**Hospital Management System**

***Proper CareHospitals***  is a chain of Hospitals present across the cities of India, which provide health services in different cities in India. Recently this concern decides to introduce web based Hospital booking system.

***The purpose of the System***

**The** followings are the important Service & modules of the system

1. Ward Service
2. Ward addition & fare fixation (modification of fare & capacity of ward) .
3. Doctor Service
4. Doctor addition & fees fixation (modification of fees).
5. Patient Service
6. Patient Admission.
7. Patient Medical & Medicine Expenses calculation
8. Patient Bill generation.
9. User registration

***Users of the System***

There are two categories of Users in this system.

1. Super
2. Ordinary

***Scope of the System***

The details of each modules are as follows:

1. **Ward Addition**:- Ward is maintained as follows:-

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Name** | **Beds** | **Available** | **Fare/Day** |
| W101 | ICU | 50 | 10 | 2500 |
| W202 | Plastic Surgery | 30 | 15 | 1500 |
| W303 | Maternity | 45 | 5 | 1250 |

Only super user can add a new ward or modify fare/beds of an existing ward. Ward id is auto generated during new ward addition.

1. **Doctor Addition:-** Doctor information is maintained as follows:-

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Name** | **Specialization** | **Fee** | **Patients** |
| D1001 | Michael Edwards | Heart | 2000 | 10 |
| D1002 | Robert Bruce | ENT | 1000 | 15 |
| D1003 | Rogers Moore | General | 750 | 18 |
| D1004 | Clara Richards | Gynaecology | 1500 | 3 |

Only super user can add a new Doctor or modify fee of an existing Doctor. Doctor id is auto generated during new Doctor addition. A Doctor can attend up to 20 patients.

1. **User Registration :-** User information will be a follows:-

|  |  |  |  |
| --- | --- | --- | --- |
| UserName | Password | Email | UserType |
| John1 | abc123$ | [john.brown@gmail.com](mailto:john.brown@gmail.com) | Ordinary |
| Eric | pqr-456 | [eric.hall1970@gmail.com](mailto:eric.hall1970@gmail.com) | Super |
| Lousie3 | rst854!y | [lou.moore80@yahoo.com](mailto:lou.moore80@yahoo.com) | Ordinary |

Only super user can add a new user or modify an existing user’s status.

1. **Patient’s Admission:-** Both Ordinary & Super user can perform this task. Patient Information is as follows:-

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PNR | Name | Address | Contact No | Gender | WardNo | Admission Date | ReleaseDate | DoctorId | MedicalExp |
| 124568921 | Bobb Haward | Raheja Nagar, Hyderabad | 7843567810 | Male | W101 | 03-09-2018 |  | D1001 | 5000 |
| 178461116 | Daisy Miller | Anna Nagar,Chennai | 0443245186 | Female | W303 | 06-06-2018 | 16-06-2018 | D1004 | 15000 |
| 178461115 | Tom Hawk | WhiteField, Bangalore | 849452123 | Male | W101 | 11-06-2018 | 19-06-2018 | D1002 | 10000 |
| 124566921 | John Brown | Andheri,Mumbai | 0226741245 | Male | W202 | 31-07-2018 |  | D1001 | 6500 |

|  |  |  |
| --- | --- | --- |
| Medicine Expenses | DoctorVisits | Case |
| 2000 | 3 | Heart |
| 10000 | 8 | Maternity |
| 12500 | 10 | Ear Problem |
| 7500 | 5 | Heart |

This module begins with case , checking of availability of beds in ward if bed is available then allocated to the patient, availability number of bed will be reduced. A doctor of that specialization is allocated . A doctor can take care of 20 patients at a time. So patients in Doctor will also added. Release Date will be zero, Medical Expense ,Medicine expense , Doctor Visits will be zero. Patient Id will be auto generated. Admission Date will be system generated.

1. **Patient Medical & Medicine Expenses calculation:-** Both Ordinary & Super user can perform this task. The module begins with what kind of expense to enter, asks PNR as input, displays patients details, asks for input & confirmation **.** These will be reflected in final bill.

Patient\_Doctor

|  |  |  |
| --- | --- | --- |
| PNR | DoctorVisits | Date |
| 124568921 | 1 | 03-09-2018 |
| 124568921 | 1 | 05-09-2018 |

Patient\_Medical

|  |  |  |
| --- | --- | --- |
| PNR | Amount | Date |
| 124568921 | 2000 | 04-09-2018 |
| 124568921 | 1000 | 05-09-2018 |

Patient\_Medicine

|  |  |  |
| --- | --- | --- |
| PNR | Amount | Date |
| 124568921 | 500 | 03-09-2018 |
| 124568921 | 250 | 06-09-2018 |

1. **Final Bill Generation : -** Both Ordinary & Super user can perform this task. This module begins with asking PNR as input, displays patients details, asks for confirmation **.** All expenses for that patient will be auto calculated which includes Bed rents, Doctor’s fees, Total Medical & Medicine expenses. Release date will be the system date. After bill generation, availability of bed will be increased and Doctor Patient’s list will be reduced.

***System Presentation & User Interface :-***

The System will be developed based on Intercommunicating with Services.

Each of the Service will be a independent Spring Boot application.

They will be related through Eureka Server

The User interfaces will be WebPages like Jsp pages.

At Back end, database will be present.