Philip Susan
Sergio Ferreira Rodrigues
Raphael Duarte Gomes

Issuing Organisation Name : CrisYs Corp

CRIS IS. CRIS WAS.

Messir User Manual
- v 1.0.3 -

Based on IEEE Std 1063-2001 [1]

Tuesday 25th October, 2016 - 11:25

Springer

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Chapter 1
Product information

1.1 Identification

SHeavy®is a web based software developed by CrisYs Corp. whose goal is to prevent the spreading of epidemics but also to manage differents oragnizations to handle epidemics in real time. s

1.2 Copyright

A copyright is an exclusive right granted to an author of a literary, musical, audiovisual or artistic work, giving the author the sole right to reproduce and distribute that work. There are several different types of copyrights which are associated with CrisYs Corp products. These include various copyrights in CrisYs Corp's software source code, executable code, product packaging, hardware and publications.

1.3 Trademark notices

Trademarks are the distinctive names, words, logos, designs and symbols used to distinguish our products or company. Some of our recognized trademarks include CrisYs Corp®, SHeavy®. The CrisYs Corp®trademark has been filed in many countries throughout the world and registrations have been issued in CrisYs Corp's name in many countries.

1.4 Restrictions

There are no restrictions on copying or distributing the software's associated documentation but the distribution of the software is only allowed over the buyer's network.

1.5 Warranties

SHeavy warrants for an entire lifetime following delivery of the Software that the Software will perform substantially in accordance with the user manual. Additionally SHeavy warrants also that our support is available 24h/24h and 7/7 days.

1.6 Contractual obligations

Having a function ready system. Maintain the web application deployed for each actor.

1.7 Disclaimers

SHeavy only shares instructions from trustful organizations and in no event will SHeavy or its distributors and their dealers be liable to you for any damages and any losts or incidental or consequential damage.

1.8 Contact

1.8.1 Online assistance

Visit the CrisYs Corp to get quick answers to your question or refer to our online support at https://www.crisyscorp.com/support. You can also get help and advices by contacting us on https://www.crisyscorp.com/chat or by contact@crisyscorp.com.

1.8.2 Telephone assistance

When you contact our support by telephone make sure that your problem is not already described on https://www.crisyscorp.com/support. Otherwise choose one of our callcenters.
CSC 1: 4884224179-85
CSC 2: 4884224179-86
More callcenters are available at https://www.crisyscorp.com/callcenter.

Chapter 2
General Information

2.1 Scope

SHEAVY is a consitent tool to handle and manage an epidemic in an efficient way. SHEAVY can be used worldwide working together with infrastrucutres like gouvernements, health organisations and hospitals. This document's goal is to provide the basic knowledge to use SHEAVY. There is no source code or programming aspect in this file.

2.2 Purpose

The user manual guide was written to show how different users can acces to the system and to understand its workflow.

2.3 Intended audience

EXTERIOR: All person which isn't involved with the crisis management will have a simple guideline to access to the news published in the application.

INTERIOR: All person activly helping controling the crisis will have a overall view of the interface. They will know where to find which information. Our contact list search will be explained to let them find anybody easily, person or institution.

