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Blockchain Application (v1.0)

Messir User Manual
- v 1.0.3 -

Based on IEEE Std 1063-2001 [?]

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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 document provides information regarding the usage of the ***Blockchain Application (v1.0)*** software.

This document is not intended to provide information about how to connect, deploy, configure, or use any external device or third-party software system that is rqeuired for the correct functioning of ***Blockchain Application (v1.0)*** .

This document may be used with other documents provided by third-party companies to have an overall view and correct understanding of the environment and procedures where the software system ***Blockchain Application (v1.0)*** is aimed to be deployed and run.

2.2 Purpose

This user manual is aimed towards the library's clients, who will be using the mobile app in order to gain access to their library account.

The purpose of this document is to help the users in navigating the different panels, as well as teach them the functionality that the application provides.

This document is meant to be read by the clients in order to make it more easy for them to adapt to using the application.

2.3 Intended audience

This document is meant to be used by all users of the ***Blockchain Application (v1.0)*** software, regardless of their age.

2.4 *Blockchain Application (v1.0)*

This software is designed to be used in accordance with a library system. The users are able to browse through list of loan-available books, send loan request for a certain book(s) and send reservation requests for temporarily unavailable books.

2.4.1 Actors & Functionalities

Overview of all the ***actors*** interacting with the software being them either humans (called end-users in the standard [?]) 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

The software will be only available for mobile platforms. There will be both an Android version as well as iOS version.

2.5 Document structure

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

4.1.2 Edit 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.

4.1.3 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
2. Click on the Delete Librarians button at the bottom of the users main window to open the users deletion page.
3. Once in the users deletion page, find the user that needs to be deleted manually or via the search field.
4. Once the user has been found, click the red x to remove the user permanently from the database system.
5. Click on the "back/done" button to return to users page.

4.2 Librarian

This subsection provides a detailed description of librarian specific functionalities.

4.2.1 Search Customer

The ”Search Customer” functionality is only available for librarians. As the title suggests, the librarian is able to look for customers using the customers ID

Parameters: Customer ID (provided by the customer), or other identifable information
Precondition: The librarian must be logged into the system and received the necessary information to look up the customer.
Post-condition: The librarian is now able to further inspect the customer and take further actions
Output messages: Prints the results in a table containing First name, Last name, internal Customer ID as well as account status (Active, Overdue, Suspended).
Triggering:

1. Enter the customer ID or any identfiable information into the search bar.
2. Select ”Customer” from the adjoining dropdown menu.
3. Hit the ”Search” button and a list of all customers matching the query will be displayed

4.2.2 Inspect Customer

The ”Inspect” button becomes available as soon as the librarian has searched for a customer, so he can check the info available on a customer

Parameters: None
Precondition: The librarian must be logged into the system, received the necessary information to look up the customer and started a query for said customer.
Post-condition: The librarian is now able to grant loans to the inspected customers, initiate a book return or suspend his account.
Output messages: None.
Triggering: Press the ”Inspect” button after searching for customers and selecting the one you want to inspect.

4.2.3 Search Book

The ”Search Book” functionality is available for the librarian. As the title suggest the librarian is able to view the books in the catalogue as well as perform other book related tasks.

Parameters: Book name, ISBN, author, or nothing if he intends to see the full catalogue
Precondition: The librarian must be logged into the system and received the necessary information to look up the book (if applicable).
Post-condition: The librarian is now able to check the status of all the books matching the search term, as well as add books to the catalogue, or remove one from it.
Output messages: Prints the results in a table containing ISBN, Author, full name, internal ID, as well as loan status (available, loaned, overdue).
Triggering:

1. Enter the ISBN or any identfiable information into the search bar.
2. Select ”Book” from the adjoining dropdown menu.
3. Hit the ”Search” button and a list of all books matching the query will be displayed

4.2.4 Add Book

The ”Add Book” functionality is available for the librarian. As the title suggest the librarian is able to add books to the catalogue after opening the latter through the ”Search Book” functionality.

Parameters: ISBN
Precondition: The librarian must be logged into the system, opened the book catalogue and pressed ”Add book”.
Post-condition: The librarian is now able to add a book to the catalogue by entering the books ISBN number into the popup windows and confirming with the ”Add book” button again. The system will automatically gather the author and book name from a server and assign it a random internal ID.
Output messages: None.
Triggering:

1. Open the library catalogue with the ”Search book” functionality by either searching for a specific book or viewing the whole catalogue by leaving the search field blank.
2. Select ”Add book” from under the table.
3. Enter the ISBN of the new book into the input field and confirm with ”Add book” to add it to the catalogue.