

Patient Management System

for Dispensaries

The Specification Document

Functions of the product

- Handle all the patient records
- Automate systems so as to reduce manual efforts
- Make regular backups
- Generate reports and analyse data
- Provide reasonable data security, redundancy and privacy
- Provide an easy & convenient way for new patients to register
- Provide an easy to use User Interface for the staff members to use

Expections of the client

- A system with automatic data processing so as to reduce the manual effort
- A central data location where all information can be stored, allowing patients to visit other hospitals in the same chain without having to carry charts.
- An easy way for new patients to get registered.
- An automatic data backup system so as to secure the data for easier future reference.
- An easy & fast user interface reducing time consumption and effort.
- Reasonable amount of data security to maintain the privacy of the patient and his records for reference.

How the new system works

- Instead of a chart, the patient will be given a smart card, eliminating the need of a chart.
- All patient records are stored in a centralised, encrypted, limited access and redundant server for easy and safe access and manipulation of all the records.
- A desktop app will be designed to communicate with the server, handle data entries and display to provide an easy interface to the user.
- A web interface will allow patients to get registered and reduce the time and effort wasted by both the patient and the staff.

Operation in detail

- Patient is given a chart where all the data is recorded regarding his/her medical history and prescriptions given on the last visit.
- After examination, the doctor fills up the chart, the details of the disease or ailment , symptoms detected and prescribing the relevant drugs.
- The patient is required to maintain the chart and bring it with them on every visit so that the staff as well as the doctor can use it as reference to the history of the patient.
- The patient carries the now updated chart to the pharmacist
- The pharmacist provides the drugs as prescribed
- In case of serious/chronic conditions, the patient is referred to a specialist doctor

The Underlying Framework

Frontend

The frontend and the graphical user interface is provided by Microsoft Visual Basic (MS VB) and the .NET Framework. Optionally, a web based interface may be provided with Hyper Text Markup Language/Cascading Style Sheets (HTML/CSS).

Backend

The app is to be powered by Oracle Database linked with the frontend by ODBC. ODBC is the programming interface that enables applications to access data in Database Management Systems using the Structured Query Language (SQL) as a data access standard. Moreover the web interface shall be powered PHP: Hypertext Preprocessor.

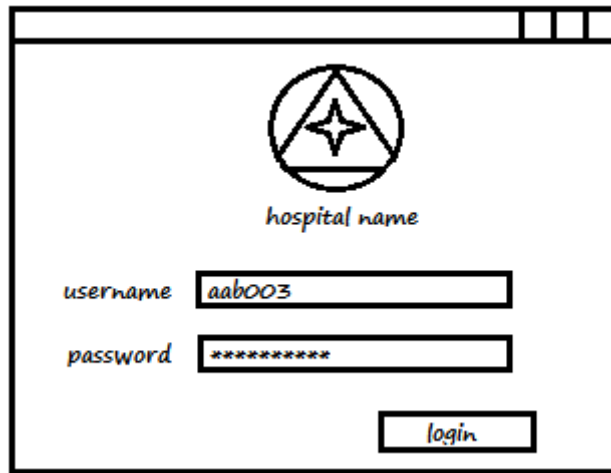
User Interface Mockups

A mockup of a 'Patient Record Detail Screen'. It features a title bar with three window control buttons. Below the title bar is a menu bar with 'database' and 'menu'. The main area contains an 'add' button and a 'remove' button. A 'search' label is followed by a text input field, with a 'view' button below it. A list of fields is shown: 'name', 'gender', 'office', 'address', 'date of birth', and 'contact'. An 'add to queue' button is located in the bottom right corner.

Patient Record Detail Screen

A mockup of a 'New Patient Record Screen'. It features a title bar with three window control buttons. Below the title bar is a menu bar with 'file', 'edit', 'organise', and 'help'. The main area contains an 'add entry' button and a 'remove' button. Below these are input fields for 'name', 'date of birth', 'office', 'address', and 'contact'. The 'gender' field has two radio buttons labeled 'male' and 'female'. 'discard' and 'save' buttons are in the bottom right corner.

New Patient Record Screen



A user login dialog box with a title bar containing three window control buttons. The main area features a logo (a circle with a triangle and a star) at the top center, followed by the text "hospital name". Below this are two input fields: "username" with the value "aab003" and "password" with the value "*****". A "login" button is positioned at the bottom right.

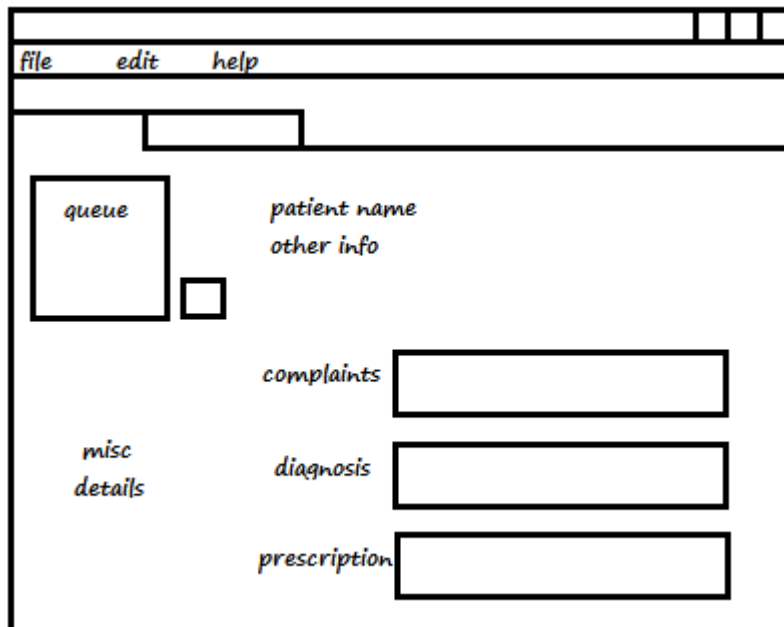
hospital name

username aab003

password *****

login

User Login Dialog Box



A doctor screen with a title bar containing three window control buttons. Below the title bar is a menu bar with "file", "edit", and "help". The main area is divided into several sections. On the left, there is a "queue" section with a list box and a "misc details" section. On the right, there is a "patient name" section with a text field, an "other info" section with a text field, and three input fields for "complaints", "diagnosis", and "prescription".

file edit help

queue

patient name

other info

complaints

diagnosis

prescription

misc details

Doctor Screen