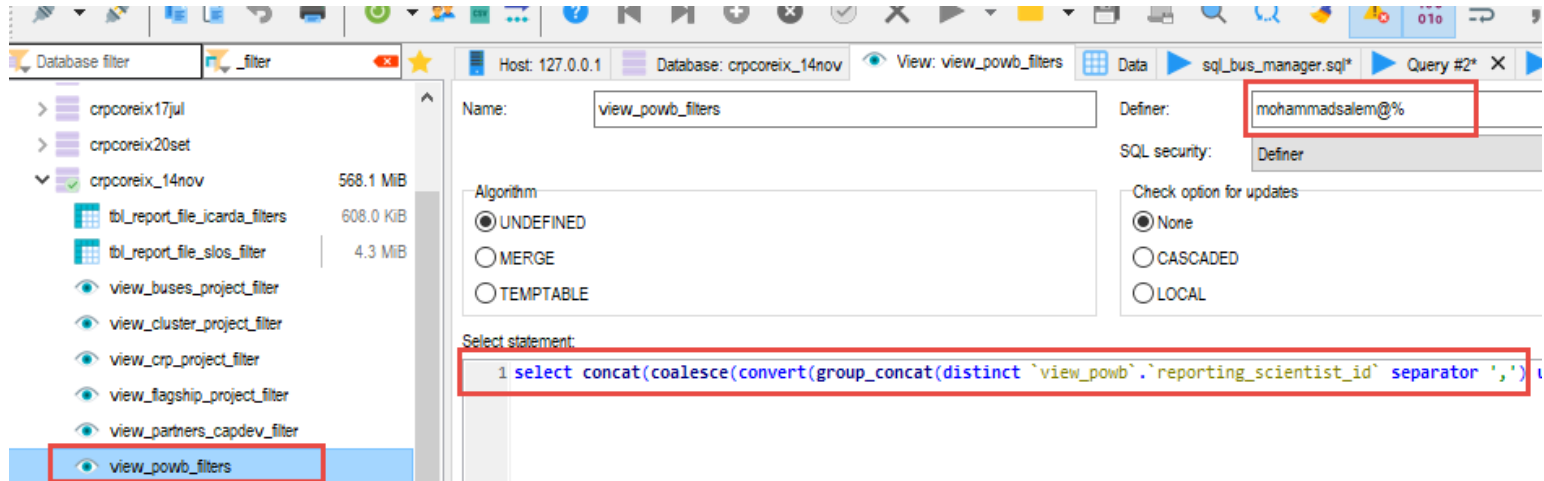
# Item 1: Building the Team and Tools

Heidi:

- Right click to export to an excel file.



