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USERSTORIES AND SCENARIOS

1. INTRO

1.1. Purpose

The purpose of this document is to present the userstories in the qto application for the version of this instance. Simply stated this is the document, in which any user gets to express their wishes towards the qto application, but in structurized manner.

1.2. Audience

This document is aimed for any potential and actual users of the qto application. Product Owners, Developers and Architects working on the application MUST read and understand this document at least to the extend of their own contribution for the application.

1.3. Related documentation

This document is part of the QTO application documentation-set, which contains the following documents:

- [readme_doc-0](#) - the initial landing readme doc for the project
- [userstories_doc-0](#) - the collection of user-stories used to describe "what is desired"
- [requirements_doc-0](#) - the structured collection of the requirements
- [system_guide_doc-0](#) - architecture and System description
- [devops_guide_doc-0](#) - a guide for the developers and devops operators
- [installations_doc-0](#) - a guide for installation of the application
- [enduser_guide_doc-0](#) - the guide for the usage of the UI (mainly) for the end-users
- [concepts_doc-0](#) - the concepts doc

You can access all the latest qto documentation from qto site:

<https://qto.fi>

in it's native format.

All the documents are updated and redistributed in combination of the current version of the application in both md and pdf file format and can be found under the following directories:

- doc/md
- doc/pdf

2. COMMON UI PERSPECTIVE

As an UI user of the qto application
In order to manage my issues via the UI successfully
I want to have a nice user experience while using the qto application.

2.1. UI Performance

As an UI user of the qto application
In order to enjoy the usage of the tool and interact efficiently
I want to have responsive and quick UI.

2.2. Form factors

As an UI user of the qto application
In order to be able to be able to access from anywhere and anytime
I want to be able to use it with different form factor devices

2.2.1. Desktop PC form factor UI

As an UI user of the qto application
In order to be able to use it fully on the work-place
I want it to work primarily on Desktop for every UI feature

2.2.2. Tablets form factor UI

As an UI user of the qto application
In order to be able to access it quickly on the go
I want to be able to use the same UI on an advanced tablets

2.2.3. Advanced Mobile phones form factor UI

As an UI user of the qto application
In order to be able to access it quickly on the go
I want to be able to use the same UI on an advanced mobile phones.

2.3. The Omni-search feature

As an UI user of the qto application
In order to have a consistent experience around all the user interfaces for search and get quickly to the information on EACH page and/or each table of the database
I want to be able to perform quick filtering on ALL the UI elements from the page from a single omni search-box placed at the top bar of the screen.

2.3.1. List as grid page quick filtering

As an UI user of the qto application
In order to get quickly to the information on the listing as grid page
I want to be able to perform quick filtering on both the grid and the left menu.

2.3.2. View page quick filtering

As an UI user of the qto application
In order to get quickly to the information on the view page
I want to be able to perform quick filtering on both the information on the view page and the left menu.

2.3.3. Search results page quick filtering

As an UI user of the qto application
In order to get quickly to the information on the search as grid page
I want to be able to perform quick filtering on both the grid and the left and right menu.

2.4. The left menu UI - organising the structure of the project

As an UI user of the qto application
in order to be able to manage the whole structure of my project
I want to have access to a left menu from each page

2.4.1. Managing listings from the left menu

As an UI user of the qto application
in order to be able to store and track data from different listings or in different documents
I want to be able to create new listings by simple right click on the left menu and selecting "add listing".

2.4.2. Managing documents from the left menu

As an UI user of the qto application
in order to be able to store and track data from different listings or in different documents
I want to be able to create new documents by simple right click on the right menu and selecting "add document".

2.4.3. Managing folders on the left menu

As an UI user of the qto application
in order to be able to be able to organise the structure of my project
I want to be able to add, update and delete folders from the left menu

2.5. The list page UI

As an UI user of the qto application
in order to be able to efficiently process relational data for any project
I want to be able to list all or part of the project's database table via a single UI

2.5.1. Search in the list page

As an UI user of the qto application
In order to be able to quickly and effortlessly search the content of the loaded document in the list page
I want to be able to focus the search-box with a single shortcut / click on the left menu, so that after typing 3 letters the left menu will get filtered by the search string and the table content will get filtered as well.

2.5.2. Items listing

As an qto ui user
In order to be able to quickly see as much items (issues, problems, ideas etc.)
I want to list the items in a web page according to the filtering criteria I might have specified earlier on ...

2.5.3. Items editing

aAs an UI user of the qto application
In order to update the application data via the UI
I want to be able to edit the data for ANY of the items in the application I have access to.

2.5.3.1. Items editing inline

As an UI user of the qto application
In order to be able to quickly update the items data in a listing UI
I want to be able to edit it Excel table like by quickly navigating through a grid and type the new values to update.

