

HOSPITAL MANAGEMENT SYSTEM (HMS)

Course Code : CSE 3009

Course Title : NoSQL Databases

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Agenda

- Introduction
- Abstract
- Scope of the Project
- Functional Requirements
- Hardware/Software Requirements
- Module Description
- Features of the Project
- Conclusion
- Screen Shorts
- Sample codes

Introduction

- It's a web application for managing hospitals rooms and determining the patient's priority for isolation.
- The app provides a centralized hub for managing the patients and planning their distribution across hospital's rooms.
- It allows doctors and nurses to keep track of the patients and their diseases in real time and to have an overview over the patients and rooms, and better manage the rooms assignment across patients.

Abstract

- Hospital management system is a computer or web based system that facilitates managing the functioning of the hospital or any medical set up.
- This system or software will help in making the whole functioning paperless. It includes registration of patients, storing their details into the system.
- The software has the facility to give a unique id for every patient and stores the clinical details of every patient and hospital tests done automatically.
- It is accessible by an administrator . Only they can add data into the database. The data can be retrieved easily.
- The interface is very user-friendly. The data are well protected for personal use and makes the data processing very fast.

Scope of the Project

- With the introduction of the Hospital management System many drawbacks associated with the traditional system can be overcome. It replaces the manual records and helps in retaining the patient's health history.

Functional Requirements

- All the access is controlled by the admin in this project.
- The admin can add or delete patients.
- The admin can add or delete diseases.
- The admin can assign rooms to patients.
- He can add users, update patient's diagnosis, assign disease to the patient and can add or remove rooms.
- He can view patient's page and retrieve patient's information.

Hardware/Software Requirements

System requirments	OS-Windows, RAM:Min 1GB, Memory: Min 5GB
Frontend	HTML,CSS, Frameworkused: jQuery,Bootstrap
Backend	Nodejs,Express.js
Database	Mongodb

Module Description

Dashboard: Data about patients and rooms is available here.

- The page is split into three tables.
- Which consists of patients with rooms, patients waiting, free rooms.

Patient: You can add a new patient in the system with his personal details and his diseases.

- The application automatically computes the score of the patient based on the entered diseases.

System settings: The control center of the application.

- It allows users to manage the diseases & rooms of the Hospital and create new accounts.

