INSTITUTE OF PUBLIC ADMINISTRATION AND MANAGEMENT (UNIVERSITY OF SIERRA LEONE)

HOSPITAL MANAGEMENT SYSTEM

GROUP 2

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| --- | --- | --- |
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Problem Statement:-

 Lack of immediate retrievals: - The information is very difficult to retrieve and to find particular information like- E.g. - To find out about the patient’s history, the user has to go through various registers. This results in inconvenience and wastage of time.

 Lack of immediate information storage: - The information generated by various transactions takes time and efforts to be stored at right place.

 Lack of prompt updating: - Various changes to information like patient are difficult to make as paper work is involved.

Assign doctor to patient is difficult: it is difficult as a patient to have a specific doctor. Eg A patient will go for treatment in the hospital and being diagnose by one doctor and go home, and when you come with your test result to start treatment you will meet another doctor.

Inability to secure information: Because hospital is using manual management system, there is no assurance that patient information is secure.

User Stories Requirement

|  |  |  |
| --- | --- | --- |
| Requirement 1 | User Story | Priority Weight |
| Requirement 1 | As an authorised user I will be able to access user account by using valid key | 5 |
| Requirement 2 | As an authorised user I will be sign out of my account. | 2 |
| Requirement 3 | An unauthorised user will not be able to login by guessing a login validity key the system will block upon a dictionary attack | 4 |
| Requirement 4 | An authorised user will be able to access information on their account after login | 5 |
| Requirement 5 | An admin user will be able to access add information Doctors and Nurses account | 3 |
| Requirement 6 | As a nurse user will be able to add participant and view patients appointment | 3 |
| Requirement 7 | As a doctor will be able to access present and past information and also approve or reject appointments | 1 |
| Requirement 8 | As an authorised user will be able to configure certain preferences on their accounts | 1 |

PART 2

3a). Stakeholders of the system are:

1. Administrators
2. Managers
3. Doctors
4. Nurse
5. Patient

3b) Actors and Goal

Admin- the role of admin users is to view patients, doctors and nurses’ account, schedule appointment, manages information and is also responsible of adding and removing users.

Doctor- the role of the doctor is to view patient history information as well as approving or rejecting appointment.

Nurse- is responsible to register patients, view availability of doctors and patients appointments with doctors.

3b) Casual Description

UC-1 (Access User Account)

Is initiated by Admin, Nurse and Doctor. The goal for this use case is for the actors to access their various account, it responds to Req 1.

UC-2 (Sign out)

Is also initiated by Admin, Nurse and Doctor. The goal for this use case is for the actors to close their various account so that information cannot be accessed by an unauthorized user. Responds to Req 2.

UC-3 (Add Users)

Can only be initiated by the admin and nurse. To add a doctor or register a patient into the system. Responds to Req 5.

UC-4 (Remove users)

Can only be initiated by Admin and the goal for the use case is to remove users from the system. Responds to Req 5.

UC-7 (Authenticate User)

The “include” use case is to authenticate users through identification by the system. Responds to Req 3.

User Interface Requirement

**Log in**

Email

Password

LOGIN

UC7

Includes

UC1

Authenticate user

Initiates

Participate

Participate

Communication

Use case

In

In

In

Initiates

UC2

**Open user**

**acount**

Takes you to homepage

Nurse

Doctor

Admin

Actors

Access user account

Sign out

Initiates

Nurse

Doctor

Admin

Initiates

UC8

Includes

Includes

Includes

Login

UC5

UC4

Initiates

Initiates

Participate

Initiates

Inspect Access History

Remove User

Add users

aadd

UC3

Remove User

Add Users

UC9: Manage Users

Nurse

Doctor

Admin

Authorised User

UC 2: Sign Out

UC 1: Access User Account

UC 3: Add Users

UC 4: Remove User

UC 8: Login

UC 7: Authenticate

UC 5: Inspect user

Traceability Matrix

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement | PW | UC1 | UC2 | UC3 | UC4 | UC5 | UC6 | UC7 | UC8 |
| Req 1 | 6 | X |  |  |  |  |  |  |  |
| Req 2 | 6 |  | X |  |  |  |  |  |  |
| Req 3 | 5 |  |  |  |  |  |  |  |  |
| Req 4 | 5 |  |  |  |  |  |  | X |  |
| Req 5 | 2 |  |  |  |  |  |  |  |  |
| Req 6 | 1 |  |  | X | X |  |  |  | X |
| Req 7 | 2 |  |  |  |  |  | X |  | X |
| Req 8 | 1 |  |  |  |  | X |  |  | X |
| Req 9 | 1 |  |  |  |  |  |  |  | X |

Req 1: Users account should open when login

Req 2: Lock account when sign out.

Req 3: Login only when valid key is entered.

Req 4: Allow retry of entry of password/email address but prevent dictionary account.

Req 5: Keep a history log.

Req 6: Add/Remove user at any time

Req 7: Configuring accounts

Req 8: Inspecting the access history

Req 9: Fill in requests or inquires

Sequence Diagram

System

Admin user

Admins account

(Initiating Actor)

Select function(login)

Prompt for keys

Enter Key Verify key

Signal valid key: open acc

Open account

Login

Home About

Blue Shade Hospital

Doctor

Doctor

Reject

Accept