# TDDC88 Project - Company 1
# Software Requirements Specification

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# 1  Introduction

In chapter one, the purpose and the intended audience of the SRS will be explained. The scope of the software product will also be defined, followed by a list of all the definitions, acronyms, and abbreviations used in this document. Lastly, an overview of the entire content of this SRS is presented.

## 1.1  Purpose and intended audience

The purpose of this document is to provide a detailed description and understanding of the requirements for the "Digital Akutjournal" software. To increase the understanding, the document will explain the constraints of the systems and the relevant interfaces. The intended audience for this document is both the customer and other stakeholders for approval and communication purposes. The document is also meant to be used as a foundation for the development team when developing mainly the first draft and for support to later versions.

## 1.2  Scope

The software product will be an application for mobile devices developed to be used in Region Östergötlands three emergency rooms located in Motala, Linköping, and Norrköping. The application will be used by the health care workers to enable easier data access and data analysis in the ER. This will be done by merging all the patient data from multiple systems and databases into one view that provides graphical overviews of historical data as well as presenting vital parameters and other medical notations. To ensure that each user can quickly access the data that they assess as relevant, the system will allow the user to customize and save their screen settings as well as be customized depending on which user role a worker has. The system will also help improve the ER workflow by notifying the user when new substantial information is available, or a critical change has occurred in a patient's vital parameter. In addition to this, the system will also allow the user to access past health data from earlier visits at the ER. The system will not have any features to support input of data, only functions to support data visualizing since the ER already has working systems to use for the data input into different databases.

## 1.3 Definitions, acronyms and abbreviations

| Term | Definition |
| --- | --- |
| SRS | System Requirements Specification |
| ER | Emerceny room |
| RÖ | Region Östergötland |
| User | Health care staff from RÖ working at the ER that interacts with the application |
| Team | A medical team active at the ER |
| GUI | Graphical user interface |
| API | Application programming interface |
| Back-end | Server that stores all the data that the application uses. |
| Triage-color | One color that is assigned to the patient after a healthcare worker assesses the patient's condition. |
| Enhetsöversikt | A page in the application where the user can get an overview of all patients. (ENG:Page Overview) |
| Orsakskod | A set of standardized codes that describe the reason for a patient's admission to the hospital. (ENG:Hospital admission codes) |
| Vätskebalans | The difference between the fluid lost compared to the fluid taken in by a patient. (ENG:Fluid Balance) |
| Vätskeintag | How much liquid a patient consumes . (ENG:Fluid intake) |
| Vätskeförlust | The loss of liquid for an patient (ENG:Fluid loss) |
| Patientöversikt | A page in the application where the user can get an overview of specific patients and their information. (ENG:Patient Overview) |
| Referensvärde | A set of values that a user uses to interpret a patient's test results (ENG:Reference value) |
| Smittsam | (ENG:Contagious) |
| Hemgångsmeddelande | Is a note that the patient gets after getting discharged from the Hospital with relevant medical information. (ENG: Discharge information) |
| Personnummer | (ENG:National identification number) |
| Ordinering | The act of administrating medication to a patient of an healthcare worker (ENG:Medication Administration) |

## 1.4 Overview

This SRS is divided into three chapters according to IEEE Std 830-1998. In the first chapter, the application is presented and introduced with the purpose and intended scope of the product, as well as the intended audience. The first chapter also contains a list of essential definitions, acronyms, and abbreviations to ensure that the reader is provided with all information needed to fully understand the SRS content. In the second chapter, the context of the application is presented through product perspectives and product functions, user characteristics, constraints, assumptions, and dependencies. The last chapter presents the most detailed description of the system by providing all the requirements. These are divided into interface, functional, performance, design constraints, software system attributes, and others.

# 2  Overall description

In this chapter, the core principles of the product will be presented. These principles will be the foundation of the development of the application and are written to ensure a deeper understanding of the product's functions connected to the need of the users.

## 2.1  Product perspective

The product is a web-based application developed for internal use at Region Östergötlands emergency rooms primely built for the healthcare worker and their needs. It will only be available inside the hospital's local networks.