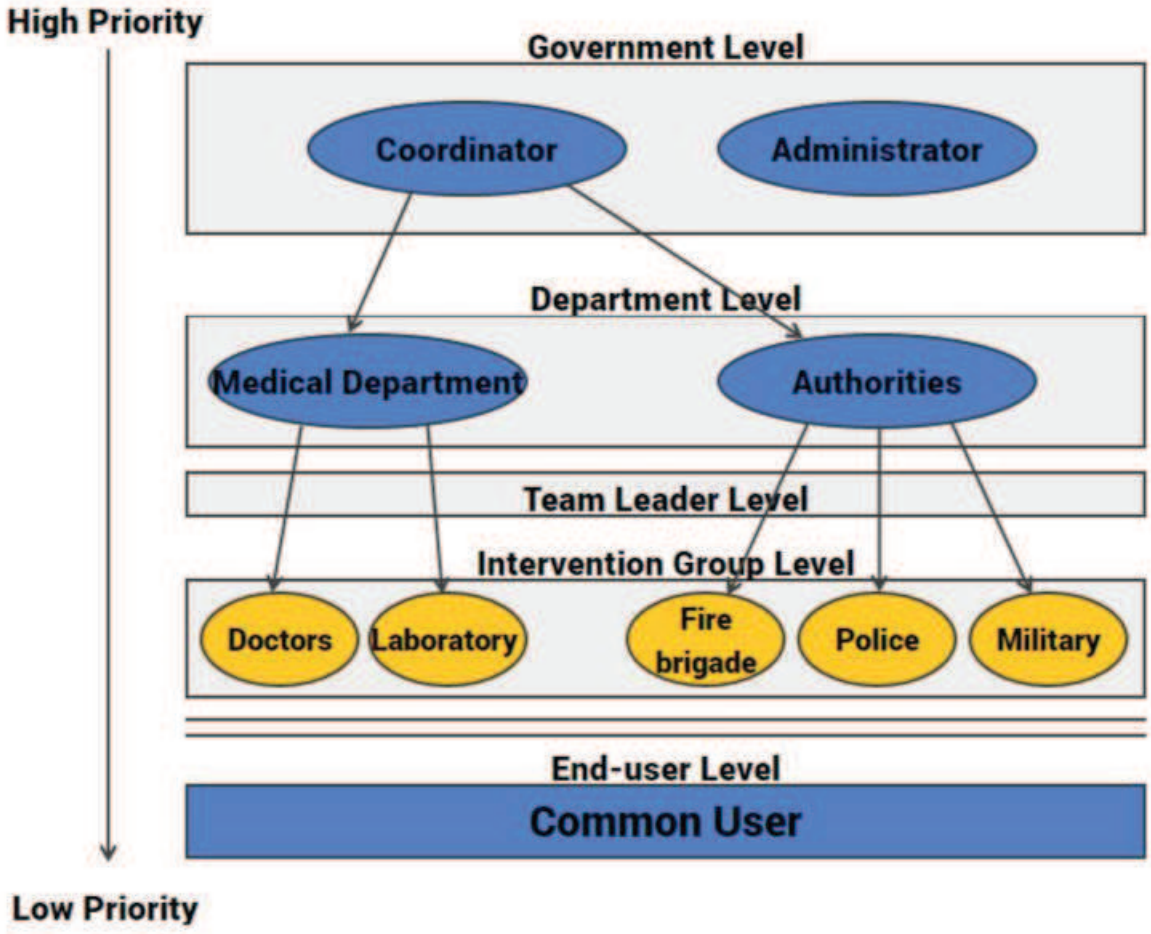
2.4 SHeavy

SHEAVY is an epidemic crisis management web based tool. Data from different sources will be fetched together to centralize all the known statuses and information of the crisis in some simple clicks. Its also a searchtool to find someone involved in the crisis easily and trough a realtime view interface, it will be fast to know how the ressources are distributed. A feature will alert the users of an important message. It keeps also track of the locations of the users to

1. Prevent them accessing an unauthorized zone
2. Guide them with GPS to secure zones.

2.4.1 Actors & Functionalities

SHeavy has different functionalities for several Actors and an hierachical-levels of organizational chart. Here is an overview.



2.4.1.1 CrisYs Corp

CrisYs Corp are the developers of the crisis management system SHeavy.

- Create and set up the system.

2.4.1.2 Common Users

A common user is defined as an end user who uses SHeavy only in order to collect information about the possible epidemic and uses the given instructions to avoid the infection.

- Common users are the principle target of SHeavy. They are going to use the application in order to reach information about a possible or several epidemic and follow the instructions given by SHeavy.
- Common users will get warnings if accessing an infected zone by GPS tracking. They will have paths to follow to access and find the safe zones.

2.4.1.3 Coordinators

The Coordinator is the intermediate between its two low-level departements, Medical Departement and Authorities, and the Government. He will execute the orders of the Government by using SHeavy. The Coordinator has several main functions such as :

- The Coordinator starts or beends the alert of the concerning epidemic.
- He's also responsable for the Ressources Management, which is already set up before the epidemic.
- Another task is to update SHeavy's Map accordingly to the situation.

2.4.1.4 Administrator

The Administrator is the responsable who keeps the ssystem operational. Additionly he distributs the logins and the professional web and mobile interface.

- The Administrator keeps the system operational by maintaining the system.
- If necessary he performs some improvements and bugs corrections.
- The Administrator distributs the professional web and mobile interface to the concerned persons. and also the logins.
- The admistrator is able to block a mobile phone or desktop interface for the security of the system.

