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Issuing Organisation Name : CrisYs Corp

CRIS IS. CRIS WAS.

# Messir User Manual
# - v 0.5 -

**Based on IEEE Std 1063-2001 [1]**

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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 will only handle contagious and lethal epidemics. It is designed for worldwide use among governments, health organisations, hospitals and citizens. This document provides information about what the software is intended to do and how to us it. Furthermore it includes our web-interface only for professional users and the mobile interface for both, professional and normal users. This document does not contain any source code of the program and is not intended to help users reverse engineer our programs.

## 2.2 Purpose

This document is the user manual of the program SHeavy (v0.5) . It was realized to introduce our program and its features to its possible users. It defines which type of users have access to which functions and information of the program.

## 2.3 Intended audience

SHeavy is targeting governments, health organisations, hospitals or in general any type of users who could help in solving such a epidemic crisis. It can be technicians with computer science competences or higher level implied people like investors, governements or any other person with specific competences in a specific domain.

Furthermore SHeavy is also targeting people who aren't directly concerned with the management of a epidemic crisis but people who are interested in accessing information about the crisis. These persons are defined as normal users. In any moment they are going to interact with the management systems in order to send instructions or information except of their GPS locations.

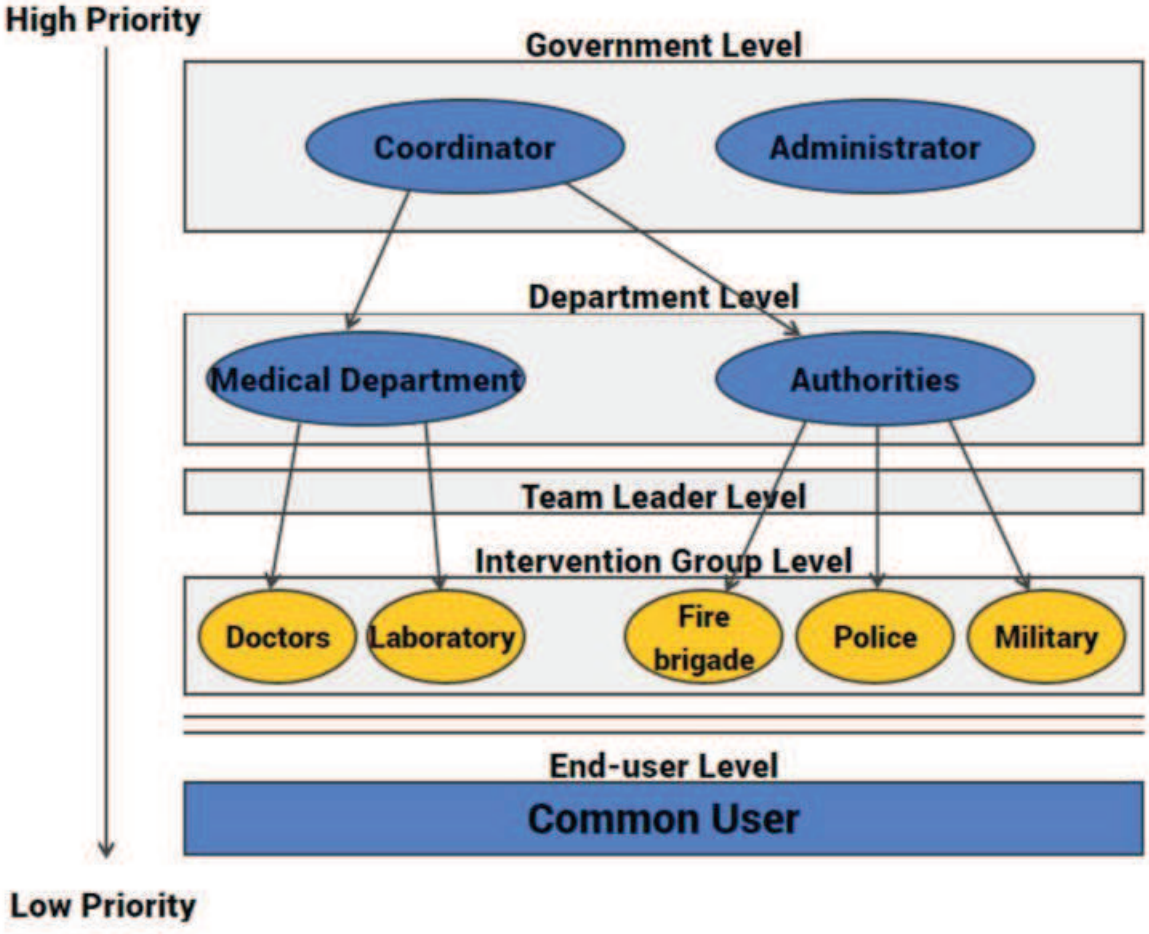
## 2.4 SHeavy

SHeavy is a software developed by CrisYs Corp whose goal is to predict and give advices to handle worldwide and lethal epidemics. It will analyse data shared by doctors around the world and deduce whether there is a beginning of epidemic. Predictions about its growth will be made and the relevant actors will be notified to take adequate measures to restrain that growth and treat it as soon as possible. The system will also keep logs

of all the communications and the actions carried out.

### *2.4.1 Actors & Functionalities*

SHeavy has different functionalities for several Actors. For this purpose an hierachical chart is given below.




#### 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.

You will find in chapter one all the necessary and general information to be properly introduced to the system we develop. Chapter two includes more detailed materials covering the main use-cases we implements, involving actors and basic technical details. Chapter three is set aside for more advanced readers, with technical skills particular to programming or at least understanding what it is about. For special notations and complex words please have a look at the glossary at the end of the document.

