1 Executive Summary

1.1 Project Summary.

With the large amounts of data, people involved and innumerable processes, a hospital is definitely an ideal candidate for data management software. If hospitals are to run efficiently, provide top line care, ensure patient and other data confidentiality, and work seamlessly – they cannot hope to do so without an effective [Hospital Management System Software](https://www.karexpert.com/hospital-information-management-system?utm_source=Website%20Organic&utm_medium=https://www.google.com/&referer=https://www.google.com/&origin_referer=https://www.google.com/). Reduced human intervention for paperwork, less paperwork, reduced staff headcount for jobs that can be easily managed within the HMS, speedier processes, reduction of errors, and data privacy and safety – are just some of the benefits of what we are offering throughout our web based application “Hospiware”.

1.2 Purpose and Scope of this Specification.

For the hospitals, HMS translates to being able to track patient history, provide better care, keep track of appointments, save patient insurance and payment data, enable doctors and clinicians to check patient history, maintain patient care continuity, and save time and effort on unnecessary tedious manual tasks. This [Electronic Medical Record (EMR)](https://www.karexpert.com/saas/ehr-emr-software/?utm_source=Website%20Organic&utm_medium=https://www.google.com/&referer=https://www.google.com/&origin_referer=https://www.google.com/) or Electronic Health Record (EHR) is the journey of a patient with the hospital – keeping track of the date of every visit, doctor consulted, medicines and advice prescribed, and other information for the patient. This ensures that even if a patient visits after a long break, the patient and hospital will not require going through the registration process again.

2 Product/Service Description.

2.1 Product Context.

Hospiware is a hospital-only dedicated system which can be of use in every department/sector of a hospital, be that the Neurology department, Medicine department, Surgery Department, Plastic Surgery, Infectious Disease department ect. It makes it easier for doctors and surgeons to know the patient’s medical history beforehand and helps them deflect prescriptions or drugs that a patient’s allergic to.

2.2 User Characteristics.

System Administrator(ADMIN).

Update or change the system based on user’s request, manage permissions for users, create or delete user accounts, approve the deletion of patient’s data.

Secretary.

Schedule appointments, check doctor’s and surgeon’s timetable, add new patient files by searching them up in the database, alert the nurse or a doctor about a patient coming from the emergency room, keep track of financial costs for every patient in the hospital.

Nurse.

Check future appointments, alter the medical file of a patient, retrieve medical file of a patient from database.

Doctor.

Delay, remove or schedule a future appointment, give medication to a patient, alter the medical file of a patient.

Surgeon.

Delay, remove or schedule a future surgery, check patient’s medical file prime to the surgery, add notes to the database inquiring the surgery (usually surgeries don’t always go the way they’re supposed to, so surgeons can write the complicalities and how they dealt with them in order for other surgeons to learn from them and be ready when a similar complication happens on their surgeries).

Head of Department.

Assign patient cases to doctors/ surgeons, send an automated system message regarding his decisions to the users.

HR Agent.

Accept complaints from patients and internal hospital staff, write a report regarding said problem, send it to Head of Department for the final decision.

Patients.

Create accounts, fill out online form to make an appointment, send a complaint to HR.

2.3 Assumptions.

It is assumed that every user that interacts with the system has the proper training, computer skills and professional knowledge to interact with the system and be able to use its features.

It is assumed that every user has a phone/tablet/desktop which has a stable internet connection.

It is assumed that every employee in the hospital has his/her own account created by the system admin.

It is assumed that appointments are made from patients by filling out a form online.

It is assumed that the hospital has a working bank account to distribute all paychecks of its employees.

It is assumed that the hospital has a template document for the patients who want to make an appointment.

It is assumed that the hospital directors have email accounts for the employees on the following email providers: Google, Microsoft.

It is assumed that the hospital has the legal means to protect hospital staff in the case of lawsuit.

2.4 Constrictions.

The system can only be accessed through a stable internet connection.

The system can only be integrated with a limited number of third-party applications

The system is designed in different sections where each user which has access to the corresponding section should have prior knowledge or training to systems of this kind.

The system does not allow the users to make customizations regarding the system’s main components in order to prevent anomalies.

The system has assigned roles for every type of user so not all users have the same accessibility to it.

2.5 Dependencies.

The Secretary should alert any available doctors in case a patient comes from the emergency room.

The Secretary should send every new case to the Head of Department in order for him/her to make the decisions.

The nurse should always access the database and retrieve a patient’s medical file when he comes from the emergency room.

The Doctors and Surgeons should make sure to clear their schedule before accepting a new patient case incase of an overlap.

The Head of Department should consider very carefully when assigning cases based on their severity.

The Doctors and Surgeons should carefully edit the patient’s file in case there has been a change of his conditions.