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Blockchain Application (v1.0)

꧞essı꧞ User Manual
- v 1.0.3 -

Based on IEEE Std 1063-2001 [1]

Tuesday 17th October, 2017 - 18:24

Contents

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Chapter 1
Product information

1.1 Identification

Include precise information of the software product like identification name (that you can include in the Glossary), list of parts that compose it (indicating identification numbers for each part). Specify the applicable operating environment(s), including version(s) of hardware, communications, and operating system(s).

1.2 Copyright

1.3 Trademark notices

1.4 Restrictions

Restrictions on copying or distributing the software and its associated documentation.

1.5 Warranties

1.6 Contractual obligations

1.7 Disclaimers

1.8 Contact

Information for contacting the issuing organization.

Chapter 2
Introduction

2.1 Scope

This section has to provide the scope of the user's manual document. In the following some opening statements to use when providing the information corresponding to this section.

This document provides . . .

This document does not . . .

This document is not . . .

This document may be used with . . .

2.2 Purpose

In this section you explain the purpose (i.e. aim, objectives) of the user's manual. In the following some examples of opening statements to be used in this section.

The purpose of this document is . . .

This document defines . . .

This document is meant to . . .

2.3 Intended audience

Description of the categories of persons targeted by this document together with the description of how they are expected to exploit the content of the document.

2.4 *Blockchain Application (v1.0)*

Brief overview of the software application domain and main purpose.

2.4.1 Actors & Functionalities

Overview of all the **actors** interacting with the software being them either humans (called end-users in the standard [1]) or not. For each actor, describe the main software functions that are offered to him. Structure of this sub-section MUST be by actor/functionalities.

2.4.2 Operating environment

Brief overview of the infrastructure on which the software is deployed and used.

2.5 Document structure

Information on how this document is organised and it is expected to be used. Recommendations on which members of the audience should consult which sections of the document, and explanations about the used notation (i.e. description of formats and conventions) must also be provided.

Chapter 3
Usage Guide

This section is aimed at describing the general use of the software, since it is **deployed, configured** and **run**.

This software is used by actors. These actors rely on the software to perform a set of business activities (called here procedures) aimed at reaching a particular goal.

These prodedures are splet in two groups:

- **Multi-procedures:** which are procedures at **summary** or **user-goal** level involving several active or pro-active actors. Each of these procedures aims at illustrating intertwined business activities required to be performed by the involved actors to reach the expected goal. Each business activity between the system and an actor must correspond to a **system operation** instance given with actual parameter values.
- **Mono-procedures:** which are procedures at **summary** or **user-goal** level involving only one active or pro-active actor. Each of these procedures aims at illustrating the required business activities an actor has to perform to reach the expected goal. Each business activity between the system and the actor must correspond to a **system operation** instance given with actual parameter values.

Each process has to be documented using the following textual description template [2] **BUT its content must be as low level as possible with actual values**:

Procedure: ProcessMissionOne
Scope: Crisis Management System (*CMS*)
Primary Actor: Coordinator John
Secondary Actor(s): FirstAidWorker Bob,
    ExternalResourceSystem ERS
Goal: The intention of the Coordinator is to process mission with ID equal to 1.
Level: User-goal level
Main Success Scenario :
    1. *John* instructs the *CMS* to process the mission with ID equal to 12.031005
    2. *CMS* selects the internal worker *Bob* to execute the mission 12.031005
    3. *CMS* instructs *Bob* to behave as *First Aid Worker (FAW)*
    4. *Bob* informs the *CMS* of his arrival
    5. *Bob* informs the *CMS* that he starts to execute the mission 12.031005
    6. *Bob* informs the *CMS* that the mission 12.031005 outcome is "Mission completed"
Extensions :
    2.a None internal worker can execute the mission
        2.a.1 *CMS* sends a request for an external resource to the *ERS* actor instance
        2.a.2 *ERS* informs *CMS* that the request can be processed
        2.a.3 *ERS* informs *CMS* that *Bob* can now be selected as first aid worker
        procedure continues at step 3

Remark-Processes presentation: processes should be introduced to the reader in a pedagogical manner. Thus, simple and common processes should be presented before than more complex and less utilised ones.
Remark-Graphical User Interfaces (GUIs): include GUIs screenshots to show the different stages of the process while its is performed by the actor(s).

3.1 Multi-procedures

3.1.1 MyMultiProcedure1

. . .

3.1.2 MyMultiProcedure2

. . .

3.1.3 MyMultiProcedure3

. . .

3.2 Mono-procedures

Mono-procedures must be grouped by actors.

3.2.1 MyActor1

3.2.1.1 MyProcedure1MyActor1

. . .

3.2.1.2 MyProcedure2MyActor1

. . .

3.2.2 My-Actor2

3.2.2.1 MyProcedure1MyActor2

. . .

3.2.2.2 MyProcedure2MyActor2

. . .

Chapter 4
Software operations

This section explains the different operations and functionalities of the system and how to attain them.

4.1 System Administrator

This subsection provides a detailed description of system administrator specific functionalities.

4.1.1 Add Librarian

The add librarian functionality is only available for the system administrator. As the title suggests, the system administrator creates and adds a new librarian account being informed from organization/library.