# 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 'Play Store' if the user uses an android device.
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'.

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### *3.1.2 Find a Person*

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**Use Case:** FindPerson
**Scope:** Crisis Management System (***SHeavy***)
**Primary Actor**: Every user
**Secondary Actor**: None
**Intention:** Find a person by name, by availablity or by his functionality and call them.
**Level**: Sub-functional level

**Main Success Scenario** :
1. The user has to log in.
2. The user access to the contact Menu.
3. The user searches for the name or fonctionality or availablity and get a list of matches.
4. The user can call or write a message to the specific user.
Extensions:
2.a. A common user get just access to the Call Centers lines.

---

### *3.1.3 Finding safe route*

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**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 has to log in.
2. The user access the SafePlaceFinder in the menu bar of the application.
3. The user select a place to go.
4 SHeavy calculates the fastest way avoiding Unsafe and Danger Zones.
5. The system opens the user's GPS application with the safest route.
Extensions:
4.a SHeavy ignores any way through an Unsafe/Danger Zone.
4.b SHeavy calculates the fastest way from the non-ignored ways.

---

### *3.1.4 Accept Mission*

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**Use Case:** AcceptMission
**Scope:** Crisis Management System **(*SHeavy*)**
**Primary Actor**: Medical Departement, Authorities
**Secondary Actor**: Coordinator
**Intention:** The Teamleader accepts or declines a mission.
**Level**: Sub-functional level
**Main Success Scenario** :
1. The Teamleader gets a notification on his mobile application about the 'Set Up Camp' mission.
2. The Teamleader accept or decline the mission.
Extensions:
1.a. Teamleader gets a notification on his mobile application about the 'Set Up Checkpoint' mission.
1.a. Teamleader gets a notification on his mobile application about the 'Transfer' mission.
1.a. Teamleader gets a notification on his mobile application about the 'Evacuate' mission.
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.

---

### *3.1.5 Execute Mission*

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**Use Case:** ExecuteMission
**Scope:** Crisis Management System (***SHeavy***)
**Primary Actor**: Medical Departement, Authorities
**Secondary Actor**: Coordinator
**Intention:** The Teamleader and his team execute the mission.
**Level**: Sub-functional level
**Main Success Scenario** :

1. The Team executes the 'Set Up Camp' mission.
2. The Team leader notifies the Coordinator that the mission was successfully executed.