2.5.3.2. Items editing via a modal dialog

As an UI user of the qto application
In order to be able update the application data via the UI by using a more familiar form-like interface
I want to be able to edit the data for any item by clicking on an edit button, and filling the fields of a form

2.5.4. Items creation

As an UI user of the application
I order to create new items in the application
I want to be able to create them via the UI
by clicking "create new button" and filling as few as possible data entries and clicking a Save button for ANY of the items in the application.

2.5.5. Items deletion

As an UI user of the application
I order to delete existing items in the project
I want to be able to delete them via the UI
by clicking a "delete " button and confirming the deletion for the item

2.5.6. Items export

As an UI user of the application
I order to export the data of the items in the application
I want to be able to perform the following data export from a single button click on the UI or a single url access:
- export to md docs (github , azure)
- export to pdf docs
- export to xls files
- export to msft docx docs
- export to json dump files

2.5.7. Items import

As an UI user of the application
I order to import data of the items in the application
I want to be able to perform the following data imports in the UI from a single button click and pointing to the file path of a file
- import from md docs
- import from pdf docs
- import from xls files
- import from msft docx docs
- import from json dump files

2.6. The view doc page UI

As an UI user of the qto application
in order to be able to efficiently process hierarchical relational data for any project
I want to be able to list all or part of the project's database table via a single UI

2.6.1. View page navigation

As an UI user
In order to quickly grasp the content of a view doc
I want to be able to quickly and effortlessly navigate the view doc page.

2.6.1.1. Title numbers link navigation and sharing

As an UI user
In order to read the the current item in the top of the screen and to be able to refer it exactly with a link
I want to be able on click the system to move it on the top of the screen and to change the url pointing to the exactly chosen item.

2.6.1.2. Title numbers link navigation and sharing

As an UI user
In order to read the the current item in the top of the screen and to be able to refer it exactly with a link
I want to be able on click the system to move it on the top of the screen and to change the url so that when the link is copied one could refer to it by sending it.

2.6.1.3. Access items by theirs ids

As an UI user
In order to be able to quickly access the content of a particular item
I want the System to be capable to scroll to it on the top of the view port of the page after I have clicked a link to it.

2.6.1.4. Keyboard navigation and editing

As an UI user
In order to be able to quickly navigate throughout the whole page once loaded
I want to be able to cycle every manageable element of the page with the keyboard in a logical order from the top till the bottom

2.6.1.4.1. Tabbing direction flow of tabbing

As an UI user
In order to be able to quickly navigate throughout the whole page once loaded
I want the cycling order to go from the omni-search box to the right-toc menu than to the titles and paragraphs of the document

2.6.1.4.2. TOC keyboard navigation

As an UI user
In order to be able to quickly navigate throughout the Table Of Contents section on the right page menu
I want to be able to cycle every manageable element in the TOC menu with the keyboard in a logical order from the top till the bottom and get visual indication for the selected / active links from the UI.

2.6.1.4.3. Faster text editing when tabbing

As an UI user
In order to be able to quickly delete text from the titles and/or the paragraphs
I want the UI to select the whole text of the title and the paragraphs while active, so that I could quickly copy or remove the text from the keyboard.

2.6.2. View doc page print preview

As an UI user
In order to be able to share the documents of a qto application in pdf format or even physically print them
I want to be able to see the whole document or just a branch of it in print-preview mode

Disable editing in print preview mode but keep the

2.6.2.1. links

As an UI user
In order to have as clean entity as possible to a pdf document I do not want to be able to add,edit or delete items from the print preview mode, however so that the clickable links should remain as part of the content

Disable the right and left menus in print preview mode

2.6.2.2.

As an UI User

In order to have as clean and easily printable document as possible in a pdf format I do not want to either see or access the right and left menu links.

2.6.3. Quick search in the view page

As an UI user of the qto application

In order to be able to quickly and effortlessly search the content of the loaded document in the view doc page

I want to be able to focus the search-box with a single shortcut / click and the document to be filtered by the content of the input search box, by highlighting the search item.

2.6.4. Hierarchical items management

As an the ui user

In order to manage the hierarchical items in the application

I want to be able to manage by actions (list, create, update, delete, search)

ANY hierarchical items of the application in from a hierarchical doc format by simply right clicking on their titles and choosing from the menu the action which must have both image and text to indicate more

2.6.4.1. Add Item

I want to be able to add items to the view page by simply right clicking the upper title of the item and selecting add item

2.6.4.2. Update item

I want to be able to update items data to the view page

2.6.4.2.1. Update item's title

I want to be able to update item's title by simply clicking in it and starting to type the new contents ...

2.6.4.2.2. Update item's description

I want to be able to update item's description by simply clicking in it and starting to type the new contents ...

2.6.4.2.2.1. Add interlinking in description

2.6.4.2.3. Update item's src_code

I want to be able to update item's src_code by simply clicking in it and starting to type the new contents ...