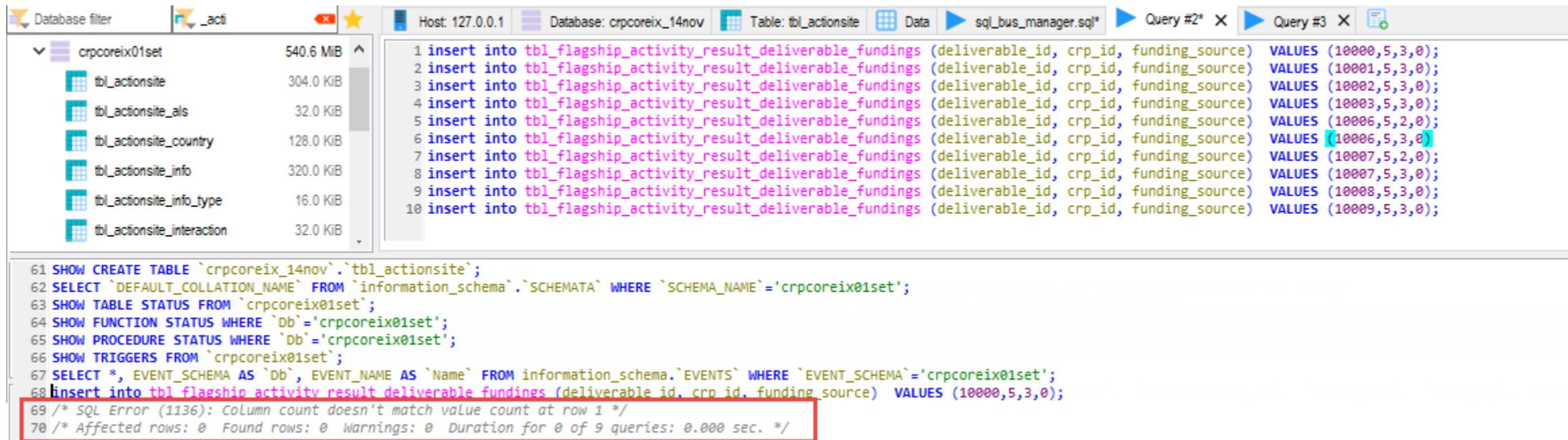
- Can get view query



# Item 1: Building the Team and Tools

## Heidi:

- When executing a group of queries you can see the status



The screenshot shows the HeidiSQL interface. On the left, a database filter shows the 'crpcoreix01set' database with several tables. The main pane displays a list of 10 SQL queries. The bottom query is highlighted with a red box, showing an error message.

```

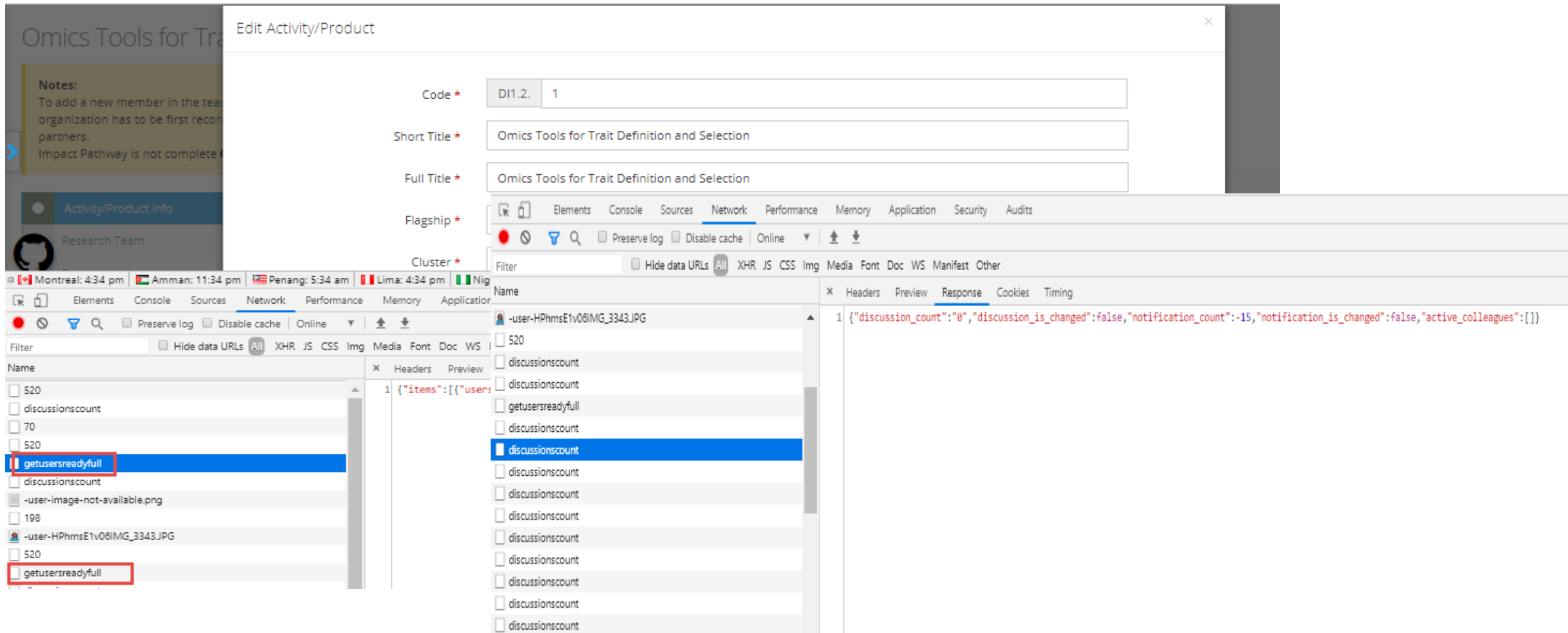
1 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10000,5,3,0);
2 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10001,5,3,0);
3 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10002,5,3,0);
4 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10003,5,3,0);
5 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10006,5,2,0);
6 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10006,5,3,0);
7 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10007,5,2,0);
8 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10007,5,3,0);
9 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10008,5,3,0);
10 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable_id, crp_id, funding_source) VALUES (10009,5,3,0);

61 SHOW CREATE TABLE `crpcoreix_14nov`.`tbl_actionsite`;
62 SELECT `DEFAULT_COLLATION_NAME` FROM `information_schema`.`SCHEMATA` WHERE `SCHEMA_NAME`='crpcoreix01set';
63 SHOW TABLE STATUS FROM `crpcoreix01set`;
64 SHOW FUNCTION STATUS WHERE `Db`='crpcoreix01set';
65 SHOW PROCEDURE STATUS WHERE `Db`='crpcoreix01set';
66 SHOW TRIGGERS FROM `crpcoreix01set`;
67 SELECT *, EVENT_SCHEMA AS `Db`, EVENT_NAME AS `Name` FROM information_schema.`EVENTS` WHERE `EVENT_SCHEMA`='crpcoreix01set';
68 insert into tbl_flagship_activity_result_deliverable_fundings (deliverable id, crp id, funding source) VALUES (10000,5,3,0);
69 /* SQL Error (1136): Column count doesn't match value count at row 1 */
70 /* Affected rows: 0 Found rows: 0 Warnings: 0 Duration for 0 of 9 queries: 0.000 sec. */

```

# Day 2: MEL Loading Performance

- JS in cache is ok, we need to revise to preloading additional calls. Repeating the same calls



The screenshot displays a web application interface for 'Omics Tools for Trait Definition and Selection'. The form includes fields for Code (DI1.2. 1), Short Title, Full Title, Flagship, and Cluster. Below the form, a 'Research Team' section is visible. The Chrome DevTools Network tab is open, showing a list of network requests. The 'getusersreadyfull' request is highlighted in blue, and its response is shown in the right pane. The response is a JSON object: `{\"discussion_count\":0,\"discussion_is_changed\":false,\"notification_count\":-15,\"notification_is_changed\":false,\"active_colleagues\":[]}`. The 'getusersreadyfull' request is also highlighted in red in the list.

## Day 2: MEL Performance

- Simplify codes in one column

```
1 SELECT CONCAT(partners.abbreviation,"-", cluster.code,".", product.code, ".", output.code) AS output_code
2 FROM tbl_flagship_activity_result output
3 LEFT JOIN tbl_flagship_activity product ON output.flagship_activity_id=product.flagship_activity_id
4 LEFT JOIN tbl_actionsite cluster ON product.actionsite_id = cluster.actionsite_id
5 LEFT JOIN tbl_flagship flagship ON cluster.flagship_id = flagship.flagship_id
6 LEFT JOIN tbl_partner partners ON flagship.partner_id = partners.partner_id
7 WHERE output.result_id > 4000;
```

```
1 SELECT CODE
2 FROM tbl_flagship_activity_result
3 WHERE result_id > 4000;
```