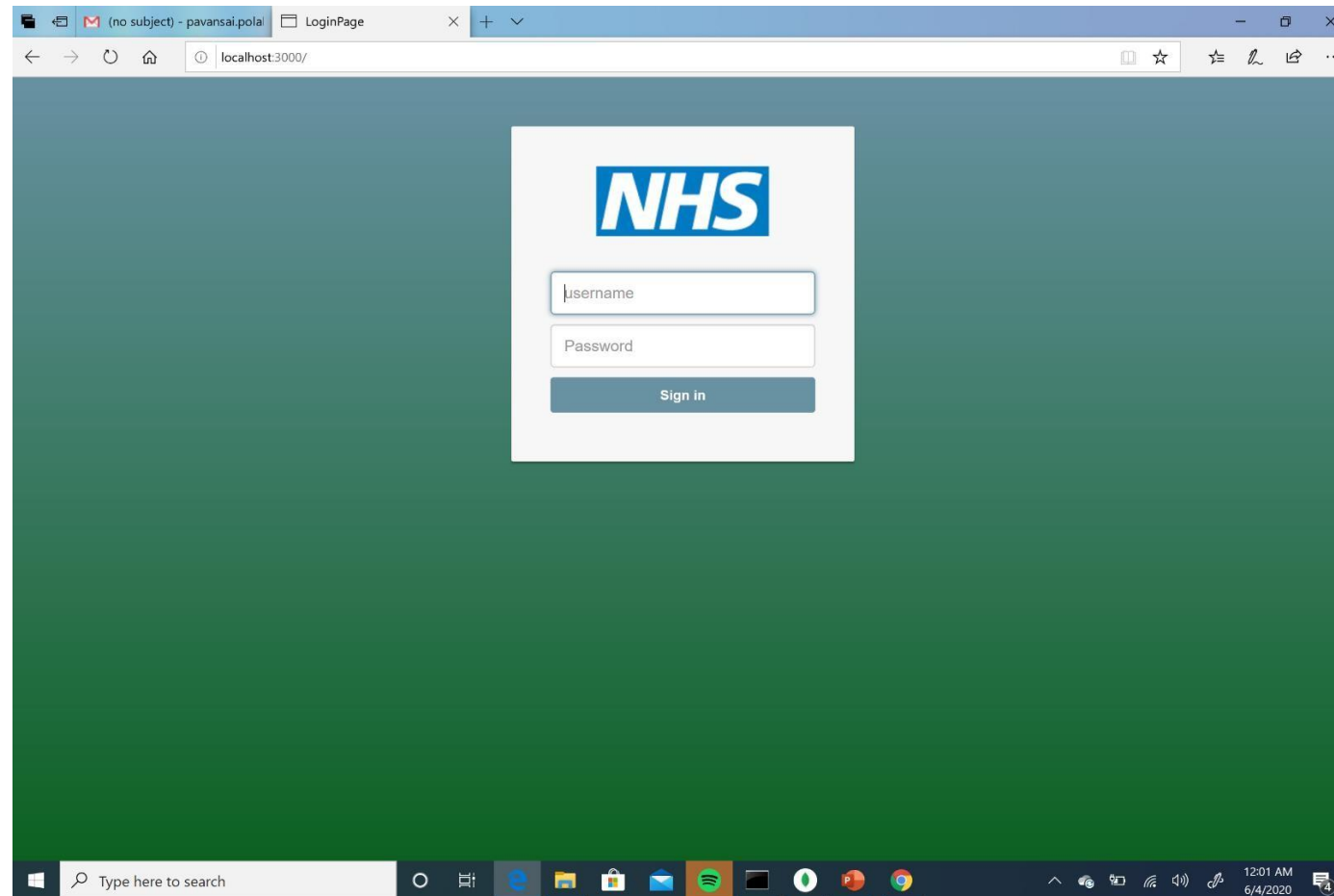
Features of the Project

- If the patient's diagnosis is not updated within 24 hours a red warning sign appears beside the patient's name indicating that we need to update.
- Admin can assign room for a patient.
- Patient can be sent to waiting list for rooms.
- Admin can update the patient details, diseases and rooms.