2.6.4.3. Delete item

As an UI user of the qto application

In order to quickly edit the structure of a hierarchical doc

I want to be able to move item by drag and drop from the left menu.

2.6.5. Move item in the hierarchy by drag and drop

As an the ui user

In order to navigate quickly in the document structure

I want to be able to see the document structure by clicking a right menu containing the Table of Contents of this document with a clickable links.

2.6.5.1. Move item in the hierarchy

As an UI user of the qto application

In order to quickly edit the structure of a hierarchical doc

I want to be able to move item by drag and drop from the left menu.

2.6.5.2. Search in the right menu

As an the ui user

In order to navigate quickly in the document structure

I want to be able filter quickly the right menu items by the means of right menu quick srch/filtering box which will filter the items containing the string I am typing for dynamically

2.6.5.3. Links in the right menu

As an the ui user
In order to navigate quickly in the document structure by levels
I want to be able to simply click on the links (level 1 , level-2 , level-3 etc.)
which will open the document

2.6.6. Left menu navigation

As an UI user of the qto application
In order to be able to quickly jump to a different document / listing
I want to be able to click on the upper left corner of the view page and
access the hierarchical project structure of the whole project from the left
menu.

2.6.7. Hierarchy management

As an UI user of the qto application
In order to be able to quickly jump to a different document / listing
I want to be able to click on the upper left corner of the view page and
access the hierarchical project structure of the whole project from the left
menu.

2.6.7.1. Single item move in the hierarchy

As a qto application UI user
In order to be able to move a single item anywhere in the hierarchy
I want to be able to move it by drag and drop on the left side of the
document.

2.6.7.2. Single item move in the hierarchy

As a qto application UI user
In order to be able to move a single item and all it's descendants anywhere
in the hierarchy
I want to be able to move it by drag and drop on the left side of the
document.

2.6.8. Pictures management in the view doc page

2.6.8.1. Add picture

As a qto application UI user
In order to have pictures in the documents
I want to be able to add pictures by ...

2.6.8.2. Edit picture

As a qto application UI user
In order to have pictures in the documents
I want to be able to add pictures by ...

2.6.8.3. Delete picture

As a qto application UI user
In order to have pictures in the documents
I want to be able to delete pictures by ...

2.6.9. Multimedia links management

2.6.9.1. Edit embedded multimedia link

2.6.9.2. Edit embedded multimedia link

2.6.9.3. Delete embedded multimedia link

2.7. The global search page / the search UI

As an qto ui user
In order to be able to search ANY items (issues, problems, ideas etc.)
I want to have a pop-up search SearchBox with dimmed background
providing with interactive autocomplete, which would assist me in specifying
the search criteria for any item I want to list.

2.7.1. Global search from the list page

As an qto ui user
In order to be able to search ANY items (issues, problems, ideas etc.) from
the list page
I want to be able to search from the list page by simply clicking on a search
textbox on the top left of the page, typing the search phrase I want to search
for and getting the results by hitting enter or clicking the search icon on the
right of the search box ...

2.7.2. Global search from the view page

As an qto ui user
In order to be able to search ANY items (issues, problems, ideas etc.) from
the view page
I want to be able to search from the view page by simply clicking on a search
icon (might be the / shortcut as well) , the system should bring up a modal
dialog with the global search ui, than I should be able to type the search
phrase I want to search for and hit enter, when the System should present
me the search results.

2.7.3. Global search modal dialog ui

As an UI user
In order to have the best possible search experience
I want to be able to search from a modal dialog UI which will pop-up on a
dimmed background after the search-box is focused ..

2.7.3.1. Search-autocomplete on modal search dialog

As an UI user
In order to get quickly to exactly the searched item I am searching for
I want the System to present me with autocomplete of the mostly occurring
string I am searching for with the name of the item on the left and when
clicking on it I want it to open the list as grid page with all the items having
this item in the search ...

2.8. The notes page / UI

The 7 sticky notes would be used for practising :
- the crud's with web sockets
- the per user data management

2.9. The chat page / UI

As UI user
In order to :
be able to quickly communicate an issue with other users of the qto
applications
I want to :
be able to use a quick chat with other users within the application instance

2.10. Multi-project aware UI

As the UI user of an qto instance
In order to save be able to track my personal time usage between different
projects and the different interdependencies
I want to be able to move items data from one project to another via the UI.

Items data transfer between different projects

2.10.1.

As the UI user of an qto instance
In order to manage multiple projects efficiently
I want to be able to move items data from one project to another via the UI in
a trusted manner.

2.10.2. Items move

As an UI user of the application
In order to move the items into different tables
I want to be able to move them from a button in the listing page by
specifying the target table

2.11. Issues import from Google calendar

As the UI user of an qto instance
In order to be able to visualise and manage my start- and stop_time having issues better
I want to be able to import my Google calendar issues into my qto profile on an qto instance

3. TEAM LEADER BIZ PERSPECTIVE

As a team leader
In order to operate successfully one or many projects of my team(s)
I want to have a nice user experience while using the qto tool.

