

1 INTRODUCTION

1.2 Convention

All requirements in this document are based on the system description of UHOPE, as well as the interview conducted with UHOPE's enterprise architect Ms. Gieske. The requirements in this document are specified via user stories, in order to describe system features from an end-user perspective. The requirements are identified in the following way: SR-1, SR-2, etc., where SR stands for System Requirements and the number is the requirement identifier. Each requirement consists of one sentence. Any information following a requirement will be in italics and is an elaboration on where the information is derived from.

2 SYSTEM REQUIREMENTS

SR-1 As a doctor, I want to be able to write prescriptions for patients.

This requirement is derived from the interview, around the 3:48 minute mark in response to a question about what Ms. Gieske meant with "departments and beyond" in her vision.

SR-2 As a doctor, I want to be able to automatically transfer prescriptions to pharmacy information systems.

This requirement is derived from the interview, around the 3:53 minute mark in response to a question about what Ms. Gieske meant with "departments and beyond" in her vision.

SR-3 As a patient, I want to be able to view prescriptions written by doctors, so that I can use it as reference when I visit the pharmacy.

This requirement is derived from the interview, around the 3:53 minute mark in response to a question about what Ms. Gieske meant with "departments and beyond" in her vision, as well as the 15:10 minute mark.

SR-4 As a **pharmacist**, I want to be able to **view** **prescriptions** that have been transferred, so that I know what patients need.

This requirement is derived from the interview, around the 3:53 minute mark in response to a question about what Ms. Gieske meant with “departments and beyond” in her vision.

SR-5 As a **patient**, I want to be able to **edit** my **personal information** online. *This requirement is derived from the interview, around the 6:30 minute mark in response to a question about all local databases being integrated into one central database, as well as the 14:15 minute mark.*

SR-6 As a **system administrator**, I want all data to be **stored** in a **central database**, so that there are fewer discrepancies between departments.

This requirement is derived from the interview, around the 6:50 minute mark in response to a question about all local databases being integrated into one central database.

SR-7 As a **system administrator**, I want **Electronic Medical Records (EMRs)** to be **integrated** with the new **management system**, so that there is a digital **collection** of a patient’s medical information available.

This requirement is derived from the interview, around the 7:30 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-8 As a **doctor**, I want to be able to **view** the **patient’s medical history**.

This requirement is derived from the interview, around the 7:30 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-9 As a **doctor**, I want to be able to **view** the **patient’s personal information**.

This requirement is derived from the interview, around the 7:30 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-10 As a **nurse**, I want to be able to **view** the **patient’s medical history**.

This requirement is derived from the interview, around the 7:30 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-11 As a **nurse**, I want to be able to **view** the **patient’s personal information**.

This requirement is derived from the interview, around the 7:30 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-12 As a **nurse**, I want to be able to **make** notes of patients.

This requirement is derived from the interview, around the 8:00 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-13 As a **receptionist**, I want to be able to **view** the **EMR** of a patient, so that I have the information required to contact the patient.

This requirement is derived from the interview, around the 8:00 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-14 As a **receptionist**, I want to be able to **schedule** appointments.

This requirement is derived from the interview, around the 8:05 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-15 As a **patient**, I want to be able to **schedule** appointments online on a personal computer.

This requirement is derived from the interview, around the 8:05 minute mark in response to a question about which components of the 32 management systems are relevant to us, as well as the 14:17 minute mark and the 16:00 minute mark.

SR-16 As a doctor, I want **mobile devices** to be **integrated** with **EMRs**, so that any **data collected** by **mobile devices** can be **stored** on EMRs.

This requirement is derived from the interview, around the 8:25 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-17 As a **patient**, I want to be able to **request** new **prescriptions** via the online appointment scheduling.

This requirement is derived from the interview, around the 8:45 minute mark in response to a question about which components of the 32 management systems are relevant to us.

SR-18 As a **systems analyst**, I want **clinical data** to be **collected**, so that I can **perform** prescriptive analytics as well as predictive analytics.

This requirement is derived from the interview, around the 10:20 minute mark in response to a question about the kind of data the system should be able to collect, as well as the system description.

SR-19 As a **systems analyst**, I want to have **access** to clinical data that is **collected** by **hospital employees**, so that I can **perform** prescriptive analytics as well as predictive analytics.

This requirement is derived from the interview, around the 10:30 minute mark in response to a question about the kind of data the system should be able to collect, as well as the system description.

SR-20 As a **systems analyst**, I want to be able to **view** the data on **bed occupancy rate**, so that I can **perform** analytics on the data.

This requirement is derived from the interview, around the 10:40 minute mark in response to a question about the kind of data the system should be able to collect.