Extensions:
1.a. The Team executes the 'Set Up Checkpoint' mission.
1.b. The Team executes the 'Transfer' mission.
1.c. The Team executes the 'Evacuation' mission.

---

## 3.2 Administrator procedures

### *3.2.1 Software Installation*

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**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 Alert Management*

---

**Use Case:** AlertManagement
**Scope:** Crisis Management System (***SHeavy***)
**Primary Actor**: Coordinator
**Secondary Actor**: Medical Departement
**Intention:** If a epidemic breaks out the Coordinator will trigger the alert which is the start signal to use the CMS to handle the crisis.

**Level**: Sub-functional level
**Main Success Scenario** :
1. The Coordinator has to log in.
2. The Coordinator 'Confirm The Alert State'. 3. The Doctor 'Handling of infected patient'. 4. The Coordinator 'Lift The Alert State'. 5. The epidemic is over.

---

### *3.3.2 Mission Management*

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**Use Case:** MissionManagement
**Scope:** Crisis Management System (***SHeavy***)
**Primary Actor**: Coordinator
**Secondary Actor**: Medical Departement, Authorities, Team leaders
**Intention:** The Coordinator requests a missions to be executed.
**Level**: Sub-functional level
**Main Success Scenario** :
1. The Coordinator 'Request Set Up Camp Mission'.
2 All relevant Team leaders 'Accept Mission'.
3. All relevant Team leaders 'Execute Mission'.
4. The Coordinator put the 'Set Up Camp Mission' as finished.
Extensions:
1.a. The Coordinator 'Request Set Up Checkpoint Mission'.
1.b. The Coordinator 'Request Transfer Mission'.
1.c. The Coordinator 'Request Evacuation Mission'.
4.a. The Coordinator put the 'Set Up Checkpoint' as finished.
4.b. The Coordinator put the 'Transfer Mission' as finished.
4.c. The Coordinator put the 'Evacuation Mission' as finished.

---

### *3.3.3 Confirm The Alert State*

---

**Use Case:** ConfirmAlert
**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, then the Doctor has to log in and he will send a to the Coordinator.
5. The Coordinstor recieves the report and trigger the alert of an epidemic.
6. The System will notify all relevant users about that.
Extensions:
4.a The tests shows their's no risk of epidemic and no report will be sent to the Coordinator.

---

### *3.3.4 Lift The Alert State*

---

**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 Mediacl Departement has to log in.
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 lifts the alert.
5. The System will notify to all relevant users that the epidemic is over.

---

### *3.3.5 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 has to log in. 2. The Coordinator access his webinterface.
3. The Coordinator clicks on OVERVIEW in the menu.
Extensions:
3.a. He can filter the information.

---

### *3.3.6 Request Set Up Camp Mission*

---

**Use Case:** SetCampMission
**Scope:** Crisis Management System (***SHeavy***)
**Primary Actor**: Coordinator
**Secondary Actor**: Medical Departement, Authorities
**Intention:** The Coordinator send a request to setting up a camp to one or more teamleaders and his team members.
**Level**: Sub-functional level
**Main Success Scenario** :

1. The Coordinator has to log in as 'Coordinator-user'. 2. The Coordinator opens the 'Mission-view' in the menu of his webinterface.
3. The Coordinator chooses one or more team leaders.
4. The Coordinator writes the title of the mission.
5. The Coordinator writes where the camp will be set up in the Location Textfield.
6. The Coordinator enters a deadline by filling the date and time textfield.
7. The Coordinator writes the capacity of the camp.

8. The CoordinatorHe also writes the number of teams needed for this mission.
9. The Coordinator can also writes further information in the description area.
10. The Coordinator clicks on 'Send' to send the mission to the selected teams.
11. The System will notify the relevant Team leaders. Extensions:
3.a The Coordinator can also select all team leaders.