3.1. Roles management

As the Instance Owner or Product Owner
in order to have a finer granularity on the different data stored in my instance
I want to be able to define roles and per roles visibility on :
- item page level
- item row level
- item tag level

3.2. Projects management

As an team leader
In order to be able to manage multiple projects
I want to be able to create , update and remove projects.

3.3. Users management in a project

As an team leader
In order to be able to efficiently allocate human resources to a project
I want to be able manage (create , update , delete and search) users for each project.

3.3.1. Users access management

As a team leader
In order provide the persons and programs access to my project
I want to provide read, write access to the data and execute access (run DDL's) per table

3.3.1.1. Grant access per project

As a team leader
In order to enroll authenticated users into the project I am responsible to
I want to be able to grant them with access by only writing their e-mail into a text field and clicking invite button.

3.3.1.2. Personal data handling minimization

As a team leader
In order to avoid legal obligations and complex procedures, while handling personal data
I want to be able to handle the interpersonal exchange of data by collecting ONLY the e-mail of the persons or programs participating in the project.

3.4. Security Management

As an team leader
In order to keep my business data secure
I want to be able decide which users to which projects will have access to the data my qto application has access to.

3.5. Secure access to data

As the team leader of a qto project
In order
I want to be able to grant separate read, write and execute access per table and role

Role based secure access to data per table for role

3.5.1.

As the team leader of a qto project
In order to restrict the certain operations to certain tables for the authenticated roles
I want to be able to grant separate read, write and execute access per table and role.

3.5.2. Role based secure access to data per row

As the team leader of a qto project
In order
I want to be able to grant separate read, write and execute access per table and role

3.6. Time management

As an team leader
In order to be able the maximise the performance of the team for qto used periods
I want to to be able to manage time efficiently
by accessing a simple page containing its value and the period it is related to.

3.6.1. Closing of a period

As the team leader of a qto project
In order to keep track the history of
I want to to be able to manage time efficiently
by accessing a simple page containing its value and the period it is related to.

4. TEAM MEMBER BIZ PERSPECTIVE

As a team member
In order to operate successfully in the project
I want to have a nice user experience while using the qto application
by being able to manage all the items in the application (issues,questions,problems , etc.)

4.1. Issues management

As a team member of the qto
In order to achieve the best possible efficiency during the work on one or many projects
I want to be able to manage the issues in those projects.

4.1.1. Remove existing issues

As an team member
In order to be able to stop the work on existing issues
I want to be able to remove issues via the qto

4.1.2. Search for existing issues

As an team member
In order to be able to change attributes of the issues I am responsible for
I want to be able to update the issues' data.

4.1.3. Track issues progress

As an team member
In order to be able to quickly access existing issues
I want to be able to search the issues.

4.1.4. Track issues history

As a team member
In order to keep track on the changes of the issues
I want to be able to follow the history of the changes

4.2. Items management

As a team member of the qto
In order to achieve the best possible efficiency during the work on one or many projects
I want to be able to manage the Items in those projects, where items could be (problems , questions etc.

4.3. Issues management

As a team member of the qto
In order to achieve the best possible efficiency during the work on one or many projects
I want to be able to manage the issues in those projects.

4.3.1. Update existing Items

As an team member
In order to be able to manage new Items
I want to be able to create Items via the qto

4.3.2. Remove existing Items

As an team member
In order to be able to stop the work on existing Items
I want to be able to remove Items via the qto

4.3.3. Search for existing Items

As an team member
In order to be able to change attributes of the Items I am responsible for
I want to be able to update the Items' data.

4.3.4. Track Items progress

As an team member
In order to be able to quickly access existing Items
I want to be able to search the Items.

4.3.5. Track Items history

As a team member
In order to keep track on what and when was planned on daily basis
I want to be able to keep track what was planned on a project term - day, week, month, year, quinquennial or decade

4.4. Track issues relations

As a team member of a project
In order to trace the issues relations to userstories, features and tests or any other objects
I want to be able to access the related objects to an issue by means of a link

4.5. Items management

As a team member of the qto
In order to achieve the best possible efficiency during the work on one or many projects
I want to be able to manage the Items in those projects, where items could be (problems , questions etc.

4.6. Measure success

As a team member
In order to measure the success of the planned issues
I want to be able to measure the deliverables of each issue by comparable metrics.

4.7. Monitor success

As a team member
In order to monitor the success of the planned issues
I want to be able to monitor the metrics of the issues.