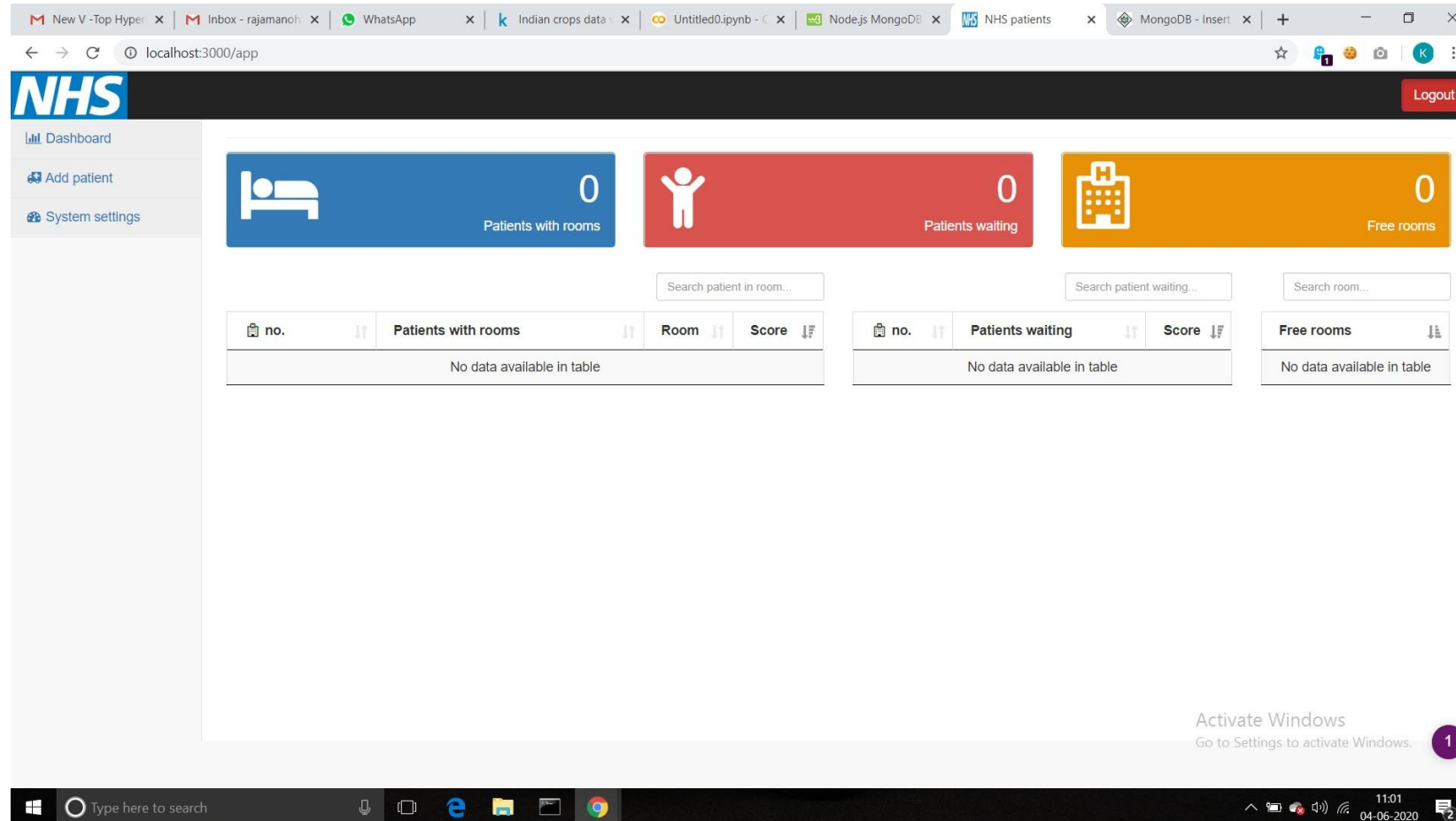
Conclusion

- Implementation of hospital management system project helps to store all the kinds of records, provide coordination and user communication, implement policies, improve day-to-day operations, arrange the supply chain, manage financial and human resources, and market hospital services