- Create status column in a element instead of calculating (deliverable reporting status)

```
$sqlQuery = $adapter->select()
->distinct()
->from(array('t' => 'tbl_flagship_activity_result_deliverable'),array('t.deliverable_id', 't.date','t.rescheduled_date', 't.reason',
    new Zend_Db_Expr('CASE
        WHEN t.status=0 and a.upload_date is not null THEN "Draft"
        WHEN t.status=0 and a.upload_date is null THEN "Not Reported"
        WHEN t.status=4 THEN "Canceled"
        WHEN t.status=1 and t.rescheduled_date is null and a.upload_date is not null THEN "Completed"
        WHEN t.status=1 and t.rescheduled_date is not null and a.upload_date is not null THEN "Postpone/Completed"
        WHEN t.status=3 and t.rescheduled_date is not null and a.upload_date is null THEN "Postponed"
        WHEN t.status=3 and t.rescheduled_date is not null and a.upload_date is not null THEN "Postpone/Draft"
        ELSE "Invalid"
    END as status_final')
))
->joinleft(array('a' => 'tbl_report_file'), 't.deliverable_id=a.deliverable_id AND a.is_deleted = 0','max(a.upload_date) AS upload_date')
->where(' ((t.date between "'.$_start_date.'" and "'.$_end_date.'" ) or (year(t.rescheduled_date) between "'.$_start_date.'" and "'.$_end_date.'" ) ) )')
->group('t.deliverable_id');
```

## Day 2: MEL Performance

- Generic functions

Create Helpers in order to call if from anywhere, identify common functions that need to be created.

### Suggestions:

- All crp's
- All countries
- .
- .
- .

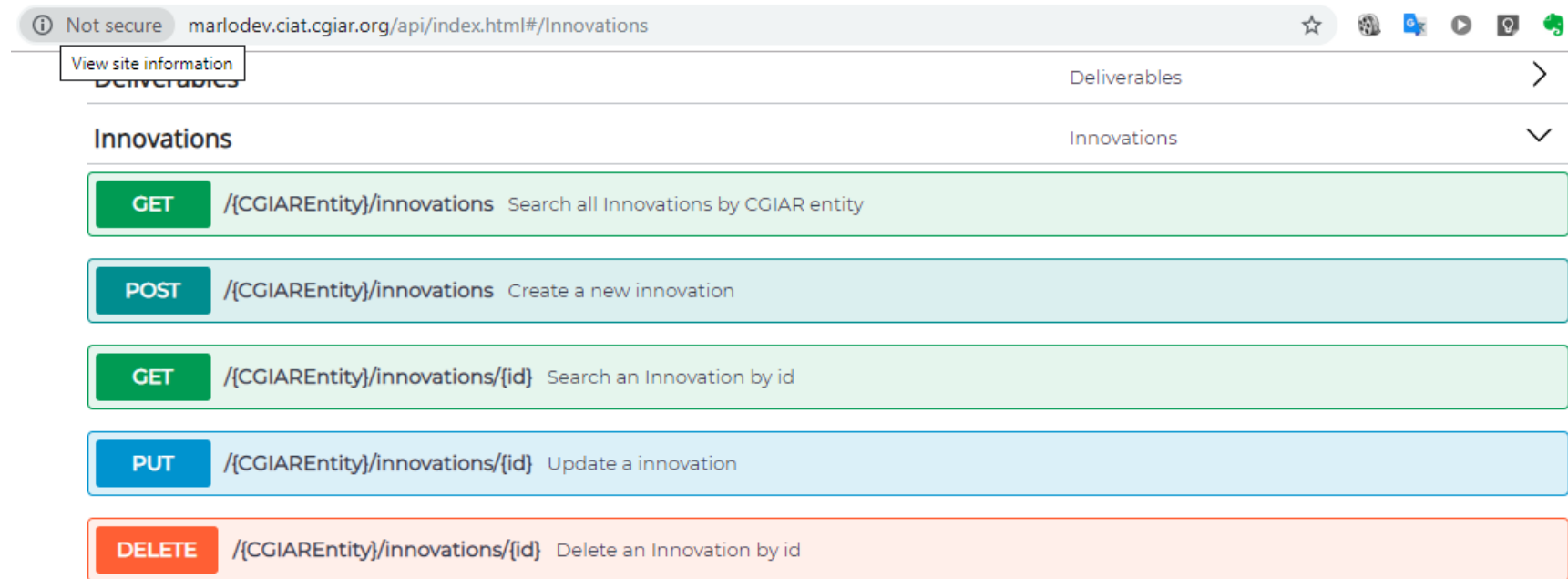
- Generic Variables

Table in which we save all types for different elements, agree to use it or not (avoid to create a new table)

generic_type_id	group_code	code	description
1	1	0	CGIAR Research Programs - Phase I
2	1	55	CRP on Dryland Cereals - DC
6	1	351	CRP on Dryland Systems - DS
7	1	722	CRP on Grain Legumes - GL
8	2	0	IMPLEMENTED CENTERS
9	2	12	Cip
10	2	5	Icarda
11	2	3	Bioversity
12	3	0	Centers
13	3	12	International Potato Center - CIP
14	3	5	International Center for Agricultural Research in the Dry Areas - ICARDA
115	3	9	International Institute of Tropical Agriculture - IITA
118	3	506	WorldFish

# MEL & MARLO API

<http://marlodev.ciat.cgiar.org/api/index.html>



Not secure marlodev.ciat.cgiar.org/api/index.html#/Innovations

View site information

Deliverables

Innovations

**GET** /{CGIAREntity}/innovations Search all Innovations by CGIAR entity

**POST** /{CGIAREntity}/innovations Create a new innovation

**GET** /{CGIAREntity}/innovations/{id} Search an Innovation by id

**PUT** /{CGIAREntity}/innovations/{id} Update a innovation

**DELETE** /{CGIAREntity}/innovations/{id} Delete an Innovation by id

MEL controller function

- User CURL to connect MARLO - CLARISSA
- Use POST to send information into MARLO