Parameters: ID (Randomly generated), First Name, Last Name, Date of Birth
Precondition: The system administrator must be logged into the system and must have received the information about the librarian too add.
Post-condition: The new librarian account been added to the database system and the librarian and the organization have received an automated notification so that the account can be finalized.
Output messages: The librarian and the organization will receive an automated notification informing that the account can now be finalized.
Triggering:

1. From the users main window, click on the Add Librarian button to open the add librarian page.
2. Once the add librarian page opens, fill out all the required parameters with information related to the new librarian that is being created.
3. Click on the Submit button to add the new librarians information to a database.

subsectionEdit Librarian
The edit librarian functionality is used when editing user information. This includes but is not limited to the first name, last name and date of birth as well as password eventually. The goal of this feature is to allow the system administrator to edit a librarians information at the request of the librarian.

Parameters: ID, First Name, Last Name
Precondition: The system administrator must be logged in, at the users page and must have the different information of the librarian that needs to be edited.
Post-condition: The edits for the librarian have been saved and a system popup appears starting that the librarian information has successfully been edited and saved.
Output messages: The system administrator will see a system popup informing the system administrator that the librarian information has successfully been edited and saved.
Triggering:

1. Click on the "Edit Librarian" button that is found in the users main page.

2. Once the edit librarian page has opened, either find the user manually or search the user via the search field at the top.
3. Click on the Librarian ID to open up the edit details page.
4. Edit the necessary details of the user that need to be edited. Click submit when complete. You will be automatically be taken back to the users page.

4.1.2 Delete Librarian

The delete librarian is once again only available for the system administrator. The delete librarian functionality is used when deleting an existing librarian account that will no longer be used due to different reasons such as; the librarian no longer works, an unfortunate event has happened to the librarian.

Parameters: ID (Randomly generated), First Name, Last Name
Precondition: The system administrator must be logged into the system and must have received the information about the librarian too remove.
Post-condition: The librarian account has been successfully deleted from the database system and the sysadmin will receive an onscreen notification informing that the user has been successfully deleted.
Output messages: The librarian and the organization will receive an automated notification informing that the account can now be finalized.
Triggering:

1. Click on the Delete Librarian button at the bottom of the users main window to open the users deletion page.
2. Once in the users deletion page, find the user that needs to be deleted manually or via the search field.
3. Once the user has been found, click the red x to remove the user permanently from the database system.
4. Click on the "back/done" button to return to users page.

4.2 System Administrator

This subsection provides a detailed description of librarian specific functionalities.

4.2.1 Add Librarian

The add librarian functionality is only available for the system administrator. As the title suggests, the system administrator creates and adds a new librarian account being informed from organization/library.

Parameters: ID (Randomly generated), First Name, Last Name, Date of Birth
Precondition: The system administrator must be logged into the system and must have received the information about the librarian too add.
Post-condition: The new librarian account been added to the database system and the librarian and the organization have received an automated notification so that the account can be finalized.
Output messages: The librarian and the organization will receive an automated notification informing that the account can now be finalized.
Triggering:

1. From the users main window, click on the â€œAdd Librarianâ€ button to open the add librarian page.
2. Once the add librarian page opens, fill out all the required parameters with information related to the new librarian that is being created.
3. Click on the â€œSubmitâ€ button to add the new librarians information to a database.

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Precondition: The system administrator must be logged in, at the users page and must have the different information of the librarian that needs to be edited.
Post-condition: The edits for the librarian have been saved and a system popup appears starting that the librarian information has successfully been edited and saved.
Output messages: The system administrator will see a system popup informing the system administrator that the librarian information has successfully been edited and saved.
Triggering:

1. Click on the "Edit Librarian" button that is found in the users main page.
2. Once the edit librarian page has opened, either find the user manually or search the user via the search field at the top.
3. Click on the Librarian ID to open up the edit details page.
4. Edit the necessary details of the user that need to be edited. Click submit when complete. You will be automatically be taken back to the users page.

4.2.2 Delete Librarian

The delete librarian is once again only available for the system administrator. The delete librarian functionality is used when deleting an existing librarian account that will no longer be used due to different reasons such as; the librarian no longer works, an unfortunate event has happened to the librarian.

Parameters: ID (Randomly generated), First Name, Last Name
Precondition: The system administrator must be logged into the system and must have received the information about the librarian too remove.
Post-condition: The new librarian account been added to the database system and the librarian and the organization have received an automated notification so that the account can be finalized.
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3. Once the user has been found, click the red â€œxâ€ to remove the user permanently from the database system.
4. Click on the "back/done" button to return to users page.

Chapter 5
Error messages and problem resolutions

All known problems in using the software should be listed and explained in details using the structure presented below.

Contact information for reporting any problems (either with the software or this document) should be clearly indicated

5.1 Error message 1

5.1.1 Problem identification

A description explaining the meaning of the faced problem.

5.1.2 Probable cause

A description explaining the reasons why such a problem has been raised.

5.1.3 Corrective actions

Describe the required steps the actor should take to recover from such situation.

Appendix A
Title of the appendix 1

Here you write the context of the appendix, structuring such content in sections, sub-sections and sub-sub-sections, if needed.

An example of appendix is the flat presentation of all the graphical user interface screens. Each screen can be presented (identification symbol and description) and screens transition graph can be given.

A.1 My Section

Description of the section.

A.1.1 My subSection

A.1.1.1 My subSubSection

References

1. IEEE: IEEE Standard for Software User Documentation. IEEE Std 1063-2001 (Dec 2001) 1–24
2. Armour, F., Miller, G.: Advanced Use Case Modeling: Software Systems. Addison-Wesley (2001)