The first thing that the user is prompted to do is to log in to the applications with their professionally linked log-in account. If the user is in front of a desktop computer, they will have to use the physical keyboard and mouse to navigate the page. In the case of a portable device like a tablet or phone, the user will use the touchscreen feature built into these devices to navigate and type in their log-in credentials into the web-based application. This process and log-in procedures are overlooked by a software administration that can create, remove, and change the levels of access for each log-in.

After a successful log-in, the user is met with an "enhetsöversikt" that shows a list of all patients that are assigned for care into the same department that the user works at. On the top of the page, a search bar will be visible where the user can type in a key to search for a patient. One example of a key is "personnummer". When the user starts typing, the search bar will be continuously updated with search results that match what is currently in the bar. If the user chooses one patient by clicking on it either on the "enhetsöversikt" or through the search bar, it will be taken to the "patientöversikt" with is an interface displaying patient information through data points and graphs.

This application will have a simple database to get and view the data. The front-end will be built in angular js.

## 2.2  Product functions

The main function of this application is to provide the health care workers at the ER in RÖ with an application that is easy and intuitive to navigate, as well as presenting a clear visualization of all the critical data points related to a patient. Each user should be able to customize this view according to their own preferences and their role. The view should also provide the user with indications about deviating data or new events related to the patient in order to improve the efficiency in detecting new patient data.

## 2.3  User characteristics

The system is intended to be used by four different types of users who work at the ER: assistant nurses, nurses, doctors, and administrators. The general assumption about these users is that they have varying technical experience and knowledge, where most of the users have none or insufficient technical knowledge. Therefore, the application should not require any level of special technical experience. Instead, the application must be intuitive even for a user with no technical knowledge to make them prefer it instead of the traditional paper journal system currently in use. The assistant nurses, nurses, and doctors will want to access different types of information depending on their role so that the application will offer a different data presenting layout on the patient view for each type of user.

## 2.4  General constraints

Due to the strict patient data protection laws, a user must be logged into the system before accessing any data from the patient view or the overview. Since the user will not be able to change any data, there are no further constraints connected to that.

## 2.5   Assumptions and dependencies

During the development of this application, an assumption has been made that all health care workers will have access to a personal device - phone or some type of tablet - to be carried with them at all times during their day. This assumption was made based on information from the customer. Another assumption that has been made is that every user and their device will have access to the local network at the three hospitals at all times, which is a prerequisite in order to enable automatic updates of lab results and examinations. The last assumption is that the tablets or phones that will hold the application will have enough computing power to run the application.

# 3 Specific Requirements

The requirements below are given an identification number built using three main parts. The first part, "RC" stands for requirement and is meant to identify that this id belongs as a requirement. The second part is three numbers and symbolizes from what use case the requirement is based. Furthermore, the third part is three numbers giving the specific requirement and a unique identifier tied to a use case and all requirements in general.

Under the requirement id, a reference to which use case it is based on and given the unique use case specifier id. The first part, "UC" stands for use case and is meant to identify that this id belongs as a use case. The second part is three numbers tying it to a specific use case. NUC is all requirements that are not derived by a use case.

## 3.1 Interface requirements

The Interface requirements are all requirements identified as interfacing between, among, or handling systems and components. Both user and external interface requirements

### 3.1.1 User interfaces

**RC-001-001**
Use case: UC-001
Description: On the "enhetsöversikt" there shall be a box where the user can input the "personnummer"
Priority: 3

**RC-002-001**
Use case: UC-002
Description: There shall be a timeline on the patient view displaying all events and timestamp related to the patient
Priority: 1

**RC-002-002**
Use case: UC-002
Description: All past events from this ER visit shall be visualized as data points on the timeline
Priority: 1

**RC-002-003**
Use case: UC-002
Description: All future events scheduled or planned shall be visualized as data points on the timeline
Priority: 1

**RC-002-004**
Use case: UC-002
Description: The timeline shall visualize where the current position on the timeline is (i.e. what time it is right now)
Priority: 1

**RC-002-006**
Use case: UC-002
Description: Whenever the user is not exposed to the full timeline, the timeline shall show an arrow that point to the left and says "Det finns fler händelser längre bak i tiden"
Priority: 2