Screen Shorts

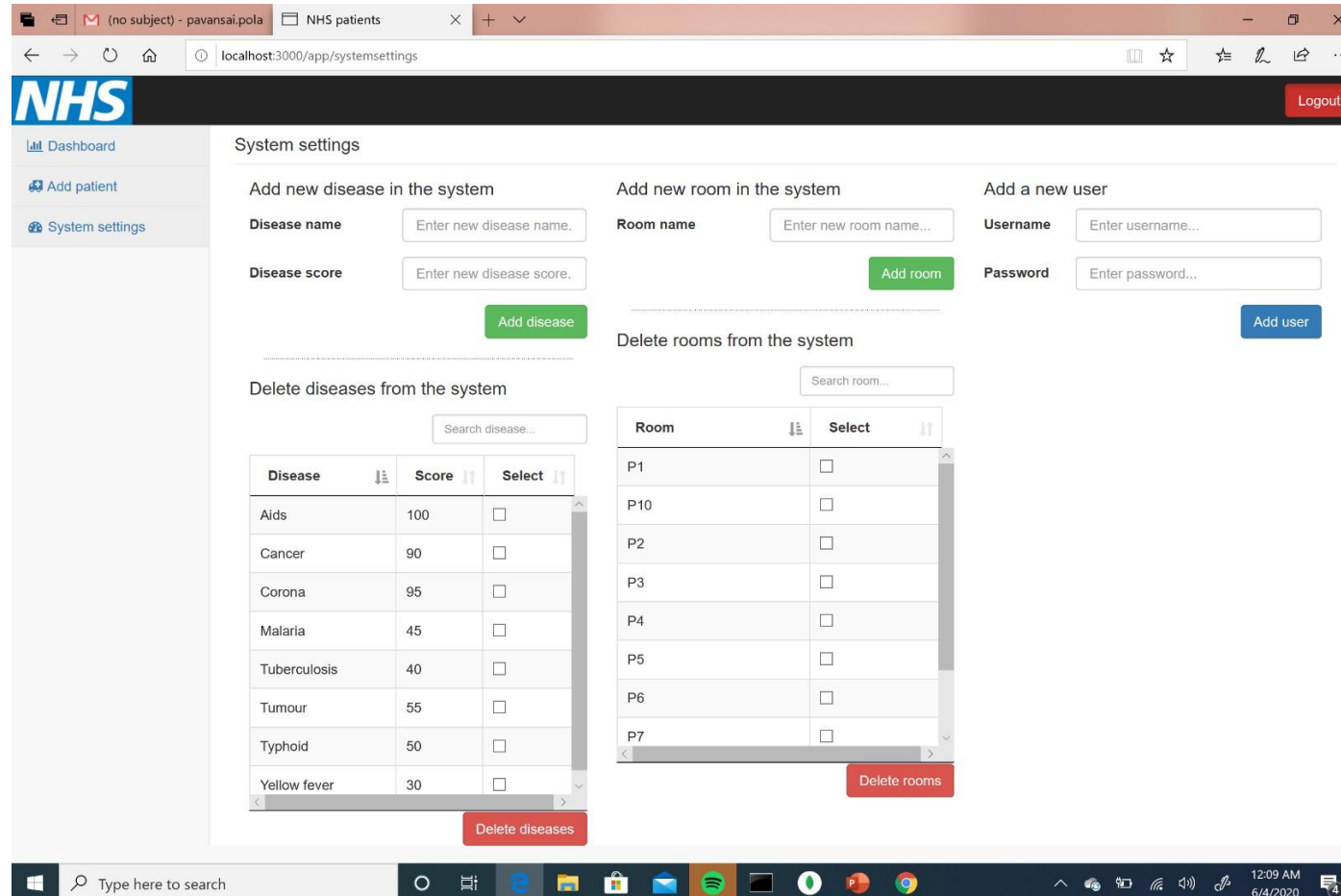


Dashboard



The screenshot shows a web browser window with multiple tabs open, including 'NHS patients' and 'MongoDB - Insert'. The browser address bar shows 'localhost:3000/app'. The application interface features the NHS logo and a 'Logout' button in the top right corner. A left sidebar contains navigation links: 'Dashboard', 'Add patient', and 'System settings'. The main content area displays three large colored boxes representing key metrics: 'Patients with rooms' (blue, 0), 'Patients waiting' (red, 0), and 'Free rooms' (orange, 0). Below these boxes are three search input fields: 'Search patient in room...', 'Search patient waiting...', and 'Search room...'. Under each search field is a table with columns for 'no.', 'Patients with rooms', 'Room', and 'Score'. All three tables currently display 'No data available in table'. At the bottom of the browser window, there is a Windows taskbar with a search bar and system tray icons, and a Windows activation watermark in the bottom right corner.

Adding diseases and rooms



The screenshot shows a web browser window with the URL `localhost:3000/app/systemsettings`. The application has a sidebar with links to Dashboard, Add patient, and System settings. The main content area is titled "System settings" and contains three main sections:

- Add new disease in the system:** Includes input fields for "Disease name" and "Disease score", and a green "Add disease" button.
- Add new room in the system:** Includes an input field for "Room name" and a green "Add room" button.
- Add a new user:** Includes input fields for "Username" and "Password", and a blue "Add user" button.

Below these are two "Delete" sections:

- Delete diseases from the system:** Features a search bar and a table of existing diseases.
- Delete rooms from the system:** Features a search bar and a table of existing rooms.

Diseases Table:

