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CRIS IS. CRIS WAS.

Messip User Manual

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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 different organizations 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 consistent tool to handle and manage an epidemic in an efficient way. SHEAVY can be used worldwide working together with infrastructures like governments, 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 access the system and to understand its workflow.

2.3 Intended audience

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

INTERIOR: All persons actively helping controlling the crisis will have an 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.

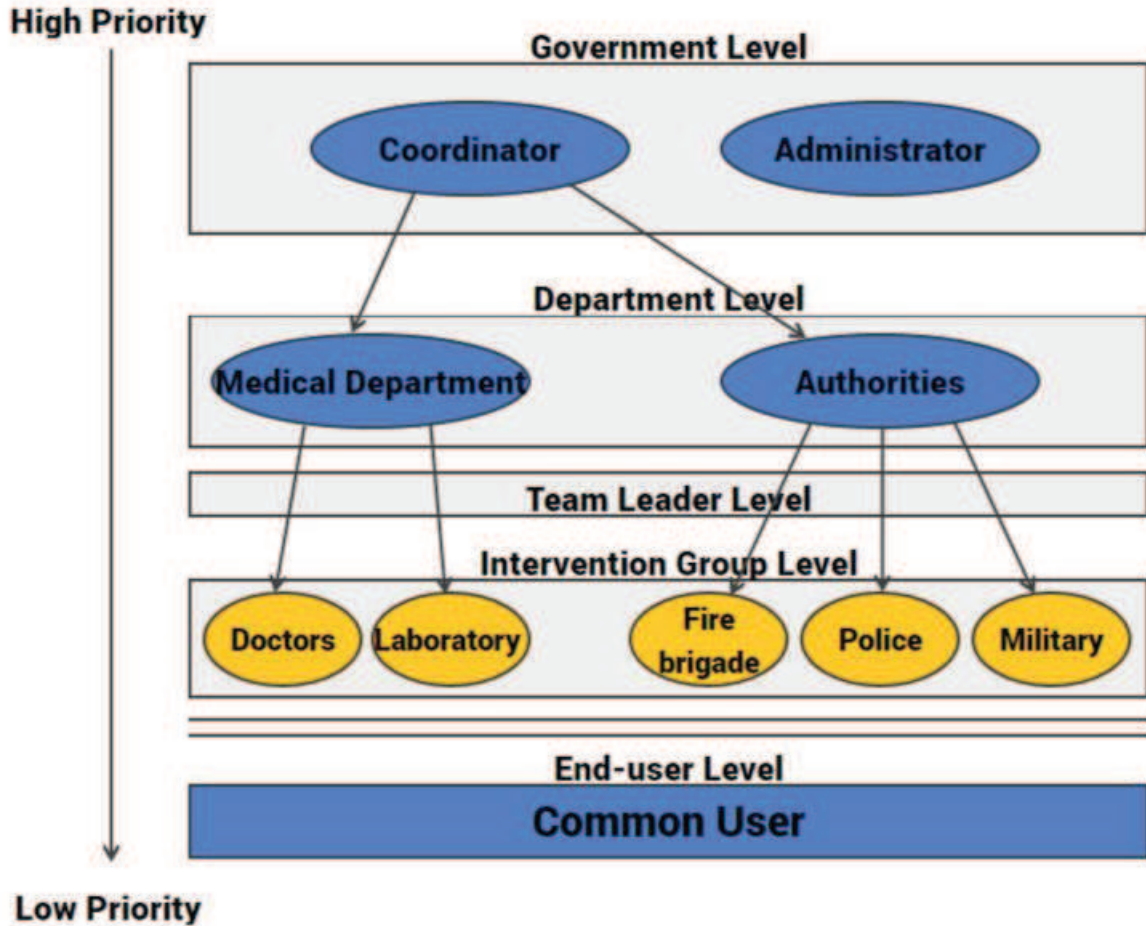
2.4 SHEavy

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. It's also a search tool to find someone involved in the crisis easily and through a real-time view interface, it will be fast to know how the resources 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 hierarchical-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 departments, 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 responsible 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 responsible who keeps the system operational. Additionally he distributes 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 distributes the professional web and mobile interface to the concerned persons. and also the logins.
- The administrator 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 perform 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.
- Analyzing 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 responsible 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 powerful 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	
<i>Android</i>	
OS	Android
Hardware	ARM 5 Dual Core
<i>iOS</i>	
Operating System	iOS 8
Hardware	iPhone 5

2.4.2.2 System requirements: Server

Server Application	
<i>Linux x86/x64</i>	
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 availability or by his functionality and call them.