**RC-002-007**

Use case: UC-002
Description: Whenever the user is not exposed to the full timeline, the timeline shall show an arrow that point to the right and says "Det finns fler händelser längre fram i tiden".
Priority: 2

**RC-002-011**
Use case: UC-002
Description: The timeline shall be split in different colors depending on if it marks the future or the past
Priority: 3

**RC-004-002**
Use case: UC-004
Description: The application shall show the patients "orsakskod" in the patient view on the top horizontal bar
Priority: 1

**RC-004-003**
Use case: UC-004
Description: The application shall show the "orsakskod" as plain text and not the numerical code. Example: Kontakt med Dolk, kniv
Priority: 2

**RC-005-001**
Use case: UC-005
Description: On the patient view, on a widget, there shall be information about the patients current "vätskebalans"
Priority: 1

**RC-005-002**
Use case: UC-005
Description: The widget shall also present all data on past "vätskebalans" from the ER visit in a graph
Priority: 1

**RC-005-004**
Use case: UC-005
Description: The application shall view "vätskeintag" and "vätskeförlust"
Priority: 1

**RC-006-001**
Use case: UC-006
Description: There shall be an icon for medical referral ("remiss")
Priority: 2

**RC-006-003**
Use case: UC-006
Description: The new view shall contain one list with previous/signed medical referrals in chronological order
Priority: 2

**RC-006-004**
Use case: UC-006
Description: The new view shall contain one list one list with upcoming/unsigned medical referrals in chronological order
Priority: 2

**RC-007-007**
Use case: UC-007
Description: The application shall show a blank page with the text "Ingen EKG" if there is no ECG measurements for the patient
Priority: 2

**RC-009-004**
Use case: UC-009
Description: When a notification about a new lab result shows up on the screen, there shall be an option to dismiss the notification
Priority: 1

**RC-009-005**
Use case: UC-009
Description: When a notification about a new lab result shows up on the screen, there shall be an option to click on the notification and more information about the lab result will show up
Priority: 2

**RC-008-001**
Use case: UC-008
Description: When new X-ray data has been added, the application will show a notification in the upper right corner
Priority: 2

**RC-008-002**
Use case: UC-008
Description: The notification marker is marked with a red marker when there is an unread notification for the user
Priority: 2

**RC-008-006**
Use case: UC-008
Description: When the user has read and closed the notification, the red marker disappears
Priority: 3

**RC-009-001**
Use case: UC-009
Description: There shall be an icon for notifications in the header
Priority: 1

**RC-009-003**
Use case: UC-009
Description: When the application receives information about a new lab result the responsible team (and only them) shall get a notification about this
Priority: 2

**RC-009-008**
Use case: UC-009
Description: The lab results shall be visible in chronological order in the "patientöversikt"
Priority: 2

**RC-009-011**
Use case: UC-009
Description: The detailed lab result view shall show the lab results in a table with the color black if within "referensvärde" and red if not

Priority: 3

**RC-010-001**
Use case: UC-010
Description: The application shall give a notification to the assigned healthcare user when a new x-ray assessment is available for a patient that is under their jurisdiction
Priority: 2

**RC-011-001**
Use case: UC-011
Description: On the "patientöversikt", there shall be a widget where all the patients vital parameters are gathered and presented in a list (since all vital parameters always should be visible)
Priority: 1

**RC-011-002**
Use case: UC-011
Description: The widget shall show the current value of the vital parameters (for every vital parameter from the patient)
Priority: 1

**RC-011-003**
Use case: UC-011
Description: The widget shall show the past values measured of the vital parameters presented as a graph (for every vital parameter from the patient)
Priority: 2

**RC-011-004**
Use case: UC-011
Description: The graph shall be in different layers: one for blood pressure and one for pulse. Blood pressure is represented with connected black arrows, pulse with connected red dots
Priority: 2

**RC-011-005**
Use case: UC-011
Description: Underneath each measuring point in the graph oxygen level, breathing frequency and temperature in that order (togetheter in a graph) are shown as text
Priority: 2

**RC-012-001**
Use case: UC-012
Description: The user shall be able to see all the "vitalparametrar" of an patient on the "patientöversikt"
Priority: 1

