Filippo Lobisch Dragan Postolovski Mike Schmitz

Issuing University of Luxembourg

MySystem (v1.0)

Messip User Manual - v 1.0.3 -

Based on IEEE Std 1063-2001 [1]

Tuesday  $17^{\text{th}}$  October, 2017 - 19:23

## Contents

1	P	roduct in	nformation				5
	1.1	Identif	ification				5
	1.2	Copyri	right				5
	1.3	Trader	emark notices				5
	1.4		ictions				5
	1.5		anties				5
	1.6		ractual obligations				5
	1.7		aimers				5
	1.8						5
	1.0	Contac	300	• •	• •	•	٠
2	Ir	ntroductio	ion				7
	2.1	Scope					7
	2.2	Purpos	ose				7
	2.3		ded audience				7
	2.4		ystem~(v1.0)				7
		2.4.1	Actors & Functionalities				7
		2.4.2	Operating environment				8
	2.5		ment structure				8
	2.0	Docum	meno sorucoure			•	
3	$\mathbf{U}$	sage Gui	iide				9
	3.1	_	i-procedures				10
	0.1	3.1.1	MyMultiProcedure1				10
		3.1.2	MyMultiProcedure2				10
		3.1.3	MyMultiProcedure3				10
	3.2		p-procedures				
	5.2	3.2.1	MyActor1				
		3.2.1 $3.2.2$	My-Actor2				
		3.2.2	WIY-ACtor2		• •	•	10
4	S	oftware o	operations				11
	4.1		m Administrator				11
		4.1.1	Add Librarian				11
		4.1.2	Delete Librarian				12
	4.2		m Administrator				12
	7.2	4.2.1	Add Librarian				12
		4.2.2	Delete Librarian				13
	4.3		ts				13
	4.5	4.3.1	Request book loan				
		4.3.1 $4.3.2$					14
			Request book reservation				
		4.3.3	Cancel book reservation			•	14
5	E.	rror moss	ssages and problem resolutions				15
U	5.1		message 1				15
	0.1	5.1.1	Problem identification				$\frac{15}{15}$
		5.1.1 $5.1.2$	Probable cause				
		0.1.2 E 1 9	Compating actions		• •	٠	10

CONTENTS	3
----------	---

$\mathbf{A}$	Title of t	he appendix 1	 	 	 	 	. 17
	A.1 My S	Section	 	 	 	 	. 17
	A.1.1	My subSection	 	 	 	 	. 17
	References .		 	 	 	 	. 19

## List of Figures

## 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 MySystem (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 required for the correct functioning of MuSystem (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 MySystem (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 MySystem (v1.0) software, regardless of their age.

#### 2.4 MySystem (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 [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.

8 2 Introduction

## 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 proactive 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  $C\!M\!S$  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 Usage Guide

## 3.1 Multi-procedures

## $3.1.1\ MyMultiProcedure 1$

. . .

## $3.1.2\ MyMultiProcedure 2$

. . .

## $\it 3.1.3~MyMultiProcedure3$

. . .

#### 3.2 Mono-procedures

Mono-procedures must be grouped by actors.

## $3.2.1\ MyActor1$

#### ${\bf 3.2.1.1~MyProcedure1MyActor1}$

. . .

#### 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 Librarians 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.

12 4 Software operations

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 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. Click on the Delete Librarians 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 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

4.3 Clients 13

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.

#### 4.2.2 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.

**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.

graphicx

#### 4.3 Clients

This subsection provides a detailed description of the client mobile application's specific functionalities.

#### 4.3.1 Request book loan

When browsing books, the user has the option to request a book loan. The request is sent to the main server, where it will wait for a librarian's input, whether the loan is allowed or not.

Parameters: ISBN number, Book name

4 Software operations

Precondition: The library has at least one physical copy available of the required book in store

Post-condition:

Output messages: The client receives a confirmation of his request being sent successfully Triggering:

- 1. User opens the list of available books via the interface button on the bottom of the screen.
- 2. He then proceeds to click on a book of his choice.
- 3. In the newly opened screen, the user clicks on the Request loan button.
- 4. When the user clicks Request loan, the request is sent to the server and it then awaits for further confirmation.

#### 4.3.2 Request book reservation

When browsing books, the user has the option to request a reservation for a book that is currently unavailable. The request is sent to the main server, where it will wait for a copy of the book to be returned back, and then the loan can be confirmed.

Parameters: ISBN number, Book name, Date of reservation

**Precondition:** The library has no physical copies available for the said book.

Post-condition:

Output messages: The client receives a confirmation of his reservation request being sent successfully.

Triggering:

- 1. User opens the list of available books via the interface button on the bottom of the screen.
- 2. He then proceeds to click on a book of his choice.
- 3. The user can clicks on the Request reservation button on the newly opened screen.
- 4. When the user clicks Request loan, the request is put in a queue, awaiting for his turn to receive a copy of the book.

#### 4.3.3 Cancel book reservation

Apart from being able to send a book reservation request, the user also has the option to cancel one. The cancelation is effective immediately.

Parameters: Book name

**Precondition:** The user has sent at least one request for a book reservation.

**Post-condition:** The reservation request is removed from the queue in the server.

Output messages: The user receives a message saying that his cancelation has been successful and is returned to the reservation-browsing screen.

#### Triggering:

- 1. Click on the Browse loans button at the bottom of the main screen.
- 2. Click on the Reservation button in the top half of the screen.
- 3. In the list of reservations, click on the book's reservation that is to be cancelled.
- 4. In the newly opened screen, click on the Cancel reservation button.
- 5. The user is returned back to the reservation list screen.

## 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 19

#### 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)