SR-21 As a **systems analyst**, I want to be able to **view** the data on **room scheduling**, so that I can **perform** analytics on the data.

This requirement is derived from the interview, around the 10:40 minute mark in response to a question about the kind of data the system should be able to collect.

SR-22 As a **systems analyst**, I want to be able to **view** the **employee schedules**, so that I can use predictive analytics in order to find out how many employees are needed.

This requirement is derived from the interview, around the 10:45 minute mark in response to a question about the kind of data the system should be able to collect.

SR-23 As a **system administrator**, I want all the data viewed by **systems analysts** to be **anonymized**, so that patient safety is ensured.

This requirement is derived from the interview, around the 11:10 minute mark in response to a question about the kind of data the system should be able to collect.

SR-24 As a system administrator, I want the new system to **comply** to GDPR standards, in order to ensure that the data within the system is protected.

This requirement is derived from the interview, around the 12:10 minute mark in response to a question about the current security and privacy measures being taken.

SR-25 As a doctor, I want the patient to be excluded from viewing any information that is not intended to be viewed by them, so that there are no security risks.

This requirement is derived from the interview, around the 12:40 minute mark in response to a question about the current security and privacy measures being taken.

SR-26 As a system administrator, I want to be able to **restrict** components from being viewed by patients, so that the patient does not have **access** to data that is not meant for them.

This requirement is derived from the interview, around the 12:40 minute mark in response to a question about the current security and privacy measures being taken.

SR-27 As a system administrator, I want to be able to **grant** different **levels of access** to users of the **management system**, so that certain **functionalities** can be excluded from those users.

This requirement is derived from the interview, around the 13:00 minute mark where the privacy expert notes that the system should distinguish between user levels.

SR-28 As a **patient**, I want to be able to **access** the **components of the EMR** that the hospital has intended me to see.

This requirement is derived from the interview, around the 14:25 minute mark in response to a question about the involvement of patients in the new management system.

SR-29 As a **patient**, I want to be able to **view** my **test results** once they have returned from the lab.

This requirement is derived from the interview, around the 14:45 minute mark in response to a question about the involvement of patients in the core management system.

SR-30 As a patient, I want to be able to **access** and **view** my EMR on a **mobile device**.

This requirement is derived from the interview, around the 15:55 minute mark in response to a question about the integration of mobile devices into the core management system.

SR-31 As a **patient**, I want to be able to **schedule** an **appointment** on a mobile device.

This requirement is derived from the interview, around the 8:05 minute mark as well as the 14:17 minute mark and the 16:00 minute mark in response to a question about the integration of mobile devices into the core management system.

SR-32 As a **patient**, I want to be able to **request** new **prescriptions** on a mobile device.

This requirement is derived from the interview, around the 8:05 minute mark as well as the 14:17 minute mark and the 16:00 minute mark in response to a question about the integration of mobile devices into the core management system.

SR-33 As a **patient**, I want to be able to **view** **prescriptions** on a mobile device.

This requirement is derived from the interview, around the 8:05 minute mark as well as the 14:17 minute mark and the 16:00 minute mark in response to a question about the integration of mobile devices into the core management system.

SR-34 As a **doctor**, I want to be able to **use** the **hospital management system** on a mobile device, so that I can access the system no matter my current location.

This requirement is derived from the interview, around the 17:45 minute mark in response to a question about whether every part of the management system should be accessible on a mobile device.

SR-35 As a doctor, I want to **have** access to all the **functionalities** on a mobile device that I also have access to on a personal computer.

This requirement is derived from the interview, around the 17:45 minute mark in response to a question about whether every part of the management system should be accessible on a mobile device.

SR-36 As a systems analyst, I want the **start and end date** of appointments to be **registered** into the **management system**, so that I can **determine** the **average duration** of an appointment.

This requirement is derived from the interview, around the 18:40 minute mark where Ms. Gieske gives an example for the data analytics.

SR-37 As a **system administrator**, I want the **management system** to only be **accessible** by users who have been **granted access**, so that patient data does not get leaked.

This requirement is derived from the interview, around the 19:20 minute mark in response to a question Ms. Gieske asks us concerning the data privacy issue.

SR-38 As a **system administrator**, I want the **management system** to **have** a **login system** that prompts users to log into their **private account**.

This requirement is derived from the interview, around the 19:30 minute mark in response to a question Ms. Gieske asks us concerning the data privacy issue.

SR-39 As a doctor, I want the data stored on the old management systems to be transferred to the new core management system, so that I do not lose any data.

This requirement is derived from the hospital management system description.

SR-40 As a nurse, I want the data stored on the old management systems to be transferred to the new core management system, so that I do not lose any data.

This requirement is derived from the hospital management system description.

These are the same requirements from assignment 1.