2.4.1.5 Medical Departement

The Medical Departement has two main groups, namely Doctors and the Laboratory. Each one is connected with each other and they are exchanging their reports. The Medical Departement is the intermediate between its groups and the Coordinator.

- Sends an alert of a possible epidemic to the Coordinator.
- Sends several reports to the Coordinator.

2.4.1.6 Doctors

Doctors are in charge of taking care of the infected victims. They'll also perform check ups and send reports and blood sample to the Laboratory.

- Write reports that will be sent to the Laboratory and Medical Departement.
- Works in various check points or hospitals in order to perfom check ups.
- Take care of the infected patients the time that an antivirus is found.
- Takes blood sample from the infected patients and sends them to the Laboratory.

2.4.1.7 Laboratory

The Laboratory is a medical group which goal is to find a cure against the virus. In constant collaboration with different medical chiefs they will get relevant information of the evolution of the epidemic in realtime. They also get the blood samples and reports from the Doctors.

- Write reports that will be sent to the Doctors and Medical Departement.
- Analizing the blood samples to isolate the virus and demantle its structure to provide an antivirus.
- Gives a guideline to the application as a news so that all the people knows how to protect itself from become infected.

2.4.1.8 Authorities

The Authorities is regrouping various intervention groups such as the fire brigade, the police and the militaries. They are working together and have a connection with each other. The Authorities are the intermediate between its groups and the Coordinator.

- Support group for various purposes.

2.4.1.9 Team Leader

Team Leader are present in all instances of epartements such as Medical Departements and Authorities. They are the leader of an intervention group which is going to execute missions given by the Coordinator.

- They are responsable of his team.
- Accept or decline a mission given by the Coordinator.
- Execute missions.

2.4.2 Operating environment

SHEAVY is a webbased application. It has a server and a client side. The server needs to be powerfull to handle the mass of information. Clients need to have a good internet access and a basic system requirement to access fast their pages.

2.4.2.1 System requirements: Client

Phone Application	
Android	
OS	Android
Hardware	ARM 5 Dual Core
iOS	
Operating System	iOS 8
Hardware	iPhone 5

2.4.2.2 System requirements: Server

Server Application	
Linux x86/x64	
Kernel	4.8.1
Hard disk space	10 TB
Processeur	Intel Xeon E7-8893
RAM	32 GB

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. Such information is grouped by the different kinds of actors. Such actors are expected to use the software to perform some processes or workflows (called here procedures) using the concerned software **(including installation procedures)**.

3.1 Actors common procedures

Common procedures to several actors are grouped in this section to avoid redundancy.

3.1.1 Application Installation

Use Case: ApplicationInstallation
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Every user
Secondary Actor: None
Intention: Every single user who is going to use SHeavy on their mobile have to proceed the installation.
Level: Sub-functional level
Main Success Scenario :

1. The user has to open their respective mobile store applicaton.
2. He has to search for SHeavy in the searchbar.
3. Then he as to confirm the installation by accepting the terms.
4. The application was installed succesfully and the user can start using the application.

Extensions:

1.a If the user uses an iOS device, he has to open the apple store.
1.b If the user uses an android device, he has to open the play store.

3.1.2 Find a Person

Use Case: FindPerson
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Medical Departement, Government
Secondary Actor: Medical Departement, Government
Intention: A user except to common users can find people by name, by availablity or by his functionality and call them.
Level: Subfunctional level

Main Success Scenario :
1. A User access the contact Menu.
2. A User input the name, fonctionality and get a list of matches.
3. A User can call or write a message to the specific user.
Extensions:
1.a. A common user get just access to the Call Centers lines.

3.1.3 Finding safe route

Use Case: FindSafe
Scope: Crisis Management System (***SHeavy***)
Primary Actor: System
Secondary Actor: Every User
Intention: Suggest the user the safest way to get to a safe place (e.g. hospital).
Level: Sub-functional level
Main Success Scenario :
1. The user access the SafePlaceFinder in the menu bar of the application.
2. The user select a place to go.
3. The user's GPS application opens with the route.
Extensions:
3.a SHeavy calculates the fastest way avoiding Unsafe and Danger Zones.
3.a.1 SHeavy ignores any way through an Unsafe/Danger Zone.
3.a.2 SHeavy calculates the fastest way from the non-ignored ways.