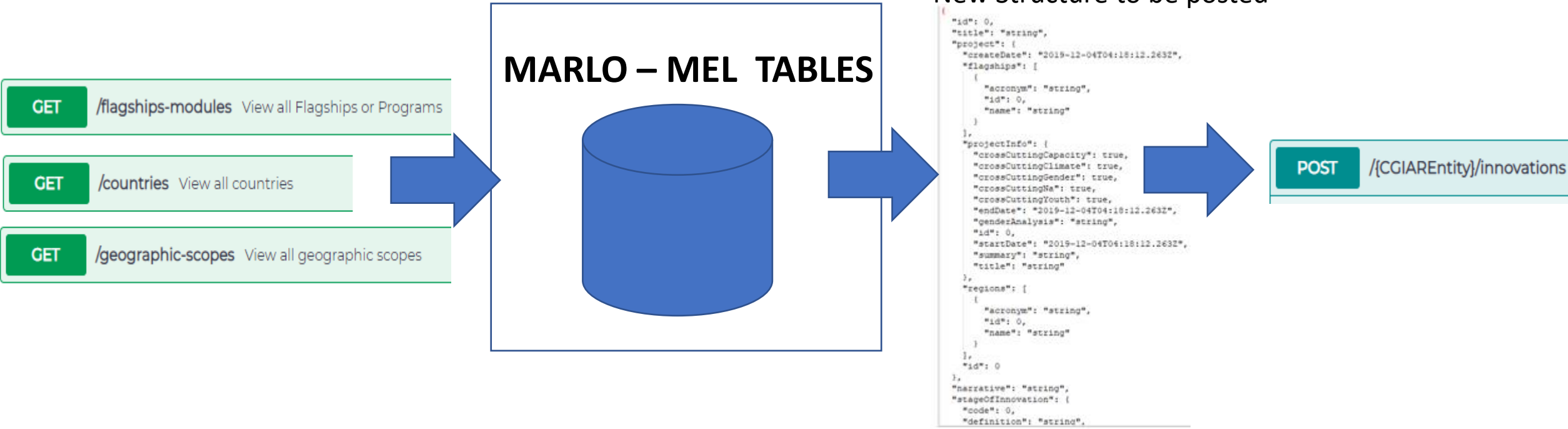


```
"data": {
  "innovation_id": "70",
  "innovation": "32",
  "innovation_name": "Scaling readiness approach - A science-based approach to develop scaling strategies",
  "year": "2017",
  "description": "The Scaling Readiness Approach is an innovation that analyze the readiness for scaling the readiness of technological and non-technological innovations independently and as packages to determine context. Its use can help identify key barriers for scaling and inform the development of scaling strategies",
  "crps": [
    {
      "id": "817",
      "innovation_id": "70",
      "crp_id": "494",
      "flagship_id": "74",
      "cluster_id": "220",
      "activity_id": null,
      "is_main": "1"
    }
  ],
  "scope": "1",
  "status": "6",
  "types": [
    "3"
  ],
  "other_description": "",
  "stages": [
    {
      "stage": "2",
      "year": "2017",
      "description": "Innovation applied in 4 pilot cases with diverse agricultural innovations.",
      "lead": "269",
      "top5": []
    }
  ],
  "evidence": "",
  "evidence_links": [
    {
      "citation": "Sartas, M.; Schut, M.; Stoian, D. scaling of RTB interventions. Scaling Readiness",
      "link": "http://hdl.handle.net/10568/89446"
    },
    {
      "citation": "Sartas, M.; Schut, M.; Van Aster, RTB interventions. Newsletter No.2. 5 p.",
      "link": "http://hdl.handle.net/10568/90665"
    },
    {
      "citation": "Sartas, M.; Schut, M.; Pypers, P. Accelerating the scaling of RTB interventions.",
      "link": "http://hdl.handle.net/10568/90666"
    }
  ],
  "partners": [
    "3",
    "6",
    "9",
    "12"
  ],
  "collaborators": [
    "2135"
  ],
  "scope_data": {
    "national": 1
  }
}
```



```
{
  "id": 0,
  "title": "string",
  "project": {
    "createDate": "2019-12-04T04:18:12.263Z",
    "flagships": [
      {
        "acronym": "string",
        "id": 0,
        "name": "string"
      }
    ]
  },
  "projectInfo": {
    "crossCuttingCapacity": true,
    "crossCuttingClimate": true,
    "crossCuttingGender": true,
    "crossCuttingNa": true,
    "crossCuttingYouth": true,
    "endDate": "2019-12-04T04:18:12.263Z",
    "genderAnalysis": "string",
    "id": 0,
    "startDate": "2019-12-04T04:18:12.263Z",
    "summary": "string",
    "title": "string"
  },
  "regions": [
    {
      "acronym": "string",
      "id": 0,
      "name": "string"
    }
  ],
  "id": 0,
  "narrative": "string",
  "stageOfInnovation": {
    "code": 0,
    "definition": "string",
  }
}
```

## schema



- **Review of Balsamic Tools**
- **Metronic**

[https://keenthemes.com/preview/metronic/theme/admin\\_1/index.html](https://keenthemes.com/preview/metronic/theme/admin_1/index.html)

# Standards into views - 10 principles of usability

## #1: Visibility of system status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

- Reasonable means to improve page loading.
- Show messages to users related to the status of the system

Flagships

Flagship Records

Add New +

10 records

LOADING...