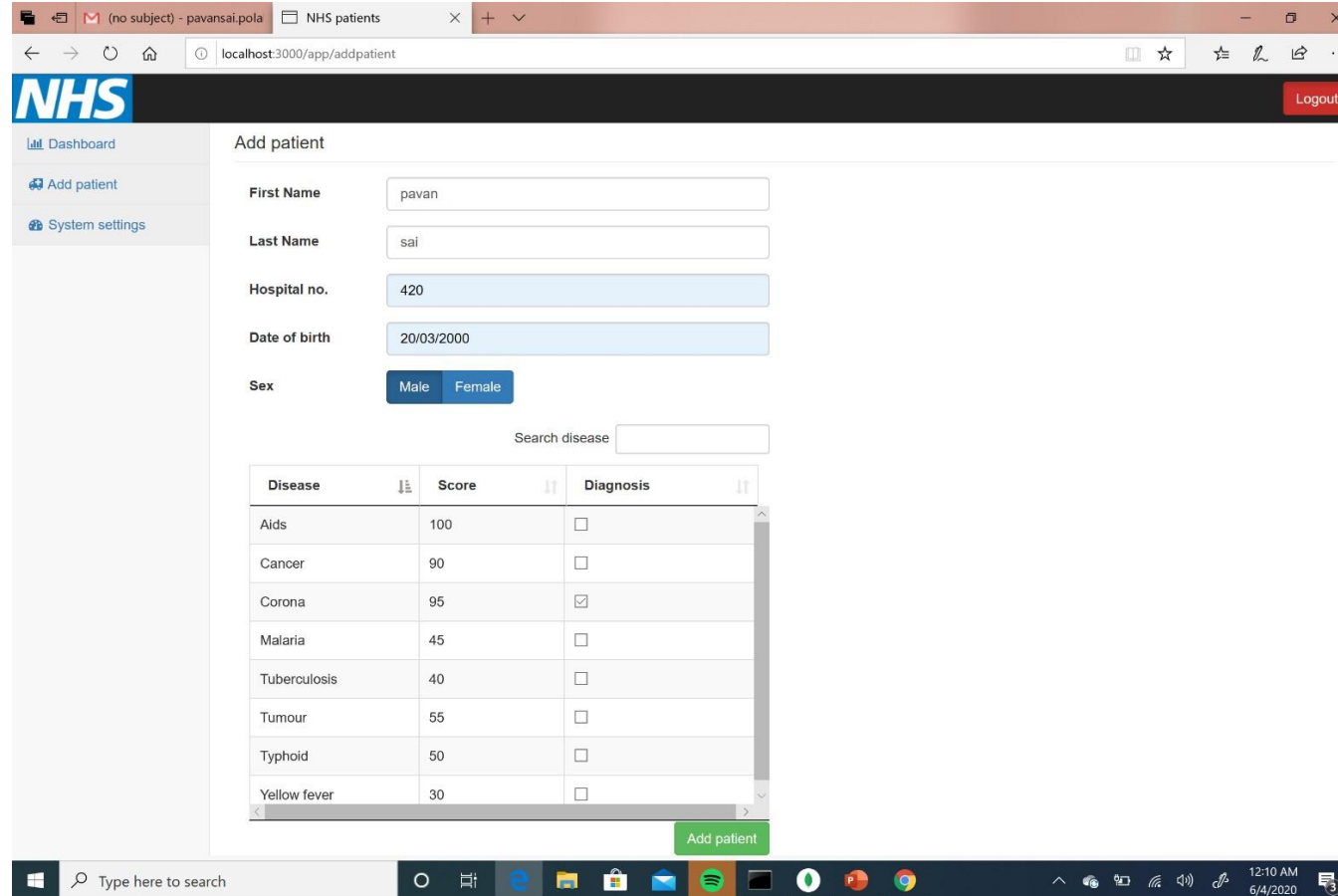
Disease	Score	Select
Aids	100	<input type="checkbox"/>
Cancer	90	<input type="checkbox"/>
Corona	95	<input type="checkbox"/>
Malaria	45	<input type="checkbox"/>
Tuberculosis	40	<input type="checkbox"/>
Tumour	55	<input type="checkbox"/>
Typhoid	50	<input type="checkbox"/>
Yellow fever	30	<input type="checkbox"/>

Rooms Table:

Room	Select
P1	<input type="checkbox"/>
P10	<input type="checkbox"/>
P2	<input type="checkbox"/>
P3	<input type="checkbox"/>
P4	<input type="checkbox"/>
P5	<input type="checkbox"/>
P6	<input type="checkbox"/>
P7	<input type="checkbox"/>

At the bottom of each table is a red button labeled "Delete diseases" and "Delete rooms" respectively.

