Requirements for a clinic appointment system:

# Scope: To reduce the patient waiting time from 1 to 2 hours in the retinal clinic

Over view: The new system shall be able to give the next clinic date and time in a small printout to the patient.

System users:

|  |  |
| --- | --- |
| No | User category |
|
| 1 | Administrator |
| 2 | Second level Administrator |
| 3 | Data entry operators |

Done.

But Administrator word is for System Administration.

Here Super User was used instead of Administrator.

Also Second Level Administrator was replaced as Manager

Need to add USERCATEGORY column of String type to PERSON table of the database.

1. Administrator: ( >>> Super User)

This role denotes the consultant of the respective clinic. He is the super user with all the executing rights. Can give some rights to selected Second level administrators. These rights shall be:

1. Rights to set the time periods (time slots) in the system
2. Rights to set the number of appointments in each time slot
3. Rights to set the number of additional appointments that can be given in each time slot
4. Rights to authorize additional appointments in each time slot (within the set limit)
5. Rights to add new Second level administrators and Data Entry operators
6. Second level administrators: ( >>> Manager)

They are the medical officers in the clinic. They can supervise Data entry operators.

1. Data Entry Operators:

This includes other staff in the clinic. They can Give, Edit, Delete appointments. Also they can search database. They are unable to new users, Set time intervals, Set number of appointments for each time slot, Set number of additional appointments that can be given and they are unable to give additional appointments if there are no additional appointments are set to be given.

# Functionality:

The system:

Logging interface:

* The system shall be able to login with a user name (UN) and a password (PW) given to each and every user.
* System privileges shall be changed according to the user category.
* Login time, logoff time and the user ID shall be captured and recorded automatically

The system shall be able to record,

1. Patient’s Name ( Good if it is in Sinhala) (need typing)
2. Clinic file number (need typing)
3. (PHN)
4. Next clinic Date (need to select from a calendar {GUI})
5. Next clinic Time (Need to select with a mouse click {GUI})
6. System user ID, (Automatically captured)
7. Date and Time of data entry (Automatically captured)

Above first 5 fields are the data entry Graphical User Interface (GUI). This GUI is visible to every user category.

In addition, following functionality shall be met with the system:

1. Issue new user ID’s and Passwords (Need typing), (Visible only for the Administrator and second level administrators)
2. Delete User ID’s and Passwords (Visible only for the Administrator and second level administrators)
3. Time slots shall be able to redefine with changing requirements (Select from drop down list) (Only for the Administrator)
4. Allowed number of appointments given in each time slot shall be able to redefine (Select from drop down list) (Only for the Administrator)
5. No additional appointment shall be given by the DATA ENTRY OPERATORS in each time slot after the predefined patient quota is fully used (Auto lock, Warning message)
6. In the case of above number 5, this shall be visually identifiable by looking at each time slot in each day of the calendar (By a color code)
7. Above number 5 situation shall be able to override and give some more appointments by all levels of administrators.
8. Duplicate appointments for a given single day shall be prevented.
9. Once a patient is given an appointment, he/she shall be given next appointment using patient data already entered into the system in the first encounter.
10. Patient shall be given a small printout with Name, Clinic file number, (PHN), Appointment date and time to bring back on the next clinic visit.
11. A bar cord (based on clinic file number (or PHN)) can be printed on the print out mentioned in above number 9, and that can be used to search the database. (To issue an appointment for the next clinic visit, change the appointment, remove the appointment and to mark in the database as that patient visited in the given appointment.)
12. Limits shall be able to predefine for the above number 7 by the Administrator. (select from a drop down list)
13. Total number of appointments given in time slot of each day and the total number of appointments given in each day shall be displayed in the GUI.
14. Database shall be able to searched using appointment date, time, patient name, part of the patient name, (PHN), Clinic file number, part of the clinic file number.
15. Search results shall be able to edit (correct the name, clinic file number, (PHN) and give new appointment / reschedule) or remove from the calendar (remove the appointment) if necessary. (Can be performed by all users)
16. In the above number 11 scenario, original appointment details (original name, clinic file number, (PHN) and original appointment date and time) shall be recorded in the database with system user ID, date and time of editing.
17. Data of above number 12 shall only be displayed by both administrators.
18. All data shall be recorded in a relational database located in the cloud.
19. Database shall be backed up daily to another cloud server automatically.
20. These databases shall be secured with maximum possible security according to the current technology available to protect from data theft. (Eg: Data encryption )
21. There shall be arrangements to continue the edgeless smooth functionality in emergencies like network failure.
22. System should be automatically logged off if the system is inactive for more than 15 minutes.