**RC-012-002**
Use case: UC-012
Description: The application shall change the color behind the "vitalparametrar" depended on if the value has fallen below or gone above a threshold value
Priority: 3

**RC-012-003**
Use case: UC-012
Description: The application shall show green if the patients "vitalparametrar" value is inside the threshold values
Priority: 3

**RC-012-004**
Use case: UC-012
Description: The application shall show red/orange/yellow if the patients "vitalparametrar" value is outside the threshold values, depending on how bad the values are. Same color shade as the triage colors
Priority: 3

**RC-012-008**
Use case: UC-012
Description: The application shall receive constant data from back-end and update patient view "vitalparametrar"
Priority: 1

**RC-014-001**
Use case: UC-014
Description: The patient shall have a parameter "smittsam"
Priority: 1

**RC-014-002**
Use case: UC-014
Description: If the patient is smittsam, this shall be marked by an icon on the "enhetsöversikt"
Priority: 1

**RC-014-003**
Use case: UC-014
Description: If the patient is smittsam, this shall be marked in yellow by the "uppmärksamhetssymbol" on the "patientöversikt" (if not, the "uppmärksamhetssymbol" shall be grey)
Priority: 1

**RC-014-004**
Use case: UC-014
Description: The icon for smittsam shall be represented with the "uppmärksamhetssymbol"
Priority: 1

**RC-015-001**
Use case: UC-015
Description: On the "patientöversikt", there shall be a widget displaying a siluette by a human body
Priority: 1

**RC-015-002**
Use case: UC-015
Description: On the human body siluette, all the in/ut-farter currently on the patient shall be visible and placed on the body part that they are currently put on
Priority: 1

**RC-015-003**
Use case: UC-015
Description: On the widget, there shall be a button called "Visa historik"
Priority: 2

**RC-017-001**
Use case: UC-017
Description: The application shall show the patients triage color on the "enhetsöversikt"
Priority: 1

**RC-017-002**
Use case: UC-017
Description: The application shall show the patients triage color in the "patientöversikt" on the top horizontal bar
Priority: 1

**RC-017-003**
Use case: UC-017
Description: The application shall show the triage color of red, yellow, or green, orange and blue
Priority: 1

**RC-024-004**
Use case: UC-021
Description: The user shall be able to see the remaining time in hours and minutes to next check-up on each patient "patientöversikt"
Priority: 2

**RC-026-001**
Use case: UC-026
Description: There shall be a symbol for patient journal in "patientöversikt"
Priority: 3

**RC-026-004**
Use case: UC-026
Description: The application shall show the journals in chronological order
Priority: 3

**RC-028-001**
Use case: UC-028
Description: The user shall be able to see the next ordinering.
Priority: 2

**RC-028-002**
Use case: UC-028
Description: The next ordinering shall be highlighted in a way its not easy to miss.
Priority: 2

**RC-028-004**
Use case: UC-028
Description: If an ordinering is administered, it removes from the highlighted area.
Priority: 3

**RC-028-005**
Use case: UC-028
Description: The user shall be able to view previous ordineringar.
Priority: 2

### 3.1.2   Hardware interfaces

**RC-027-001**
Use case: UC-027
Description: A timestamp shall always be shown right beside all "vital parameter" data points on the "patientöversikt"
Priority: 2

**NUC-001**
Description: The application shall have a header
Priority: 1

**NUC-002**
Description: The header shall contain Region Östergötland's logotype, button for menu, search field, button for "all patients" (start view), date and time, message icon, button for the logged in user
Priority: 1

**NUC-003**
Description: If the user is viewing a patient page the header should also contain: "varningssymbol", patients "personnummer", family name, first name, age, gender symbol, the location for the patient (room:bed)
Priority: 1

**NUC-004**
Description: The application shall have a menu
Priority: 1

**NUC-006**
Description: The menu shall contain "enhetsöversikt"
Priority: 1

**NUC-007**
Description: There shall be a patient overview page - "Enhetsöversikt" that shall show all the patients currently in the ER in a list
Priority: 1