3.1.4 Accept Mission

Use Case: AcceptMission
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Medical Departement, Authorities
Secondary Actor: Coordinator
Intention: The Teamleader accepts a mission.
Level: Sub-functional level
Main Success Scenario :
1. The Teamleader gets a notification on his mobile application.
2. The Teamleader accept or decline the mission.
Extensions:
2.a. If accepted the mission will be sent to his team members.
2.b. If declined the mission will be affected to another team.

3.2 Administrator procedures

3.2.1 Software Installation

Use Case: SoftwareInstallation
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Adminstrator
Secondary Actor: Coordinator, Medical Departement, Authorities
Intention: The Adminstrator will install for the concerned, namely Coordinator, Medical Departement, Authorities, actors a software in their desktop.
Level: Sub-functional level
Main Success Scenario :

1. The Adminstrator starts the installation in the specifs desktops.
2. He will also configure the settings.
3. He'll also perfom a test run.
4. The software is successfully installed.

Extensions:
2.a The test run fails and the adminstrator will repair it.

3.3 Coordinator procedures

3.3.1 Trigger The Alert State

Use Case: TriggerAlertState
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Coordinator
Secondary Actor: Medical Departement
Intention: According to the diagnostic made by the Medical Departement, which will be sent to the Coordinator, the Coordinator will trigger the alert and SHeavy will notify all users about a possible epidemic.
Level: Sub-functional level
Main Success Scenario :

1. The Doctor notice that a patient is contracting an highly infectious virus.
2. The Doctor sends the report and blood samples to the Laboratory.
3. The Laboratory proceed to various tests with the blood samples.
4. If the risk of a possible epidemic is assesssed, a report wil be sent to the Coordinator.
5. The Coordinstor recieves the report and trigger the alert of an epidemic.

Extensions:
4.a The tests shows their's no risk of epidemic and no report will be sent to the Coordinator.

3.3.2 Lift The Alert Atate

Use Case: LiftAlertState
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Coordinator
Secondary Actor: Medical Departement

Intention: According to the diagnostic made by the Medical Departement,which is send to the Coordinator, the Coordinator will lift of the epidemic and SHeavy will notify all users that the epidemic is over.
Level: Sub-functional level
Main Success Scenario :

1. The Laboratory finds a cure for the epidemic.
2. All infected persons are healed.
3. The Medical Departement sends a report to the Coordinator, in which it is said that the epidemic is over.
4. The Coordinator reads the report and according to that lift the alert.

3.3.3 Handling Ressources

Use Case: OverView
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Coordinator
Secondary Actor: Medical Departement, Authorities
Intention: The Coordinator gets an overview of the infected zone, it's infrastructures and the deployed teams.
Level: Sub-functional level
Main Success Scenario :

1. The Coordinator access his webinterface.
2. The Coordinator clicks on OVERVIEW in the menu.
   Extensions:
   2.a. He can filter the information.

3.3.4 Send Mission

Use Case: SendMission
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Coordinator
Secondary Actor: Medical Departement, Authorities
Intention: The Coordinator sent a mission to a teamleader.
Level: Sub-functional level
Main Success Scenario :

1. The Coordinator access the MISSION menu in his webinterface.
2. The Coordinator choose Submit Mission.
3. The Coordinator fulfill the information.
4. The Coordinator sends the notification.

3.3.5 Set Zone

Use Case: SetZone
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Coordinator

Secondary Actor: Laboratory
Intention: Set up a safe camp or a quarantine zone.
Level: Sub-functional level
Main Success Scenario :

1. The Laboratory surveys the status of a zone.
2. After the Laboratory confirms that a zone is safe or infected, the Coordinator is notified.
3. The Coordinator will set a new camp and Sheavy will notify all the users automatically.
4. The Coordinator will sent a request to the concerned intervention groups to set the camp.

3.3.6 Change Zone State

Use Case: ChangeZoneState
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Coordinator
Secondary Actor: Laboratory
Intention: Change the state of an already set zone.
Level: Sub-functional level
Main Success Scenario :

1. The Laboratory surveys the status of a zone.
2. The Laboratory send futher reports to the Coordinator about the change of a zone.
3. The Coordinator reads the reports and change the zone state and SHeavy will notify all the users.

