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## USERSTORIES AND SCENARIOS

### 1. 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.

#### 1.1. 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.

#### 1.2. 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

##### 1.2.1. Desktop 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

##### 1.2.2. Table 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

##### 1.2.3. Mobile 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.

### 1.3. 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  
I want to be able to perform quick filtering on ALL the UI elements from the page from a single omin search-box placed at the top bar of the screen

#### 1.3.1. 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

#### 1.3.2. View page quick filtering

#### 1.3.3. Search results page quick filtering

### 1.4. project

The left menu UI - organising the structure of the

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

#### **1.4.1. 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".

#### **1.4.2. 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".

#### **1.4.3. 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

### **1.5. 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

#### **1.5.1. 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.

#### **1.5.2. 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 ...

#### **1.5.3. Items editing**

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

##### **1.5.3.1. 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 wan to to be able to edit it Excel table like by quickly navigating trough an grid and type the new values to update.

##### **1.5.3.2. 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

#### 1.5.4. 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.

#### 1.5.5. 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

#### 1.5.6. 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
- export to pdf docs
- export to xls files
- export to msft docx docs
- export to json dump files

#### 1.5.7. 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

### 1.6. The view 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

#### 1.6.1. 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.

##### 1.6.1.1. 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.

##### 1.6.1.2. 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.

#### **1.6.2. 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**

#### **1.6.2.1. 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**

#### **1.6.2.2.**

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.

#### **1.6.3. 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 on the left menu, so that after typing 3 letters the left menu will get filtered by the search string.

#### **1.6.4. 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

##### **1.6.4.1. 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

##### **1.6.4.2. Update item**

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

###### **1.6.4.2.1. 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 ...

###### **1.6.4.2.2. 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 ...

#### **1.6.4.2.3. 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 ...

#### **1.6.4.2.4. Move item in the hierarchy**

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

#### **1.6.4.3. Delete item**

I want to be able to delete an item by right clicking it's title and choosing delete item.

#### **1.6.5. Right TOC menu navigation**

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.

##### **1.6.5.1. Open and close of right menu**

As an the ui user  
In order to navigate quickly in the document structure  
I want to be able to open and close the right menu quickly from both it's top and the bottom

##### **1.6.5.2. 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

##### **1.6.5.3. 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

#### **1.6.6. Left menu navigation**

As a QTO application UI user  
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 hierarchichal project structure of the whole project from the left menu.

#### **1.7. 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.

##### **1.7.1. 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 ...

### **1.7.2. 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.

### **1.7.3. 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 ..

#### **1.7.3.1. 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 ...

## **1.8. The notes page / UI**

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

## **1.9. 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

## **1.10. 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**

#### **1.10.1.**

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.

## **1.11. Items management**

As an UI user of the application  
In order to be able to manage multiple different items and entities  
I want to be able to perform multiple actions on items easily and efficiently.

#### 1.11.1. 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

#### 1.12. 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

#### Access issues data from Google sheet ( deprecating )

#### 1.13.

As the biz user of the issue tracker tool  
In order to be able to share and edit the data with multiple users authenticated within the Google eco system  
I want to be able to access , edit and update the issues data from google sheet.

### 2. 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.

#### 2.1. 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

#### 2.2. 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.

#### 2.2.1. 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.

#### 2.2.2. 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

#### 2.2.2.1. 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.

#### 2.2.2.2. 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

### **2.3. 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.

### **2.4. Time management**

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

## **3. 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. )

### **3.1. 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.

#### **3.1.1. 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

#### **3.1.2. 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.

#### **3.1.3. 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.

#### **3.1.4. 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

### **3.2. Items management**

As a team member of the qto  
In order to achieve the best posible 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.

### **3.3. 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.

#### **3.3.1. 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

#### **3.3.2. 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

#### **3.3.3. 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.

#### **3.3.4. 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.

#### **3.3.5. 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

### **3.4. 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

### **3.5. 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.

### **3.6. 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.

### **3.7. 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.

### 3.8. 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

### 3.9. 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

#### 3.9.1. 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

#### 3.9.2. 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

### 3.10. 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

## 4. 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.

### 4.1. 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.

### 4.2. 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.

### 4.3. 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.

### 4.4. 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.

## **5. 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.

### **5.1. 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.

### **5.2. 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

### **5.3. 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

### **5.4. 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.

### **5.5. 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

### **5.6. 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

### **5.7. 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

## **6. 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.

## 6.1. 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.

## 6.2. 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.

### 6.2.1. 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?

## 6.3. 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.

### 6.3.1. 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?

## 7. 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.

### 7.1. 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.

### 7.2. 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.

### 7.3. 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.

### 7.4. 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.

## **7.5. 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

## **7.6. 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

## **7.7. 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**

#### **7.7.1. 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

## **7.8. 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

## **7.9. 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.

## **7.10. 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.

## **7.11. 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 be able to easily verify and test parts or the whole System by issuing a single shell call.

## **8. 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.

## **8.1. 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:.

## **8.2. Databases - local to remote and remote to local sync**

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

### **8.2.1. 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.

## **8.3. 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.

## **8.4. 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.

## **8.5. 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.

### **8.5.1. 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

## **8.6. 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

### **8.6.1. 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

## 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

### 8.7.1. 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.

### 8.7.2. 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

## 8.8. Application's source code and documentation integrity

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.

## 8.9. 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.

### 8.9.1. 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

## 8.9.2. UUID trackability for test files and userstories

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.

## 8.10. 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 easily verify and test parts or the whole System by issuing a single shell call.

#### **8.10.1. 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

#### **8.10.2. 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

#### **8.10.3. 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.

### **8.11. 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.

#### **8.11.1. 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 decadal basis

#### **8.11.2. 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

#### **8.11.3. Issues files history**

As a CLI user

In order to be able quickly to search through old issues

I want to be able to access old issues files by their date held in their file names from the file system

#### **8.11.4. 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**

#### **8.12.**

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

### 8.12.1.

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
```

## 8.13. Configuration management

### a single route to copy paste the appConfig in json

#### 8.13.1. 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

#### 8.13.2.

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

#### 8.13.3.

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
```

## 8.14. 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

### 8.14.1. 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

#### 8.14.1.1. 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

#### 8.14.2. 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

#### 8.14.3. 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

##### 8.14.3.1.

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

##### 8.14.3.2. 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

#### 8.14.4. 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

##### 8.14.4.1.

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

#### 8.14.5. 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

#### 8.15. 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

### 8.16. 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

### 8.17. 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

#### 8.17.1. 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

#### 8.17.2. 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

#### 8.17.3. 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.

### 8.18. 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

## 9. 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.

### 9.1. Easy setup for testability

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### 9.2. 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

### 9.3. 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

#### 9.4. 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

#### 9.5. 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.

#### 9.6. 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