4.8. Track issues relations

As a team member of a project
In order to trace the issues relations to userstories, features and tests or any other objects
I want to be able to access the related objects to an issue by means of a link

4.9. Time management

As an issues-manager
In order to be prepared for issues such as (events , tasks) which have start and stop time
I want to be able to save their start time and stop time per issue in every possible interface

4.9.1. time centric planning

As an issues-manager
In order to be able to plan the issues data for a certain term - day,week,month,year,quinquennial or decade
I want to be able to perform all the features of the qto on that specific period regardless whether it is today , in the past or in the future

4.9.2. time centric reporting

As an issues-manager
In order to be able to report the issues data for a certain term - day,week,month,year,quinquennial or decade
I want to be able to perform all the features of the qto on that specific day regardless whether it is today , in the past or in the future

4.10. Project's persons issue combinations

As the project manager of an qto project
In order to be able to quickly and reliably combine the reported hours by the project's people
I want to be able to read their qto formatted google sheets and combine them into a single project's google qto sheet

5. PROJECT OBSERVER BIZ PERSPECTIVE

As a project observer
In order to observe the advancement of a project
I want to have a nice user experience while using the qto application.

5.1. Projects observation

As a project observer
In order to observe the advancement of a project
I want to be able to observe the project's data.

5.2. Measure success

As a team member
In order to measure the success of the planned issues
I want to be able to measure the deliverables of each issue by comparable metrics.

5.3. Issues observation

As a project observer
In order to observe the advancement of the project's issues
I want to be able to observe the project's issues.

5.4. Monitor success

As a team member
In order to monitor the success of the planned issues
I want to be able to monitor the metrics of the issues.

6. SYSADMIN PERSPECTIVE

As a sysadmin of the qto application
In order to complete the tasks and activities of my role
I want to have a nice user experience while using the qto application.

6.1. System deployability

As the SysAdmin
In order to be able to provide access to a new database driven application to my organization
I want to be able to deploy an instance of the qto application and spawn a new project out of it in less than a hour from a clean Linux host including AWS.

6.2. Time management

As an issues-manager
In order to be prepared for issues such as (events , tasks) which have start and stop time
I want to be able to save their start time and stop time per issue in every possible interface

6.3. System stability

As the SysAdmin
In order to minimize downtimes and ensure continuous operations
I want the System containing the qto application to perform its defined functions on request without interruptions or unknown side effects

6.4. Generic CRUDS for items

As a team member
In order to be able to manage all the items in the application I have access to
I want to be able to create,update,delete and search for those items from the UI of the application.

Almost Hot meta-data reload for alter table statements

6.5.

As the SysAdmin of an qto project database
In order to be able to perform quick changes on the database side, WITHOUT having to evoke downtime or code new changes in the UI
I want to be able to simply run the alter table statements, reload one of the following tables from the list page: meta_tables, meta_columns or items_doc and be sure that none of the clients will get meta-data related errors during their next page refresh for this altered item table.

Hot meta-data reload for alter table statements

6.6.

As the SysAdmin of an qto project database
In order to be able to perform quick changes on the database side, WITHOUT having to evoke downtime or code new changes in the UI
I want to be able to simply run the alter table statements and be sure that none of the clients will get meta-data related errors during their next page refresh for this item table.

6.7. System reliability

As the SysAdmin
In order to be able to rely on the operations of the tool
I want the System containing the qto application to perform its functions as specified consistently

6.8. Project's persons issue combinations

As the project manager of an qto project
In order to be able to quickly and reliably combine the reported hours by the project's people
I want to be able to read their qto formatted google sheets and combine them into a single project's google qto sheet

6.9. Ease of use

As the SysAdmin
In order to be efficient and decrease the amount of errors
I want to generally perform any command the system within the sysadmin scope via clean and memorable oneliners

7. PROJECT OBSERVER BIZ PERSPECTIVE

As a project observer
In order to observe the advancement of a project
I want to have a nice user experience while using the qto application.

7.1. Security

As the SysAdmin
In order to be able to provide the best possible security level of operation for the qto instance I am responsible for
I want to have pre-defined and clear set of tasks and activities to perform related to the security.

7.2. Projects observation

As a project observer
In order to observe the advancement of a project
I want to be able to observe the project's data.

7.2.1. who logged in and out when

As the SysAdmin
In order to provide the best possible security for the data of my organisation
I want to be able to provide easily and quickly answer to the question :
Who logged in and out when?

7.3. Issues observation

As a project observer
In order to observe the advancement of the project's issues
I want to be able to observe the project's issues.

7.3.1. who changed what and why

As the SysAdmin
In order to provide the best possible security for the data of my organisation
I want to be able to provide easily and quickly answer to the question :
Who changed what and why?

8. ETL AND INTEGRATIONS PERSPECTIVE

As an ETL and integrations specialist
In order to complete the tasks and activities of my role
I want to have a nice user experience while using the qto application.