---

### *3.3.7 Request Set Up Checkpoint Mission*

---

**Use Case:** SetCheckpointMission
**Scope:** Crisis Management System (***SHeavy***)
**Primary Actor**: Coordinator
**Secondary Actor**: Medical Departement, Authorities
**Intention:** The Coordinator send a request to setting up a checkpoint to one or more teamleaders and his team members.
**Level**: Sub-functional level
**Main Success Scenario** :

1. The Coordinator has to log in as 'Coordinator-user'.
2. The Coordinator opens the 'Mission-view' in the menu of his webinterface.
3. The Coordinator chooses one or more teamleaders.
4. The Coordinator writes the title of the mission.
5. The Coordinator writes where the camp will be set up in the Location Textfield.
6. The Coordinator enters a deadline by filling the date and time textfield.
7. The Coordinator also writes the number of teams needed for this mission.
8. The Coordinator can also writes further information in the description area.
9. The Coordinator clicks on 'Send' to send the mission to the selected teams.
10. The System will notify the relevant Team leaders. Extensions:
3.a The Coordinator can also select all team leaders.

---

### *3.3.8 Request Transfer Mission*

---

**Use Case:** TransferMission
**Scope:** Crisis Management System (***SHeavy***)
**Primary Actor**: Coordinator
**Secondary Actor**: Medical Departement, Authorities
**Intention:** The Coordinator send a request to transfer people to one or more teamleaders and his team members.
**Level**: Sub-functional level
**Main Success Scenario** :

1. The Coordinator has to log in as 'Coordinator-user'.
2. The Coordinator opens the 'Mission-view' in the menu of his webinterface.
3. He chooses one or more teamleader.
4. The Coordinator writes the title of the mission.
5. The Coordinator decides where the person are going to be moved. According to that he needs to fills the from and to textfield.
6. The Coordinator enters a deadline by filling the date and time textfield.
7. The Coordinator writes the quantity of person to be moved.
8. The Coordinator clicks on 'Send' to send the mission to the selected teams.
9. The System will notify the relevant Team leaders. Extensions:
3.a The Coordinator can also select all team leaders.

---

### *3.3.9 Request Evacuation Mission*

---

**Use Case:** EvacuationMission
**Scope:** Crisis Management System (***SHeavy***)
**Primary Actor**: Coordinator
**Secondary Actor**: Medical Departement, Authorities
**Intention:** The Coordinator send a request to evacuate an area to one or more teamleaders and his team members.
**Level**: Sub-functional level
**Main Success Scenario** :

1. The Coordinator has to log in as 'Coordinator-user'.
2. The Coordinator opens the 'Mission-view' in the menu of his webinterface.
3. The Coordinator chooses one or more teamleaders.
4. The Coordinator writes the title of the mission.
5. The Coordinator selects the kind of area in 'Type'.
6. The Coordinator also fills the from and to Textfield to specificate from where to where the people should be moved.
7. The Coordinator also writes an estimation of people to be moved.
8. The Coordinator clicks on 'Send' to send the mission to the selected teams.
9. The System will notify the relevant Team leaders. Extensions:

3.a The Coordinator can also select all team leaders.

---

### *3.3.10 Zone Management*

---

**Use Case:** ZoneManagement
**Scope:** Crisis Management System (***SHeavy***)
**Primary Actor**: Coordinator
**Secondary Actor**: Laboratory
**Intention:** Updating the Map or adding new zone on the Map
**Level**: Sub-functional level
**Main Success Scenario** :

1. The Coordinator has to log in.
2. The Laboratory send reports to the Coordinator where new zone are needed.
3. The Coordinator 'Set Zone'.
4. If it is needed the Coordinator 'Mission Management'.

Extensions:

3.a. The Coordinator 'Change Zone State'.
4.a. The Coordinator 'Change Zone State'.

---

### *3.3.11 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.

---

### *3.3.12 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 following 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 Login

The coordinator, administrator, leaders or anyone working in the medical department or authorities wants to access the applications.