	CRP	Phases	Code/Acronym	Short Title	Long Title	Leader	Actions
Loading...							

success

Flagship modified successfully

Failed

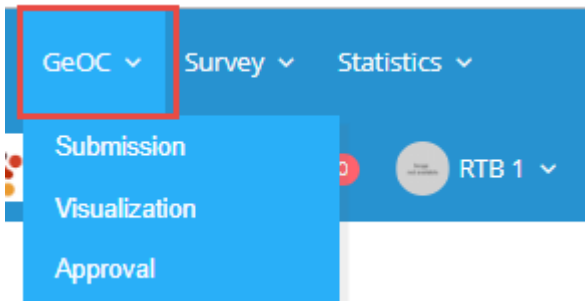
Oops! something went wrong

# Standards into views - 10 principles of usability

## #2: Match between system and the real world

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

An adblocker has been detected. Please disable the adblocker as it may interfere with some of the core functionalities of this site.  
MEL is ad-free and disabling your adblocker will not interfere with your navigation experience.



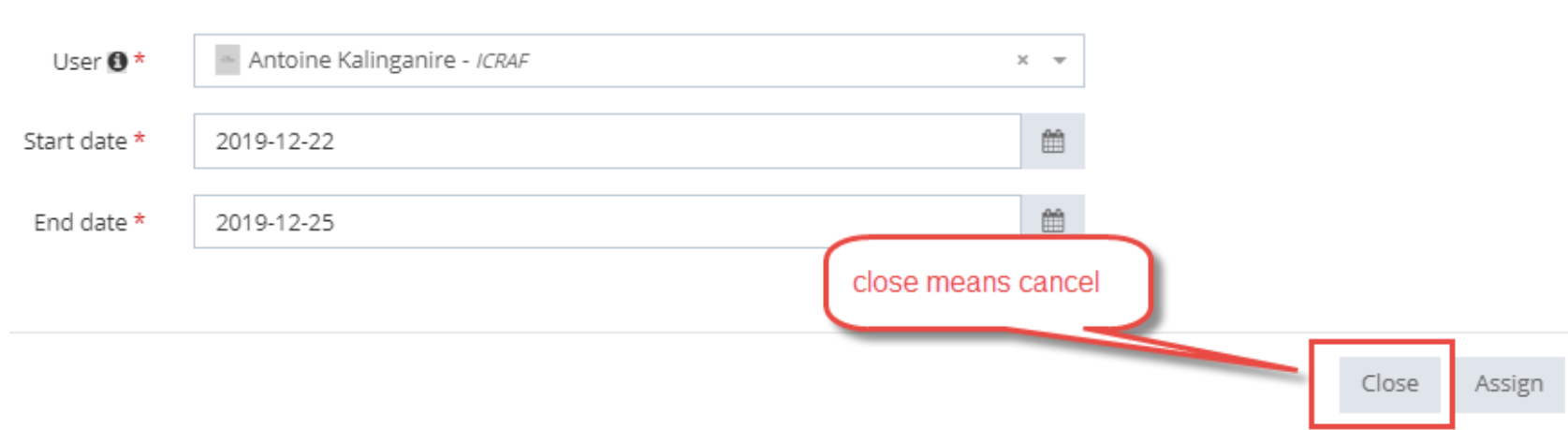
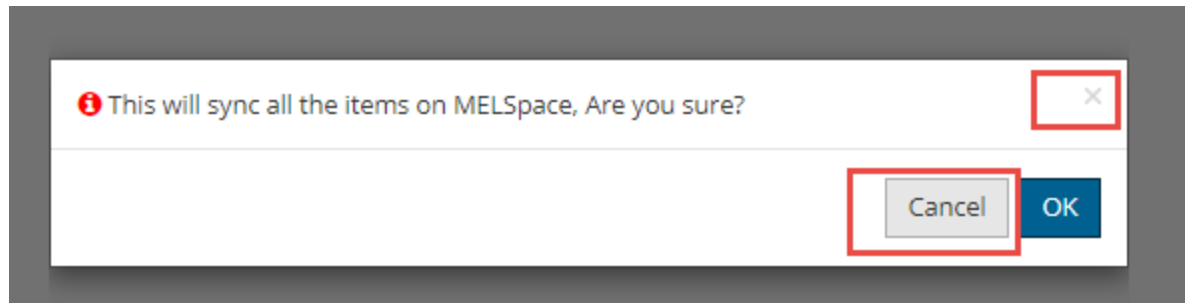
Sync all items to MELSpace

# Standards into views - 10 principles of usability

## #3: User control and freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue.

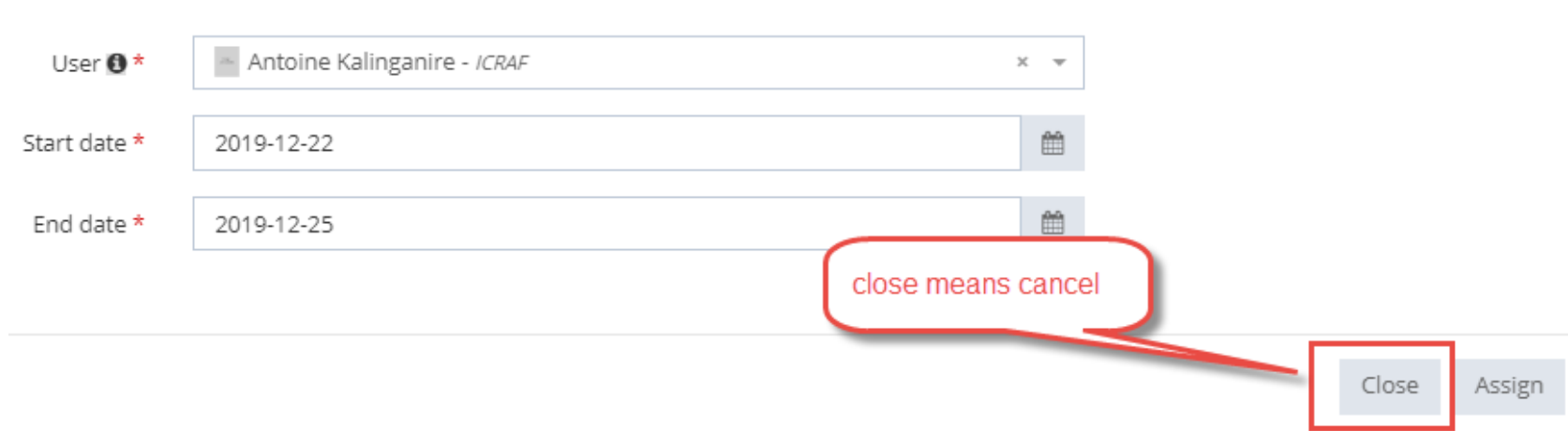
Means: use a clear way to leave a process.