8.1. Database userstories

8.1.1. Database to json files data load

As the ETL and Integration Specialist
In order to be able to quickly move all the project data into a different storage format
I want to be able to export the project db data into json files - one per table via a single shell call.

8.1.2. Database metadata export

As the ETL and Integration Specialists
In order to be able to show, communicate and store the meta-data of my application
I want to be able to export the project's database meta-data into an xls file.

8.2. System deployability

As the SysAdmin
In order to be able to provide access to a new database driven application to my organization
I want to be able to deploy an instance of the qto application and spawn a new project out of it in less than a hour from a clean Linux host including AWS.

8.3. System performance

As the SysAdmin
In order to ensure the performance of the qto application
I want the System containing the qto application to perform its functions within the defined performance criteria.

8.4. Json files to db data load

As the ETL and Integration Specialist
In order to be able to quickly move all the project data from json files into the db tables
I want to be able to import the exported json files (one per table) into the database.

8.5. System stability

As the SysAdmin
In order to minimize downtimes and ensure continuous operations
I want the System containing the qto application to perform its defined functions on request without interruptions or unknown side effects

8.6. System reliability

As the SysAdmin
In order to be able to rely on the operations of the tool
I want the System containing the qto application to perform its functions as specified consistently

8.7. xls-to-postgres-db hierarchical data load

As the Data Integrator
In order to be efficient while handling the System's hierarchical data
I want to be able to
use a single shell call to load all or chosen table(s) to the postgres db

error reporting in xls-to-postgres-db hierarchical data

8.7.1. load

As the Data Integrator
In order to be efficient while troubleshooting data loading errors
I want to be able to see :
- which table's load failed
- what was the error in failed to

8.8. Ease of use

As the SysAdmin
In order to be efficient and decrease the amount of errors
I want to generally perform any command the system within the sysadmin scope via clean and memorable oneliners

8.9. Security

As the SysAdmin
In order to be able to provide the best possible security level of operation for the qto instance I am responsible for
I want to have pre-defined and clear set of tasks and activities to perform related to the security.

8.10. Project deployment

As a potential Developer of the qto or a qto application
In order to have the easiest installation experience
I want to be able to deploy fully functional development environment on a clean host in less than an hour with a single oneliner.

8.11. System verifiability and testability

As an ITOPS
In order to be able to rely on the operations of the tool and manage easily its features and functionalities
I want to easily verify and test parts or the whole System by issuing a single shell call.

9. DEVOPS PERSPECTIVE

As an ETL and integrations specialist
In order to complete the tasks and activities of my role
I want to have a nice user experience while using the qto application.

9.1. Clarity and brevity of the end to end tests

As an ITOPS
In order to be able to verify all the features and functionalities of the tool within the System
I want to see the results of each test in 1 flow in the following format:

Databases - local to remote and remote to local sync

9.2.

As a DevOps Operator

In order to :

- keep the dog-footed local and remote db instances in sync
- and have full mobile access via the web

I want to :

- be able to apply a full db dump remotely via a single one-liner
- both local to remote and remote to local

9.2.1. Abort end-to-end tests on single test fail

As an ITOPS

In order to be able to run continuously end-to-end tests and skip for several runs failing tests

I want to be able to configure the single e2e entry point script to skip certain tests, but report me what was skipped.

9.3. Database to json files data load

As the ETL and Integration Specialist

In order to be able to quickly move all the project data into a different storage format

I want to be able to export the project db data into json files - one per table via a single shell call.

9.4. Logging

As a Full-Stack Developer

In order to quickly understand what is happening in the application

I want to have easy-to-use and highly customisable logging to both file and console.

9.5. Json files to db data load

As the ETL and Integration Specialist

In order to be able to quickly move all the project data from json files into the db tables

I want to be able to import the exported json files (one per table) into the database.

9.5.1. Control flow logging

As a CLI user

In order to be able to understand what the issue tracker tool is executing

I want to have configurable logging with stderr, stdout and file output

9.6. xls-to-postgres-db hierarchical data load

As the Data Integrator

In order to be efficient while handling the System's hierarchical data

I want to be able to

use a single shell call to load all or chosen table(s) to the mysql db

9.6.1. Log entries format configuration

As a Full-Stack Developer

In order to be able to get the msg of any component of the application

I want each log entry to content:

- the type of the entry - log , error , warn , fatal
- the timestamp of the log entry event
- the name of the component issueing the msg and the line num of the src file
- the msg as it was echoed by the application

9.7. xls-to-postgres-db hierarchical data load

As the Data Integrator

In order to be efficient while handling the System's hierarchical data

I want to be able to

use a single shell call to load all or chosen table(s) to the postgres db

9.7.1. Single entry point for end to end tests

As an DevOps

In order to be able to verify all the features and functionalities of the tool within the System

I want to run a single shell call running all the end-to-end test of the application ensuring the specified features and functionalities.