**Parameters:** User Information, User Password
**Precondition:** The user has the application open and has already his credentials.
**Post-condition:** The user enters the homescreen with access to his individual information and functions.
**Output messages:** None.
**Triggering:**

1. After opening the application the user has two textfields for account and password.
2. The user enters his account and his password.
3. Click on the 'Login' button and the user will be linked to the homescreen.

## 4.3 Add a new User

In request of the coordinator, the Administrator adds a person as a common user or a professional user to the system, allowing them to use the specific operation each type of user has.

**Parameters:** Personal Information, User Information, Coordinator Request
**Precondition:** The crisis didn't has started and the administrator is logged in. Furthermore, the person who the administrator is going to add don't has an existing account.
**Post-condition:** The selected user gains access to the specific feature of the system each type of user has.
**Output messages:** The user has been added to the system.
**Triggering:**

1. The administrator clicks on 'Add User' that opens the Add-User-Interface.
2. The administrator fills in the Personal Information: Title, First Name, Last Name, Phone Number, E-mail.
3. The administrator fills in the requested type of professional from the following: Common User, Medical Department, Authorities and Coordinator.
4. The administrator selects his subtype for the Medical Department and Authorities but not for the Common user and Coordinator.
5. The administrator enters the Users Team.
6. Finally, the administrator clicks on 'Add User'.

## 4.4 Send Alert

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

**Parameters:** Alert Information, User and State Information
**Precondition:** The user is logged in as professional user such as Medical Departement.
**Post-condition:** The alert was successfully sent and the Coordinator was notified about the alert.
**Output messages:** 'Alert sent'.
**Triggering:**

1. In the alert message window, the professional 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.

## 4.5 Confirm Alert

The Coordinator recieves an alert message from the Medical Departement including a report about the severity of the epidemic. The Coordinator will read it and will confirm 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 and has already read the report.
**Post-condition:** Start of the CMS. The alert is confirmed and every user is notified about he epidemic.
**Output messages:** 'Epidemic confirmed'.
**Triggering:**

1. The Coordinator recieves an alert notification on his web-interface. He has to click on 'Report' to read the report sent by the Medical Departement.

2. According to the Coordinator's decision he'll click on 'Launch Crisis' to start the crisis, 'Delay Decision' to not decide yet if he needs confirmation of the governement or 'Decline' if the situaton don't need a crisis management system.

## 4.6 Upgrade User to Professional status

In request of the coordinator, the Administrator wants to upgrade a common user to a professional user.

**Parameters:** User name, Coordinator Request
**Precondition:** The administrator has to be on his home screen.
**Post-condition:** The selected user gains access to the new feature of the system.
**Output messages:** The user has been modified.
**Triggering:**

1. The administrator selects or he uses the search to find and select the requested user in order to modify his data.
2. The administrator selects the requested type of professional from the following: Common User, Medical Department, Authorities and Coordinator.
3. The administrator selects his subtype for the Medical Department and Authorities but not for the Common user and Coordinator.
4. The administrator enters the Users Team.
5. The administrator clicks on Update User to finish the operation.

## 4.7 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 crisis is on going. The user is logged in and has his GPS enabled.
**Post-condition:** The fastest way to a certain safe place was calculated.
**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.

## 4.8 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 has to be connected to a network. The crisis has already started.
**Post-condition:** The application uses call the respective group or person.
**Output messages:** Calling 'ContactX'

**Triggering:**

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

## 4.9 Set Camp Mission

The Coordinator sends set camp mission to various groups leaders (e.g. fire figther, military, Doctors,..) with some important information concerning the mission.