A screenshot of a form with three input fields: "User" (containing "Antoine Kalinganire - ICRAF"), "Start date" (containing "2019-12-22"), and "End date" (containing "2019-12-25"). At the bottom right, there are two buttons: "Close" and "Assign". The "Close" button is highlighted with a red rectangular box. A red callout bubble with the text "close means cancel" points to the "Close" button.

# Standards into views - 10 principles of usability

## #4: Consistency and standards

Users should not have to wonder whether different words, situations, or actions mean the same thing.



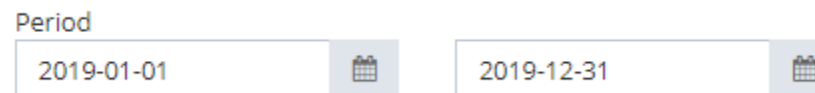
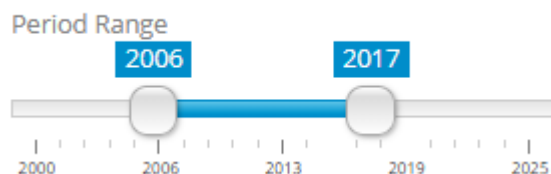
User ⓘ \* Antoine Kalinganire - ICRAF x ▾

Start date \* 2019-12-22 📅

End date \* 2019-12-25 📅

Close Assign

close means cancel

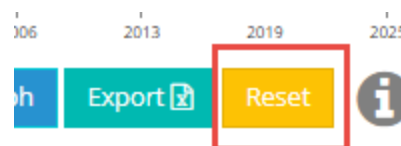


Period

2019-01-01 📅 2019-12-31 📅



ⓘ Get POWB Reset

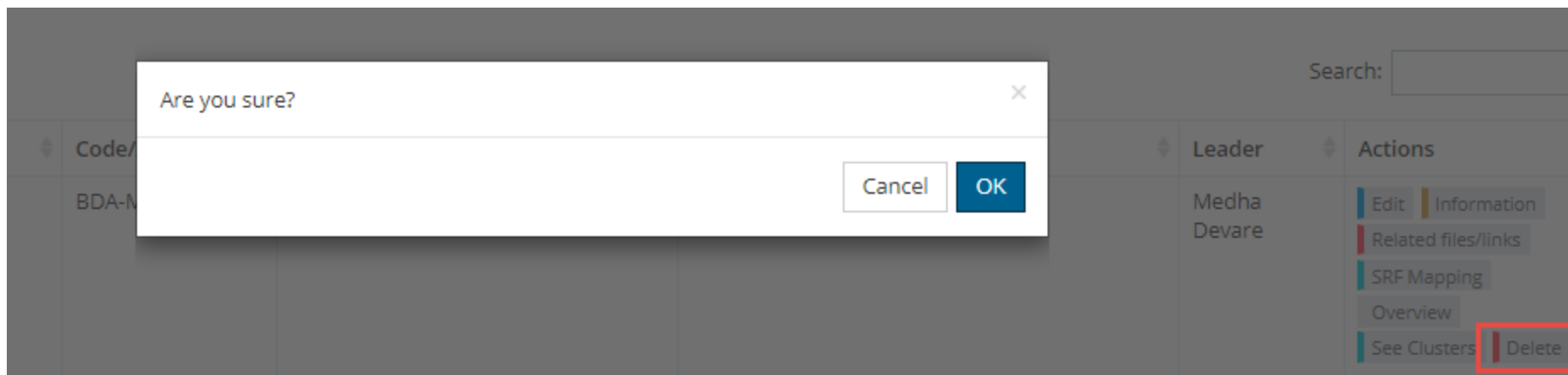


ⓘ Export Reset ⓘ

# Standards into views - 10 principles of usability

## #5: Error prevention

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.



### Notes:

To add a new member in the team her/his organization has to be first recorded in the list of partners.