9.7.2. Tool run log to human readable description

As a CLI user
In order to be able to get a human readable description of the log of the specific run of the tool
I want to be able to translate the recorded uuid's in the execution run log to their respective records

Application's source code and documentation integrity

9.8.

As a Full-Stack Developer
In order to make easy the entry of other developers to the projects
I want to be able to point to written documentation for user-stories, issues, features and functionalities, which will be linked to parts of the source code.

9.9. System deployment

As a potential Developer of the qto or a qto application
In order to have the easiest installation experience
I want to be able to deploy fully functional development environment on a clean host in less than an hour with a single oneliner.

9.9.1. Userstories to test case relations

As a Developer
In order to ensure the stability and expandability of the application
I want to be able to run for each implemented user-story a single test

UUID trackability for test files and userstories

9.9.2.

As a Developer
In order to identify each user-story to be tested with its according test
I want to be able to track each user-story or test code entry point file by UUID.

9.10. System verifiability and testability

As an ITOPS
In order to be able to rely on the operations of the tool
and manage easily its features and functionalities
I want to be able to easily verify and test parts or the whole System
by issuing a single shell call.

9.10.1. Components start run message print

As a CLI user
In order to know when a component has been started
I want to be able to see the "START <<COMPONENT NAME>>" on either the STDOUT or the log file of the component

9.10.2. Tool exit with exit code and exit message

As a CLI user or calling automated component
In order to be able to understand whether or not the execution of the call to the tool was successful or not
I want to get the exit code from the tool execution and see the exit message

9.10.3. Execution path tracing by UUID's

As a DevOps operator
Foreach execution run of the tool
I want to be able to walk through the execution path of the tool programmatically.

9.11. Logging

As a Full-Stack Developer
In order to quickly understand what is happening in the application
I want to have easy-to-use and highly customisable logging to both file and console.

9.11.1. Issues directories naming conventions

As a issues manager
In order to be able to manage lots of issues from different projects stored in plain txt files
I want to be able to store large quantity of issues txt files by their date on daily, weekly, monthly, yearly and decadally basis

9.11.2. Issues files naming conventions

As a issues manager
In order to be able to manage lots of issues from different projects stored in plain txt files
and open them quickly
I want to be able to just type the first letter in a text editor supporting select opened file by typing its first letter and jump to that file

9.11.3. Issues files history

As a CLI user
In order to be able quickly to search trough old issues
I want to be able to access old issues files by their date held in their file names from the file system

9.11.4. Issues files naming conventions

As a DevOps
In order to be able quickly to access and manage programmatically issues
I want to be able to guess the file paths of the issues file by their date

Application's source code and documentation integrity

9.12.

As a Full-Stack Developer
In order to make easy the entry of other developers to the projects
I want to be able to point to written documentation for user-stories, issues, features and functionalities, which will be linked to parts of the source code.

Issues files naming conventions for the project

9.12.1.

As a DevOps
In order to be able quickly to switch between different projects
I want to have the project name of the issues file in its name as the first token as follows:
<<issue_tracker_project>>-issues.<<current-iso-date>>.
<<daily|weekly|monthly|yearly>>.txt

9.13. Configuration management

a single route to copy paste the appConfig in json

9.13.1. format

As a DevOps Operator
In order to quickly dig out basic confs about the current project , I want to be able to have a route for that in the web ui ... so that I could quickly just copy paste that json ... or create another application.conf out of it ...

Issues files naming conventions for current date

9.13.2.

As a DevOps
In order to be able quickly and programmatically to go back in the history
I want to have the current registration date in the file name and path
<<issue_tracker_project>>-issues.<<current-iso-date>>.
<<daily|weekly|monthly|yearly>>.txt

Issues files naming conventions for the time frame

9.13.3.

As a DevOps
In order to be able quickly and programmatically to go back in the history
I want to have the current registration date in the file name and path
<<issue_tracker_project>>-issues.<<current-iso-date>>.<< (daily|weekly|monthly|yearly) >>.txt

9.14. Issues transformations

As a cli user of the qto application
In order to be able to sort the issues according to their attributes
and edit them in both txt file and xls file
I want to be able to perform the following loads:
txt-to-db - to load a txt file with issues to an issues table in db
db-to-xls - to load a xls file from db table to xls
xls-to-db - to load a xls file with issues to an issues table in db
db-to-txt - to load a txt file from db table

9.14.1. Load by txt-to-db action

As a cli user of the qto application
in order to store my issues in structured form to db for further processing
I want to be able to load any issue file with a single line shell call to a db

9.14.1.1. Load issues file from file system to db

As a cli user of the qto application
- in order to be able to handle issues from different projects
- and load them to db for further processing
I want to:
- pre-set the variables of the project
- and then load any issue file with a single line shell call to a db
- and optionally specify the period of the issues file (daily , weekly , monthly
, yearly) with daily as default

9.14.2. Load issues by db-to-xls action

As a cli user of the qto application
in order to be able to sort and edit my issues in Excel
I want to be able to unload my issues from one or many tables in the db at
once in a single shell call

9.14.3. Load issues by xls-to-db action

As a cli user of the qto application
in order to store my issues in structured form to db for further processing
after being sorted in Excel
I want to be able to load my latest xls file with a single line shell call to a db
by choosing the names of the tables to load

Load issues by xls-to-db action for insert or upset

9.14.3.1.