**Parameters:** Contact Information, Mission Information
**Precondition:** The user is logged in as a professional user. The crisis has already started.
**Post-condition:** The mission is recieved by the concerned leader.
**Output messages:** 'Mission Pending'
**Triggering:**

1. The Coordinator opens the 'Mission-view'.
2. Select one or more teams by selecting a leader in the 'send to' field or sends to all by clicking on 'Send to All'.
3. Writes the title and select 'Set Camp' as type by clicking on 'Set Type'.
4. Give the Location of the camp and also announce a deadline in format Date and time.
5. Furthermore indicates de capacity of the camp and how many teams are needed there.
6. Fill the description for more details about the mission.
7. Click on the 'Send'-Button to submit the mission.

## 4.10 Set Checkpoint Mission

The Coordinator sends set checkpoint mission to various groups leaders (e.g. fire figther, military, Doctors,..) with some important information concerning the mission.

**Parameters:** Contact Information, Mission Information
**Precondition:** The user is logged in as a professional user. The crisis has already started.
**Post-condition:** The mission is recieved by the concerned leader.
**Output messages:** 'Mission Pending'
**Triggering:**

1. The Coordinator opens the 'Mission-view'.
2. Select one or more teams by selecting a leader in the 'send to' field or sends to all by clicking on 'Send to All'.
3. Writes the title and select 'Set Checkpoint' as type by clicking on 'Set Type'.
4. Give the Location of the camp and also announce a deadline in format Date and time.
5. Furthermore indicates how many teams are needed there and where victims are going to be moved.
6. Fill the description for more details about the mission.
7. Click on the 'Send'-Button to submit the mission.

## 4.11 Transfer Mission

The Coordinator sends transfer mission to various groups leaders (e.g. fire figther, military, Doctors,..) with some important information concerning the mission.

**Parameters:** Contact Information, Mission Information
**Precondition:** The user is logged in as a professional user. The crisis has already started.
**Post-condition:** The mission is recieved by the concerned leader.
**Output messages:** 'Mission Pending'
**Triggering:**

1. The Coordinator opens the 'Mission-view'.
2. Select one or more teams by selecting a leader in the 'send to' field or sends to all by clicking on 'Send to All'.
3. Writes the title and select 'Transfer People' as type by clicking on 'Set Type'.
4. Give the Locations from where to where people are going to be moved.
5. Announce a deadline in format Date and time and how many people are going to be moved.
6. Click on the 'Send'-Button to submit the mission.

## 4.12 Evacuation Mission

The Coordinator sends evacuation mission to various groups leaders (e.g. fire figther, military, Doctors,..) with some important information concerning the mission.

**Parameters:** Contact Information, Mission Information
**Precondition:** The user is logged in as a professional user. The crisis has already started.
**Post-condition:** The mission is recieved by the concerned leader.
**Output messages:** 'Mission Pending'
**Triggering:**

1. The Coordinator opens the 'Mission-view'.
2. Select one or more teams by selecting a leader in the 'send to' field or sends to all by clicking on 'Send to All'.
3. Writes the title and select 'Evacuate' as type by clicking on 'Set Type'.
4. Give the Locations from where to where people are going to be evacuate.
5. Indicate an estimated number of people to be rescued but can be changed lately.
6. Click on the 'Send'-Button to submit the mission.

## 4.13 Accept Mission

Each group member can recieve a mission from the Coordinator. But only the leader can accept the mission or decline if they can't execute it.

**Parameters:** Contact Information, Mission Information
**Precondition:** The user is logged in as a professional user and recieves the mission notification. The crisis has already started. The maximum number of team needed in the mission doesn't exceed the demande. And the Deadline isn't reached.
**Post-condition:** The mission will be executed or sent to another team.
**Output messages:** The mission is Accepted or Transfer.
**Triggering:**

1. The team leader recieves a mission.
2. He can click on 'Details' to get further information or decline immimediately.
3. By clickin ont 'Extras' he get 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'.

## 4.14 Add New Zone

The Coordinator can add new zones to the map. According to that the map will be updated.