**NUC-008**
Description: There shall be a "Patientöversikt" that always displays widget for vital parameters, triage color, orsakskod
Priority: 1

**NUC-018**
Description: The colors in the application shall be strongly contrasted so that they can be seen quickly by color blind health care workers
Priority: 2

### 3.1.3   Communication interfaces

**RC-001-004**
Use case: UC-001
Description: The system shall request information from back-end based on the user input "personnummer"
Priority: 3

**RC-002-012**
Use case: UC-002
Description: The timeline shall request all data related to the patient from back-end
Priority: 1

**RC-017-004**
Use case: UC-017

Description: The application shall be able to pull patient data from back-end with the patients already assigned triage color
Priority: 1

**RC-004-004**
Use case: UC-004
Description: The application shall be able to pull patient data from back-end with the patients already assigned "orsakskod"
Priority: 1

**RC-005-003**
Use case: UC-005
Description: The information about the "vätskebalans" shall be requested from back-end by providing the patients "personnummer"
Priority: 1

**RC-007-004**
Use case: UC-007
Description: The system shall be able to pull data from back-end based on person number
Priority: 1

**RC-010-002**
Use case: UC-010
Description: The application shall send a request to back-end with the "personnummer" and x-ray assessments when the user presses the button for x-ray assessment
Priority: 1

**RC-011-006**
Use case: UC-011
Description: The widget shall request information about the vital parameters from back-end( and update automatically)
Priority: 1

**RC-014-005**
Use case: UC-014
Description: The information about if a patient is "smittsam" or not shall be requested from back-end
Priority: 1

**RC-015-006**
Use case: UC-015
Description: The widget shall request data about "in-utfarter" from back-end (based on patients "personnummer")
Priority: 1

**RC-021-004**
Use case: UC-021
Description: The users settings on their visible data fields on the "patientöversikt" shall be saved in the back-end even when the user logs in or logs out
Priority: 2

**RC-024-001**
Use case: UC-021
Description: The application shall calculate, based in the triage-color of the patient, how much time that is left from last check-up
Priority: 3

**RC-026-002**
Use case: UC-026
Description: The application shall fetch the journal from back-end when requested
Priority: 3

## 3.2 Functional requirements

The functional requirements define all the requirements for functionality in the application. Company 1 have worked with developing detailed use case, use case diagrams, and user stories from the collected materials of the customer's needs, pain points, and wishes. This material was later translated into requirements with the analyst in charge of the process.

**RC-001-002**
Use case: UC-001
Description: When a number is put in the "personnummer"-box, the system shall instantly update the displayed list with the best matching "personnummer" in the back-end
Priority: 3

**RC-001-003**
Use case: UC-001
Description: If there is no match of the "personnummer" from the database, the list will not show up but instead display a text that says "Det finns ingen patient med angivet personnummer"
Priority: 3

**RC-001-005**
Use case: UC-001
Description: When a number is put in the "personnummer"-box, the system shall mark the matching numbers from every patient showing up on the displayed list in bold.
Ex. User enters: 9705
Result list show up as:
Test Testsson
**9705**14-1213
Exempel Exempelsson
**9705**16-1395
Priority: 3

**RC-002-008**
Use case: UC-002
Description: The application shall be able to show more specific information about each event by user tapping on the icon. (Ex user who was responsible for the event, all relevant lab results or "utlåtanden" from doctors)
Priority: 2

**RC-002-009**
Use case: UC-002
Description: The application shall close the box with specific information by either clicking a cross on the box or somewhere on the screen that is not the box
Priority: 1

**RC-002-010**
Use case: UC-002
Description: The timeline shall have a feature that enables scrolling back or forth on the timeline

by swiping the user's finger to the right or left
Priority: 2

**RC-006-002**
Use case: UC-006
Description: When clicking on the icon the system shall open a new view/pop up
Priority: 2

**RC-006-005**
Use case: UC-006
Description: If the user clicks on a certain medical referral it shall open up and show what's written in it
Priority: 2

**RC-006-007**
Use case: UC-006
Description: If the user clicks on "close"-button the application shall close the medical referral view and get back to the patient view
Priority: 2