As a cli user of the qto application
in order to insert or upset my issues in structured form to db for further
processing after being sorted in Excel
I want to be able to load my latest xls file with a single line shell call to a db
by choosing the names of the tables to load and specifying upset by adding
the guid column to the xls sheet

Load issues by xls-to-db action by truncating or not

9.14.3.2. the loadable table

As a cli user of the qto application
in order to store my issues in structured form to db for further processing
after being sorted in Excel
I want to be able to load my latest xls file with a single line shell call to a db
by choosing the names of the tables to load

9.14.4. Load issues by db-to-txt

As a cli user of the qto application
in order to store my issues in more structured data format for further
processing
I want to :
- be able to load the issues for a period from the db to a file
- by choosing the names of the tables to load

xls-to-db action load sort by issues prio attribute

9.14.4.1.

As a cli user of the qto application
during the db-to-txt action load
in order to understand the priority of my issues
I want to :
- be able to specify the order in the issues txt files lines to be based on the
prio attribute
by choosing the names of the tables to load

9.14.5. Load issues file from db to file system

As a cli user of the qto application
in order to store my issues in more structured data format for further
processing
I want to :
- be able to load the issues for a period from the db to a file
- and optionally specify the period of the issues file (daily , weekly , monthly
, yearly) with daily as default

9.15. issues file filtering

As a CLI user
In order to filter quickly my issues
I want to be able to show the issues with their categories of only certain
status

9.16. Single shell call for projects switching

As an issues-manager
In order to be able to switch between different projects quickly
I want to be able to issue a single shell call for loading a project's
configuration
and run the issue-handler against this pre-loaded configuration

9.17. Issues publishing from shell calls

As a DevOps
In order to be able to quickly share the current issues data in tabular format
I want to be able to issue a single shell call for copying the current items
data to a medium by specifying the tables to be published

9.17.1. Issues publishing in e-mail format

As a DevOps
In order to be able to quickly share the current issues data in email format
I want to be able to issue a single shell call for copying the current items
data to email by specifying the tables to be published

9.17.2. Issues handling in google sheet format

As a DevOps
In order to be able to quickly share the current issues data in tabular format
I want to be able to issue a single shell call for copying the current items
data to google sheet by specifying the tables to be published

9.17.3. Issues publishing in google calendar format

As a DevOps
In order to be able to quickly share the current issues data in google
calendar format
I want to be able to issue a single shell call for copying the current items
data to google calendar by specifying the tables to be published for the items
having set start_time and stop_time attributes.

9.18. Issues transformations

As a cli user of the qto application
In order to be able to sort the issues according to their attributes
and edit them in both txt file and xls file
I want to be able to perform the following loads:
txt-to-db - to load a txt file with issues to an issues table in db
db-to-xls - to load a xls file from db table to xls
xls-to-db - to load a xls file with issues to an issues table in db

10. UI DEVELOPER PERSPECTIVE

As the UI Developer
In order to be able to deliver working solutions for the UI
I want to have user friendly development experience.

10.1. Easy setup for testability

5b04d8fa-1ebb-4fe7-a9ad-700c40a57f3c

10.2. Code traceability by uuid

As the UI Developer
In order to be able to grasp the inner working of the application
I want to be able to search by user-story uuid from the source code of the application

10.3. Single shell call for projects switching

As an issues-manager
In order to be able to switch between different projects quickly
I want to be able to issue a single shell call for loading a project's configuration
and run the issue-handler against this pre-loaded configuration

10.4. Issues publishing from shell calls

As a DevOps
In order to be able to quickly share the current issues data in tabular format
I want to be able to issue a single shell call for copying the current items data to a medium by specifying the tables to be published

10.5. Metadata handling

As a DevOps operator
In order to be able to programatically manage all aspects of my data
I want to have a single entry point to manage the meta data per tables , columns and UI elements
so that even a table, column or whatever object is not populated in the meta still there will be default values for it usable by the application.

10.6. Easy setup for testability

As the UI Developer
In order to deliver working ui units
I want to be able to quickly setup the existing project with minimalistic default set of data

11. ARCHITECTURAL PERSPECTIVE

11.1. Full horizontal scalability

As the architect of an qto instance
In order to be able to sell a solution, which does not require unknown amount of work regarding scalability
I want the qto application to be fully horizontally scalable for both the application and database layers.