**Parameters:** Epidemic Information, Change State
**Precondition:** The user is logged in as a professional user. The crisis has already started. The zone to add doesn't exists.
**Post-condition:** A new zone was added to the map.
**Output messages:** 'Updated'
**Triggering:**

1. The Coordinator opens the 'Map Editor-view'.
2. He has to click on the 'Add Zone' label to add a new Zone.
3. He has to select a Type of zone by clicking on 'Choose Type'.
4. The Coordinator select the visibility type.
5. Set the area by given an estimation of the height and width in km.
6. At last select the Location where the area will be set.
7. Click on the 'Add Zone'-Button to submit the modifications on the map.

## 4.15 Change Zone

The Coordinator can change a zone's propreties in any time. According to that the map will be updated.

**Parameters:** Epidemic Information, Change State
**Precondition:** The user is logged in as a professional user. The crisis has already started. The relevant zone exists.
**Post-condition:** An existing zone was modified on the map.
**Output messages:** 'Updated'
**Triggering:**

1. The Coordinator opens the 'Map Editor-view'.
2. He has to click on the 'Set Zone' label to change a Zone.
3. At first he has to select the zone by clicking on 'Select a Zone' button or searches for the name of the zone.
4. He can modify the zone's propreties.
5. Click on the 'Safe Changes' to submit the modifications on the map or click on 'Cancel Changes' to cancel the modification.

## 4.16 Delete Zone

The Coordinator can delete a zone in any time. According to that the map will be updated.

**Parameters:** Epidemic Information, Change State
**Precondition:** The user is logged in as a professional user. The crisis has already started. The Zone exists.
**Post-condition:** An existing zone was deleted on the map.
**Output messages:** 'Updated'
**Triggering:**

1. The Coordinator opens the 'Map Editor-view'.
2. He has to click on the 'Set Zone' label to change a zone.
3. At first he has to select the zone by clicking on 'Select a Zone' button or searches for the name of the zone.

4. Click on the 'Delete Zone' button to delete the zone or click on the 'Cancel Change' button to quit.

## 4.17 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. The crisis has already started.
**Post-condition:** The request is send to the corresponding groups.
**Output messages:** None
**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 No Mobile Network

### *5.1.1 Problem identification*

Impossible to refresh or to get the latest news or notifications.
Impossible to opens some features of the application.

### *5.1.2 Probable cause*

The user may have put the device in flight mode, has no Wifi or is out of the router's range or no mobile connection. It may be that the main server isn't operational any more or a misfunction from your ISP. The router can also be turned off.

### *5.1.3 Corrective actions*

- The user may reduce the range between the router and the mobile phone.
- Contact your Internet service provider.
- Go to the Settings menu, disable the 'Flight mode' option.
- Go to the Settings menu, enable the 'Mobile data' option.
- Go to the Settings menu, enable the 'Wifi' option.
- Wait until the main server is operational again.

## 5.2 No Internet Network

### *5.2.1 Problem identification*

Impossible to refresh or to get the latest news or notifications.
Impossible to opens some features of the application nor send information.

### *5.2.2 Probable cause*

The user may have put the device in flight mode, has no Wifi or is out of the router's range or no ethernet connection. It may be that the main server isn't operational any more or a misfunction from your ISP. The router can also be turned off.

### *5.2.3 Corrective actions*

- The user may reduce the range between the router and the computer.
- Turn on the router.
- Contact your Internet service provider.
- Go to the Settings menu, disable the 'Flight mode' option.
- Go to the Settings menu, enable the 'Wifi' option.
- Wait until the main server is operational again.

## 5.3 Server down

### *5.3.1 Problem identification*

Impossible to open the application nor to work on it. The application is not responding.

### *5.3.2 Probable cause*

The server is down or the user has a falsely configured device.

### *5.3.3 Corrective actions*

- Wait until the operation has finished.
- Go to the Settings menu, choose the option 'Server settings' and click on 'Repair server'.

## 5.4 Access denied

### *5.4.1 Problem identification*

the user can't sign in.

### *5.4.2 Probable cause*

The user is given the wrong credentials.

### *5.4.3 Corrective actions*

- Disable 'Caps locks'
- Restore his credentials by sending an email to the administrator.

# 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