**RC-006-008**
Use case: UC-006
Description: When a new "remissvar" is added the application shall notify the user
Priority: 2

**RC-007-001**
Use case: UC-007
Description: When a new "ECG" is added the application shall notify the user
Priority: 1

**RC-007-002**
Use case: UC-007
Description: The application shall be able to visualize older ECGs data that the patient has done at an earlier checkup during the ER visit
Priority: 2

**RC-007-003**
Use case: UC-007
Description: If the user press the icon for "ECG" on the "patientöversikt" The application shall show the ECG data
Priority: 1

**RC-008-003**
Use case: UC-008
Description: The user is only notified about new results related to patients belonging to their team
Priority: 2

**RC-009-006**
Use case: UC-009
Description: The user shall be able to click on the notification for the lab results and get details about the lab results
Priority: 3

**RC-009-007**
Use case: UC-009

Description: The user shall be able to validate the lab results by checking a check box
Priority: 3

**RC-009-010**
Use case: UC-009
Description: The user shall be able to click on the lab results in the "patientöversikt" and get details about the lab results
Priority: 3

**RC-009-014**
Use case: UC-009
Description: The user shall be able to click on a close button to get back to the patient view
Priority: 2

**RC-012-005**
Use case: UC-012
Description: If the conditions in RC-012-004 are met the application shall send a notification including time, value and patient to nurse and/or doctor in charge of the patient
Priority: 3

**RC-013-001**
Use case: UC-013
Description: The application shall get incoming transmissions with information from back-end (ambulace system)
Priority: 1

**RC-013-002**
Use case: UC-013
Description: The start page shall have an information box about incoming patient on the start page
Priority: 1

**RC-013-003**
Use case: UC-013
Description: The information shall contain estimated arrival time and condition (ex: vital parameters, illness/trauma etc)
Priority: 1

**RC-013-004**
Use case: UC-013
Description: If critical the application shall send notification to the coordinator/responsible doctor
Priority: 1

**RC-015-004**
Use case: UC-015
Description: The user shall be able to click "Visa historik" and get a list of all "in/utfarter" that the patient has had during the ER visit as well as start time and removal time
Priority: 2

**RC-015-005**
Use case: UC-015
Description: The user shall be able to click a button "Stäng" on the display list of historical data to get the list to disappear and the user will be back on looking at the widget
Priority: 2

**RC-026-003**
Use case: UC-026
Description: If the user clicks on the symbol a pop-up shall appear with the patient's journal
Priority: 3

**NUC-005**
Description: If the user clicks on the menu button in the header the application shall show or hide the menu
Priority: 1

**RC-028-003**
Description: The user shall be able to make a check that they have administered the ordinering.
Priority: 3

## 3.3  Non-Functional requirements

Non-functional requirements are the requirements that define how our application shall perform and shall have in terms of quality, language, and systems.

**NUC-010**
Description: Every user shall per default always belong to a team
Priority: 1

**NUC-011**
Description: The application shall be in swedish
Priority: 1

**NUC-012**
Description: Every user shall always have an assigned role
Priority: 2

**NUC-013**
Description: The application shall be adaptable for screens such as ipad mini, desktop and phone
Priority: 1

**NUC-014**
Description: OS-neutral web application that doesn't have to be installed
Priority: 1

**NUC-015**
Description: Use functions that are commonly available on most smart phones/tablets
Priority: 1

**NUC-016**
Description: Server calls should be through open API:s, for example based on REST/HTTPS
Priority: 1

**NUC-017**
Description: Important information on the application shall be quickly accessible (i.e. need less than 3 clicks to be found)
Priority: 2

## 3.4 Priority 4

In this subsection, we list all requirements that are prioritized with level 4. All of these are not currently implemented in the product as of VSSE'21. These requirements, we believe, have a lot of added value to the application. A deep-dive of future improvements and features is given in the architectures notebook and the user manual.