Impact Pathway is not complete ⓘ



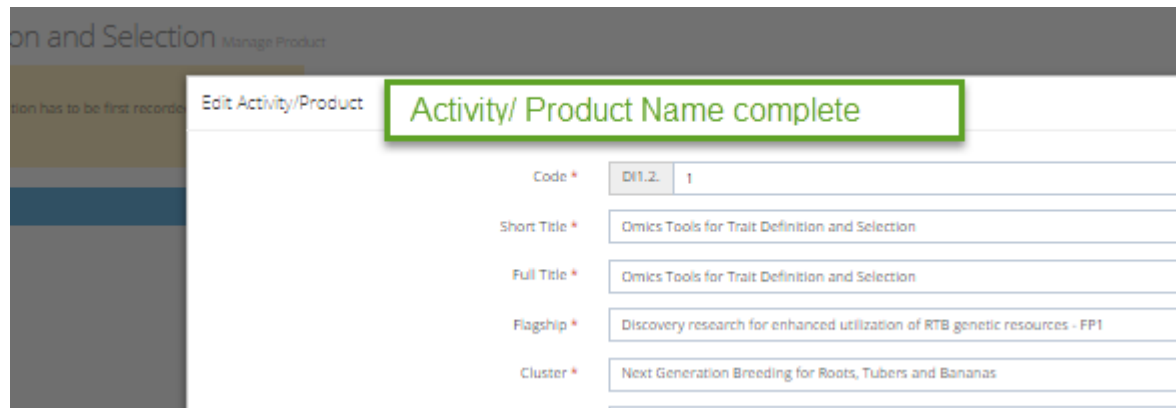
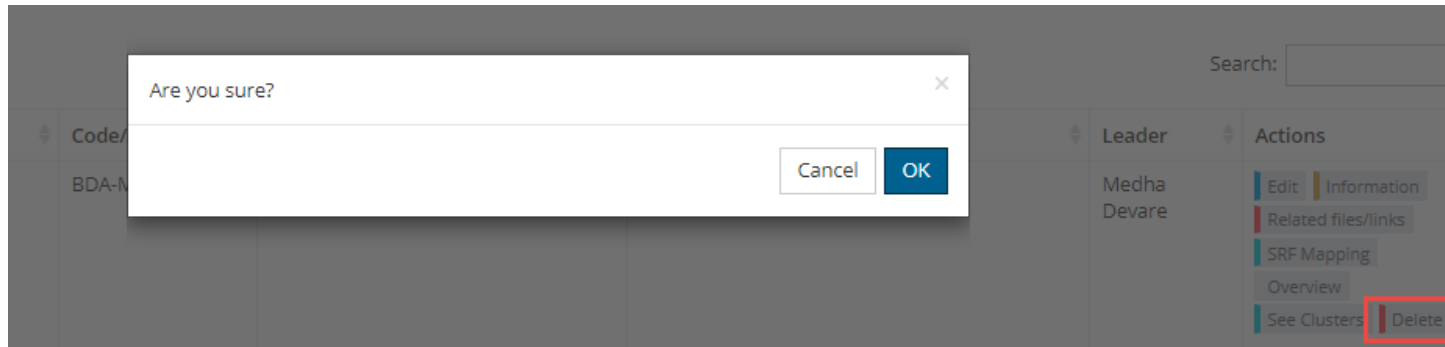
# Standards into views - 10 principles of usability

## #6: Recognition rather than recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Interfaces that promote recognition.

(example: are you sure you want to delete cluster: cluster name?)



The screenshot shows a web application interface for 'Edit Activity/Product'. A green box highlights the message 'Activity/ Product Name complete'. Below the message, there are several input fields with labels and asterisks indicating required fields:

- Code \* (Value: DI1.2. 1)
- Short Title \* (Value: Omics Tools for Trait Definition and Selection)
- Full Title \* (Value: Omics Tools for Trait Definition and Selection)
- Flagship \* (Value: Discovery research for enhanced utilization of RTB genetic resources - FP1)
- Cluster \* (Value: Next Generation Breeding for Roots, Tubers and Bananas)

# Standards into views - 10 principles of usability

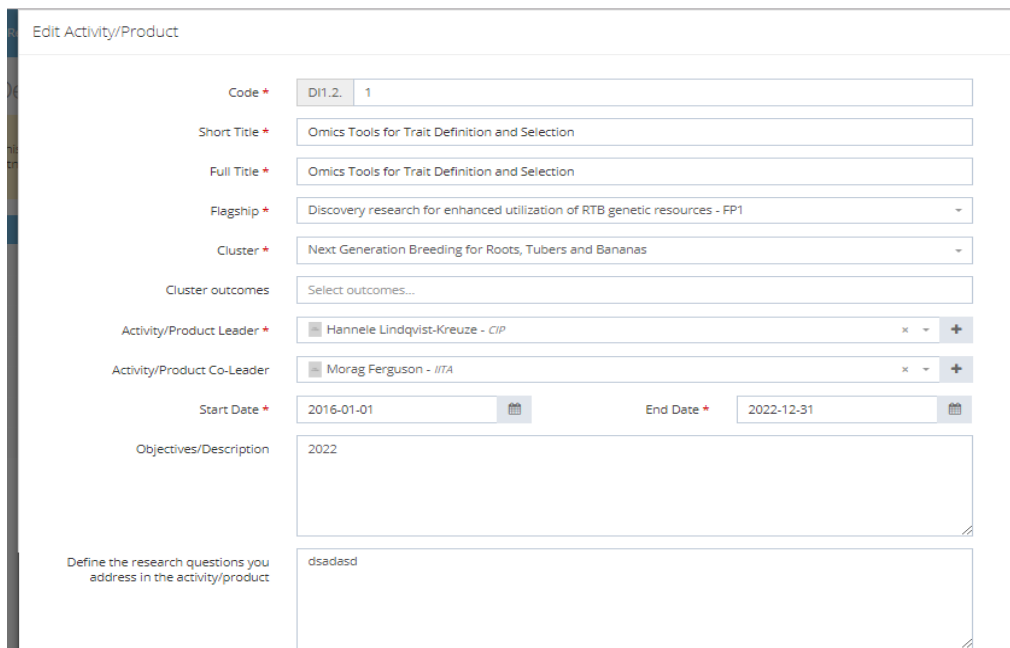
## #7: Flexibility and efficiency of use

Accelerators may often speed up the interaction for the expert user such that the system can use for inexperienced and experienced users. Allow users to tailor frequent actions.

System let me choose my method of interaction, this would be comfortable for the users

Use TAB to fill the form or use a mouse to move through the form.

Click “cancel”, “X” or click outside to close the modal.



