

TDDC88 Project - Company 1

Software Requirements Specification

Lead Analyst: Sofie Andersson

December 1, 2021
Version 1.8

Contents

1	Introduction	3
1.1	Purpose and intended audience	3
1.2	Scope	3
1.3	Definitions, acronyms and abbreviations	4
1.4	Overview	4
2	Overall description	5
2.1	Product perspective	5
2.2	Product functions	5
2.3	User characteristics	5
2.4	General constraints	5
2.5	Assumptions and dependencies	6
3	Specific Requirements	7
3.1	Interface requirements	7
3.2	Functional requirements	16
3.3	Non-Functional requirements	21
3.4	Performance requirements	21
3.5	Design constraints	21
3.6	Software system attributes	21
3.7	Other requirements	21

Version	Author	Updates	Reviewed by	Date
1.0	E. Sköld	Initial outline of document	F. Dolk	2021-09-13
1.1	F. Dolk	Chapter one first draft (1.1, 1.2,1.3, 1.4	J. Chou Chen	2021-11-04
1.2	F. Dolk	Added 2.3, 2.4 and 2.2	J. Chou Chen	2021-11-05
1.3	F.Dolk	Added 2.5, 3.2	J. Chou Chen	2021-11-09
1.4	J. Chou Chen	Added 2.1, removed RC-007-005, removed RC-007-008, removed RC-007-010, removed RC-009-002, removed RC-009-009, removed RC-010-005, removed RC-010-006, removed section 2.6, removed RC-012-006, removed RC-012-007, removed NUC-009	F.Dolk	2021-11-11
1.5	J. Chou Chen	Added backend, triage-color, enhetsöversikt, orsakskod, vätskebalans, vätskeintag, vätskeförlust, patientöversikt, referensvärde, smittsam, hemgångsmeddelande, varningssymbol, personnummer, in-utfarter, referensvärde and ordinerings in 1.3 Also changed the title of requirements RC-002-001, RC-007-007, RC-009-004, RC-009-005, RC-014-004, RC-024-003, RC-024-004, NUC-002 and RC-017-002	F.Dolk	2021-11-26
1.6	J. Chou Chen	Added RC-028-001, RC-028-002, RC-028-003, RC-028-004 and RC-028-005	L. Sundqvist	2021-11-26
1.7	J. Chou Chen	Added explaining text to 3, 3.1, 3.2 and 3.3	F.Dolk	2021-11-27
1.8	J. Chou Chen	Changed RC-001-001,RC-001-002. RC-001-003,RC-001-004,RC-001-005 and RC-011-005	F.Dolk	2021-12-01

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, but also for support to later versions.

1.2 Scope

The software product will be a 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 analysing 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 to improve the workflow at the ER by notifying the user when new important 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	Emergency 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
Backend	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 3 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 intended audience. The first chapter also contains a list of important definitions, acronyms and abbreviations to ensure that the reader is provided with all information needed to fully understand the content of the SRS. In the second chapter, the context of the application is presented through product perspectives and product functions, user characteristics, constraints, assumptions and dependencies. In the last chapter the most detailed description of the system is presented 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 is written to ensure a deeper understanding of the products functions connected to the need from 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 hospitals own 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 Infront of a desktop computer, they will have to use the physical keyboard and mouse to navigate the page. In case of a portable device as a tablet or phone the user will use the touchscreen feature built into these devices to navigate and type in their login credentials into the web-based application. This process and login procedures is overlooked by a software administration that can create, remove, and can 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 is assigned for care into same department that the user works in. On the top of the page and search bar will be visible where the user can type in a key to search for a patient for example. One example of a key is “personnummer”. When the user start typing the search bar will be cuntinously updating with search results that match whith what is currently in the bar. If the user chooses one patient by clicking on it either on the “enhetsöversikt” or thru the search bar it will be taken to the “patientöversikt” with is an interface displaying patient information thru data points and graphs.

This application will have a simple database to get and view the data. The frontend 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 works at the ER: assistant nurses, nurses, doctors and administrators. The general assumption about these users are that they have a varying technical experience and knowledge, where most of the users have none or very low technical knowledge. Therefore, the application should not require any level of special technical experience. Instead it is very important that the application is intuitive even from a user with no technical knowledge, in order to make them prefer this application 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 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 all times, which is a prerequisite in order to enable automatic updates of lab results and examinations. The last assumption is that the tables 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 on. And 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 is not derived by an 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-004-001

Use case: UC-004

Description: The application shall show the patients “orsakskod” on the team’s overview - “Enhetsöversikt”

Priority: 4

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-006-006

Use case: UC-006

Description: The application shall only show one medical referral at a time

Priority: 4

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-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-010-001

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 (together 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 backend 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 silhouette by a human body

Priority: 1

RC-015-002

Use case: UC-015

Description: On the human body silhouette, 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-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

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 ordinerings.

Priority: 2

RC-028-002

Use case: UC-028

Description: The next ordinerings shall be highlighted in a way its not easy to miss.

Priority: 2

RC-028-004

Use case: UC-028

Description: If an ordinerings 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 ordinerings.

Priority: 2

3.1.2 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

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 Software interfaces

-

3.1.4 Communication interfaces**RC-001-004**

Use case: UC-001

Description: The system shall request information from backend 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 backend

Priority: 1

RC-017-004

Use case: UC-017

Description: The application shall be able to pull patient data from backend 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 backend with the patients already assigned "orsakskod"

Priority: 1

RC-005-003

Use case: UC-005

Description: The information about the “väskebalans” shall be requested from backend by providing the patients “personnummer”

Priority: 1

RC-007-004

Use case: UC-007

Description: The system shall be able to pull data from backend based on person number

Priority: 1

RC-010-002

Use case: UC-010

Description: The application shall send a request to backend 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 backend(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 backend

Priority: 1

RC-015-006

Use case: UC-015

Description: The widget shall request data about “in-utfarter” from backend (based on patients “personnummer”)

Priority: 1

RC-021-002

Use case: UC-021

Description: The users settings on their visible data fields on the “Enhetsöversikt” shall be saved in the backend even when the user logs out and logs in again

Priority: 4

RC-021-004

Use case: UC-021

Description: The users settings on their visible data fields on the “patientöversikt” shall be saved in the backend 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-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-026-002

Use case: UC-026

Description: The application shall fetch the journal from backend when requested

Priority: 3

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

3.2 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 backend

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

970514-1213

Exempel Exempelsson

970516-1395

Priority: 3

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-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-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-008-003

Use case: UC-008

Description: The user is only notified about new results related to patients belonging to their team

Priority: 2

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: 3

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: 3

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-009-013

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-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-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: 3

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-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 backend (ambulance 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 pa-

rameters, 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-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-026-003

Use case: UC-026

Description: If the user clicks on the symbol a pop-up shall appear with the patient's journal

Priority: 3

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

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 ordinerings.

Priority: 3

3.3 Non-Functional requirements

Non-functional requirements are the requirements that define how our application should 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 Performance requirements

3.5 Design constraints

3.6 Software system attributes

3.7 Other requirements