### 3.4.1 User interfaces

**RC-004-001**
Use case: UC-004
Description: The application shall show the patients "orsakskod" on the team's overview - "Enhetsöversikt"
Priority: 4

**RC-006-006**
Use case: UC-006
Description: The application shall only show one medical referral at a time
Priority: 4

**RC-009-012**
Use case: UC-009
Description: If the user clicks on a specific lab result the application shall open a new view that shows the lab results as a graph and indicate if the results are outside of the "referensvärde"
Priority: 4

**RC-010-006**
Use case: UC-010
Description: The user shall be able to see an history of older x-rays on the same page as RC-010-004.
Priority: 4

**RC-019-001**
Use case: UC-019
Description: On the "patientöversikt" there shall be a button for print "hemgångsmeddelande"
Priority: 4

**RC-021-005**
Use case: UC-021
Description: The user shall be able to have different data fields/widgets visible depending on which patient's "patientöversikt" they are currently looking at
Priority: 4

**RC-024-003**
Use case: UC-021
Description: The user shall be able to see the remaining time in hours and minutes to next check-up on each patients row in the "enhetsöversikt"
Priority: 4

### 3.4.2 Hardware interfaces

**RC-019-002**
Use case: UC-019
Description: If clicking on the button the application shall send an autogenerated "hemgångsmeddelande" to the printer service

Priority: 4

### 3.4.3   Communication interfaces

**RC-012-007**
Use case: UC-012
Description: If the patient is having a "hjärtstopp", the applicant shall send an notification to the "Hjärtstopp-team "
Priority: 4

**RC-021-002**
Use case: UC-021
Description: The users settings on their visible data fields on the "Enhetsöversikt" shall be saved in the back-end even when the user logs out and logs in again
Priority: 4

**RC-024-002**
Use case: UC-021
Description: The application shall pull data about last time when the check-up happened from the database
Priority: 4

**RC-026-006**
Use case: UC-026
Description: If the user clicks on a specific journal entry the application shall send a request to the back-end
Priority: 4

### 3.4.4   Functional requirements

**RC-002-005**
Use case: UC-002
Description: The timeline shall have a feature that enables zooming in or zooming out by the user pinch zooming the screen
Priority: 4

**RC-007-006**
Use case: UC-007
Description: If the user clicks on two points on the ECG, the application shall be able to measure the distance between those
Priority: 4

**RC-007-009**
Use case: UC-007
Description: If the user pinch zoom on the ECG, the application shall zoom on the ECG curve
Priority: 4

**RC-008-004**
Use case: UC-008
Description: When the user has clicked the red marker in the notification, the application shows the user what the result was
Priority: 4

**RC-008-005**
Use case: UC-008
Description: The user can close the result box by clicking on a cross in the right corner
Priority: 4

**RC-009-013**
Use case: UC-009
Description: The user shall be able to get back to the lab result table by clicking on a close button
Priority: 4

**RC-010-003**
Use case: UC-010
Description: The user shall be able to select the x-ray assessment module and get the picture of the newest x-ray assessment
Priority: 4

**RC-010-004**
Use case: UC-010
Description: The user shall be able to press a button beside the x-ray assessment to access the picture of the x-ray in a new popup that the assessment is about
Priority: 4

**RC-010-007**
Use case: UC-010
Description: The user shall be able to close the x-ray assessment module by pressing on a white space outside the module or an "X" button on the top right corner
Priority: 4

**RC-010-008**
Use case: UC-010
Description: The user shall be able to close the x-ray picture popup by pressing on a white space outside the module or an "X" button on the top right corner
Priority: 4

**RC-010-009**
Use case: UC-010
Description: The user shall be able to zoom in and out on the picture in RC-010-005 by pinching on mobile devices
Priority: 4

**RC-010-010**
Use case: UC-010
Description: The user shall be able to show two x-ray pictures side by side by opening another and older x-ray and drag it to the side of the new picture
Priority: 4

**RC-021-001**
Use case: UC-021
Description: If the user clicks on the button "Välj synliga fält" the application shall show options for add or remove data fields on "enhetsöversikten"
Priority: 4

**RC-021-003**
Use case: UC-021
Description: If the user clicks on the button "Välj synliga fält" the application shall show options

for add or remove data fields on "patientöversikten"
Priority: 4

**RC-026-005**
Use case: UC-026
Description: The user shall be able to click on a specific journal entry to retrieve more information
Priority: 4