The screenshot displays a web form titled "Edit Activity/Product". The form is organized into several sections with labels on the left and input fields on the right. The fields include:

- Code \***: A text field containing "DI1.2." and a small dropdown menu showing "1".
- Short Title \***: A text field containing "Omics Tools for Trait Definition and Selection".
- Full Title \***: A text field containing "Omics Tools for Trait Definition and Selection".
- Flagship \***: A dropdown menu showing "Discovery research for enhanced utilization of RTB genetic resources - FP1".
- Cluster \***: A dropdown menu showing "Next Generation Breeding for Roots, Tubers and Bananas".
- Cluster outcomes**: A text field containing "Select outcomes...".
- Activity/Product Leader \***: A dropdown menu showing "Hannele Lindqvist-Kreuze - CIP" with a close button (x) and a plus button (+).
- Activity/Product Co-Leader**: A dropdown menu showing "Morag Ferguson - IITA" with a close button (x) and a plus button (+).
- Start Date \***: A date field showing "2016-01-01" with a calendar icon.
- End Date \***: A date field showing "2022-12-31" with a calendar icon.
- Objectives/Description**: A large text area containing "2022".
- Define the research questions you address in the activity/product**: A large text area containing "dsadasd".

# Standards into views - 10 principles of usability

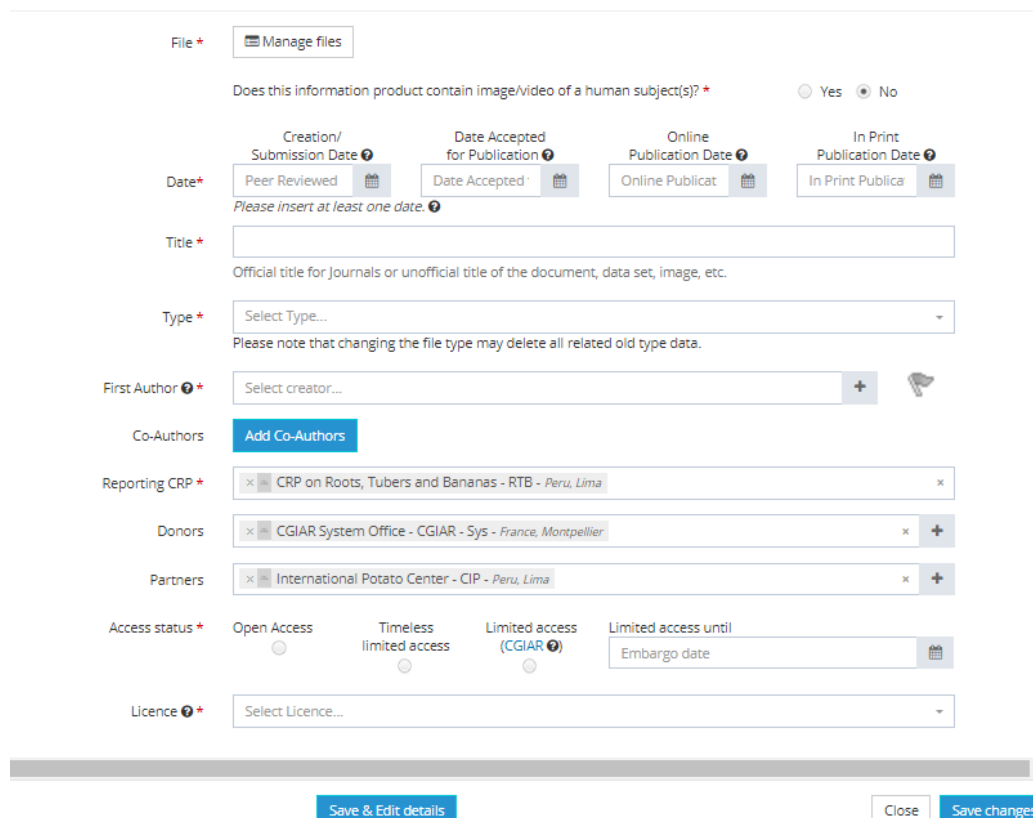
## #8: Aesthetic and minimalist design

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

Ratio between relevant / irrelevant

Every extra unit of information competes with the relevant information.

## Ex. Upload a File



The form is titled 'File \*' and includes a 'Manage files' button. It contains several sections for metadata and file management:

- Does this information product contain image/video of a human subject(s)? \*** with radio buttons for 'Yes' and 'No' (selected).
- Date \*** section with four date pickers: 'Creation/ Submission Date', 'Date Accepted for Publication', 'Online Publication Date', and 'In Print Publication Date'. Below these is a note: 'Please insert at least one date.'.
- Title \*** text input field with a placeholder: 'Official title for Journals or unofficial title of the document, data set, image, etc.'
- Type \*** dropdown menu with 'Select Type...' and a note: 'Please note that changing the file type may delete all related old type data.'
- First Author \*** dropdown menu with 'Select creator...' and a '+' button.
- Co-Authors** section with an 'Add Co-Authors' button.
- Reporting CRP \*** dropdown menu with 'CRP on Roots, Tubers and Bananas - RTB - Peru, Lima'.
- Donors** dropdown menu with 'CGIAR System Office - CGIAR - Sys - France, Montpellier'.
- Partners** dropdown menu with 'International Potato Center - CIP - Peru, Lima'.
- Access status \*** section with radio buttons for 'Open Access', 'Timeless limited access', and 'Limited access (CGIAR)' (selected). There is also a 'Limited access until' field with a date picker.
- Licence \*** dropdown menu with 'Select Licence...'.

At the bottom, there are three buttons: 'Save & Edit details', 'Close', and 'Save changes'.

# Standards into views - 10 principles of usability

## #9: Help users recognize, diagnose, and recover from errors


Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Title \*

This field is required.  
Official title for Journals or unofficial title of the document, data set, image, etc.

Type \*

This field is required.  
Please note that changing the file type may delete all related old type data.

First Author ⓘ \*   

This field is required.

Choose at least one flag.

# Standards into views - 10 principles of usability

## #10: Help and documentation

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