3.4 Doctor procedures

3.4.1 Handling of infected patient

Use Case: HandlingOfInfectedPatient
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Doctor
Secondary Actor: Labotatory
Intention: The Medical Department intends to update the application with the newest data about infected people, no matter what sickness they have. In case of a known epidemic infection, keep an updated record of the growth of the epidemic.
Level: Sub-functional level
Main Success Scenario :

1. The Doctor performs a medical check on a patient.
2. He writes or updates data about the patient in his report.
3. The Doctor sends the blood sample to the nearest laboratory in order to find a cure.
4. The Doctor tries to stop the infection by performing several operations or by followinf the instruction of the Laboratory.

3.5 Common Users Procedures

3.5.1 Alert While Entering a Danger Zone

Use Case: DangerAlert
Scope: Crisis Management System (***SHeavy***)
Primary Actor: Common user
Secondary Actor: None
Intention: Warn a user that he is about to enter a Danger Zone before entering the Danger Zone.
Level: Sub-functional level
Main Success Scenario :

1. The common user is going somewhere in or near a Danger Zone to do something.
2. The common user is located by SHeavy and John is near a Danger Zone and is going in its direction.
3. SHeavy immediately send a warning to John's Phone, indicating that John is entering a Danger Zone.
4. The common user sees the warning and he takes a way around the Danger Zone.

Chapter 4
Software operations

Explain each allowed software operations (i.e. an atomic unit of treatment, a service, a functionality) including a brief description of the operation, required parameters, optional parameters, default options, required steps to trigger the operation, assumptions upon request of the operation and expected results of executing such operation. Describe how to recognise that the operation has successfully been executed or abnormally terminated. The template given below (i.e. section 4.1 has to be used).

Group the operations devoted to the needs of specific actors. Common operations to several actors may be grouped and presented once to avoid redundancy.

4.1 MyOperation

The system operator creates and adds a new crisis to the system after being informed by a third party (citizen, organization) and selects a crisis handler for the crisis.

4.1.1 MyExample1

Examples should illustrate the use of **complex operations**.

Each example must show how the actor uses the software operation under description to achieve (at least one of) its expected outcome.

It might be required to include GUI screenshots to illustrate the example.

4.2 Requirements

The professional user (medical department, government) can request material needs or support by a resource team. The user has to describe the needs in the corresponding window.

Parameters: Needs Information, Needs Request
Precondition: The user has to be logged in as professional and click on the 'Need' button in the resources menu.
Post-condition: A need request is send to the corresponding groups.
Output messages: The needs are send to the corresponding team.
Triggering:

1. Click on menu, then resource and then on needs.
2. The user has to fill out the Needs Information that is the selection of the receiver, as well as the description of the needs.

3. The user has to indicate his location to add a verification of the needs.
4. After filling in, click on 'Send' to notify the resource teams of your request.
5. The user will be notify after the receiver confirms the request.

4.3 Send Alert

The professional user create an alert message to an event, including a description of what happened and what should be done as a reaction of that event.

Parameters: Alert Information, User and State Information
Precondition: The user is logged in as professional user and is sending an alert message.
Post-condition: An alert message is sent out to the users selected in the alert message window.
Output messages: The selected users will be notified after the alert is confirmed.
Triggering:

1. In the alert message window, the user fills out the alert information: the title and the description text-fields.
2. Select which user should receive the alert as well as indicating the state of the alert if needed.
3. Click on the 'Send' button and in the next screen click on 'Yes' if you are sure to submit this message.

4.4 Find Safe Place

Any user requests the safest and fastest way to a certain safe place e.g. hospital, safe camp. The operation will send him through GPS to the selected place.

Parameters: Place Information, Place Location
Precondition: The user is logged in and is requesting to find the safe place.
Post-condition: The application send the user to the GPS.
Output messages: Route to the selected safe place is ready.
Triggering:

1. In the menu the user clicks on 'Safe Place Finder'.
2. A new window shows a list of safe places and the user choses one by clicking on the one the user wants to request the route and send the Place Information to SHeavy.
3. SHeavy send back the Place Location which includes the actual location as well as the safest route.
4. The user is lead to the GPS window.

4.5 Urgency Call

Any professional user requests a call to a specific group in a certain location by selecting them in the contact list or using the search to find the group (medics, fireman, military) by name or location (e.g. hospital/camp name or city they are located).

Parameters: Contact Information
Precondition: The user is logged in and is requesting to make an urgency call.
Post-condition: The application uses call the respective group or person.
Output messages: Calling 'ContactX'
Triggering:

1. Open the 'Contacts'-menu.

2. Open the 'Contacts'-menu.
3. Click on 'Call' to request a call to the person or group.

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