Level: Sub-functional level

Main Success Scenario :

1. A User access the contact Menu.
2. A User input the name, functionality 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: Administrator

Secondary Actor: Coordinator, Medical Departement, Authorities

Intention: The Administrator 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 Administrator starts the installation in the specifics desktops.
2. He will also configure the settings.
3. He'll also perform a test run.
4. The software is successfully installed.

Extensions:

- 2.a The test run fails and the administrator 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 assessed, a report will be sent to the Coordinator.
5. The Coordinator receives 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.
-

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 Send Alert

The Medical Departement creates an alert message to an event, including a report of what happened and what should be done as a reaction of that event. He's sending it to the Coordinator who will read it and trigger the alert state.

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 Coordinator selected in the alert message window.

Output messages: The Coordinator will be notified that an epidemic is spreading out.

Triggering:

1. In the alert message window, the user fills out the alert information: the title and the description text-fields.
2. The message has to have an report as well as indicating the state of the alert if needed.

3. Click on the 'Send' button and the Coordinator will be notified of the epidemic.

4.3 Trigger Alert

The Coordinator receives an alert message from the Medical Department including a report about the severity of the epidemic. The Coordinator will read it and will trigger the alert and notify every user about the epidemic.

Parameters: Alert Information, User and State Information

Precondition: The user is logged in as professional user. He has already read the report and is triggering the alert.

Post-condition: The alert is triggered.

Output messages: Every user will be notified that an epidemic is on going.

Triggering:

1. The Coordinator click on the 'Alert' button and the alert is send to every user.

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 chooses 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.

4.6 Send Mission

The Coordinator send different mission to various groups leaders (e.g. fire fighter, military, Doctors,...) with some important information concerning the mission.

Parameters: Contact Information, Mission Information

Precondition: The user is logged in as an professional user and is sending a mission.

Post-condition: The mission is received by the concerned leader.

Output messages: The mission is sent to the leader.

Triggering:

1. The Coordinator opens the 'Mission-view'.
2. Select the concerned leader by selecting a leader in the 'send to' field.
3. Writes the title and select the type by clicking on 'Set Type'.
4. Fill the information about the selected type.
5. Click on the 'Send'-Button to submit the mission.

4.7 Accept Mission

Each of the group's leader can receive a mission from the Coordinator. The leader has to accept or decline the mission if they can't execute it.

Parameters: Contact Information, Mission Information

Precondition: The user is logged in as an professional user and receives the mission notification.

Post-condition: The mission will be executed or sent to another team leader.

Output messages: The mission is accepted or declined.

Triggering:

1. The team leader receives a mission.
2. He can click on 'Details' to get further information or decline immediately.
3. By clicking on 'Extras' he gets information about other teams present in the mission zone.
4. He can click on 'accept' or 'decline'
5. After accepting the mission he gets a confirmation notification. He can quit it by clicking on 'OK'.

4.8 Edit Map

The Coordinator can edit the map such as create, remove or change zones on the map.

Parameters: Epidemic Information, Change State

Precondition: The user is logged in as an professional user and is creating, removing or changing a zone.

Post-condition: The map is updated and ready to use.

Output messages: Every user will be notified about the changes.

Triggering:

1. The Coordinator opens the 'Map Editor-view'.
2. He has to click on the 'Add Zone' button to create a new Zone.
3. He has to click on the 'Set Zone' button to change or delete a new Zone.
4. Fill the information about zone to add.
5. Fill the information about zone to change or delete.
6. Click on the 'Add Zone'-Button or 'Set Zone' to submit the modifications on the map.

4.9 Requirements

The professional user (medical department, authorities) 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.

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