Adding patient



Browser tabs: (no subject) - pavansai.pola, NHS patients

Browser address bar: localhost:3000/app/addpatient

NHS logo

Logout button

Dashboard

Add patient

System settings

Add patient

First Name: pavan

Last Name: sai

Hospital no.: 420

Date of birth: 20/03/2000

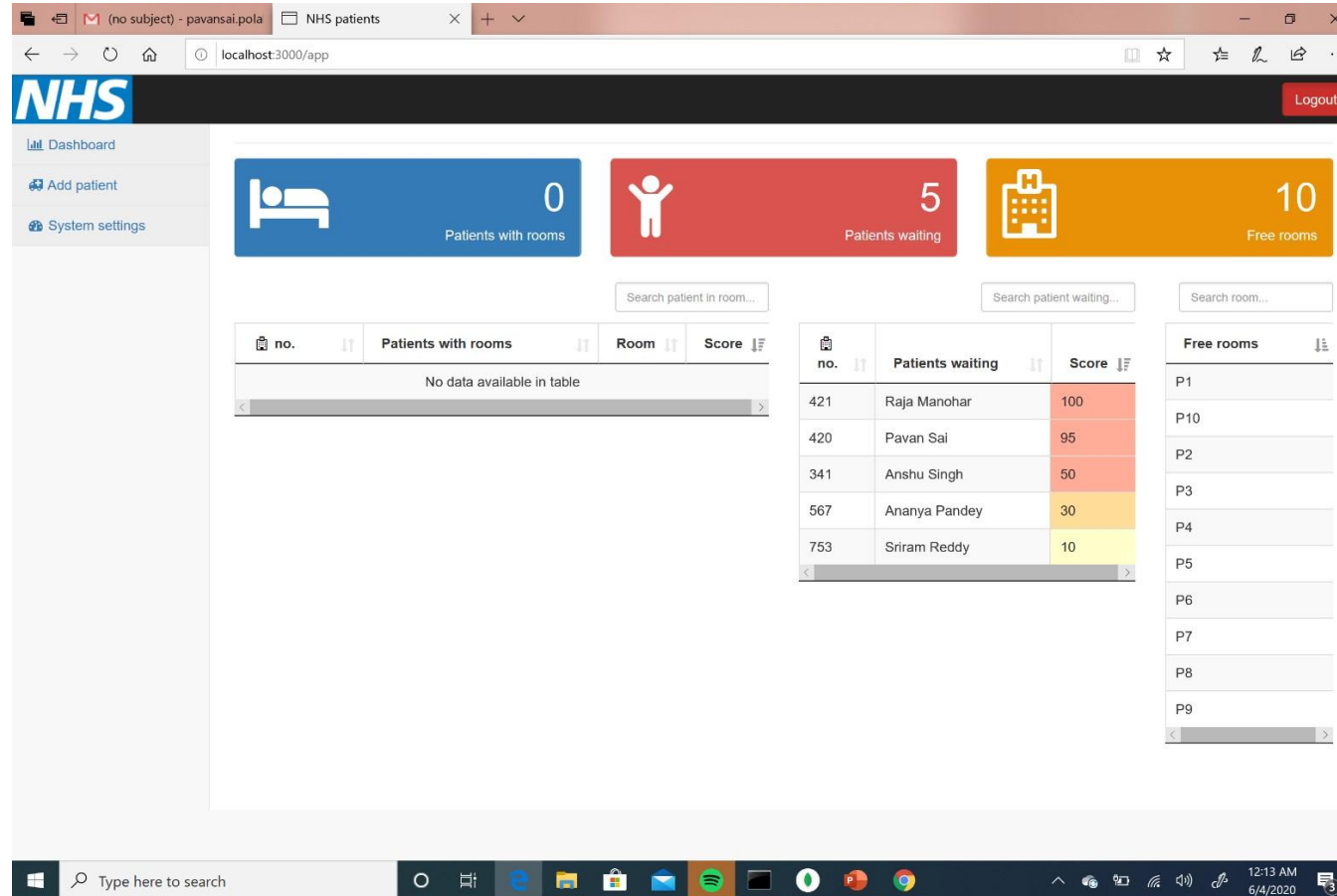
Sex: Male Female

Search disease

Disease	Score	Diagnosis
Aids	100	<input type="checkbox"/>
Cancer	90	<input type="checkbox"/>
Corona	95	<input checked="" type="checkbox"/>
Malaria	45	<input type="checkbox"/>
Tuberculosis	40	<input type="checkbox"/>
Tumour	55	<input type="checkbox"/>
Typhoid	50	<input type="checkbox"/>
Yellow fever	30	<input type="checkbox"/>

Add patient

Dashboard after adding patients and rooms



The screenshot shows a web application interface for managing patients and rooms. The browser window has tabs for "(no subject) - pavansai.pola" and "NHS patients". The address bar shows "localhost:3000/app". The NHS logo is in the top left, and a "Logout" button is in the top right.

The dashboard features three main status cards at the top:

- Patients with rooms:** 0 (blue card with a bed icon)
- Patients waiting:** 5 (red card with a person icon)
- Free rooms:** 10 (orange card with a building icon)

Below these cards are three search bars:

- Search patient in room...
- Search patient waiting...
- Search room...

There are three data tables:

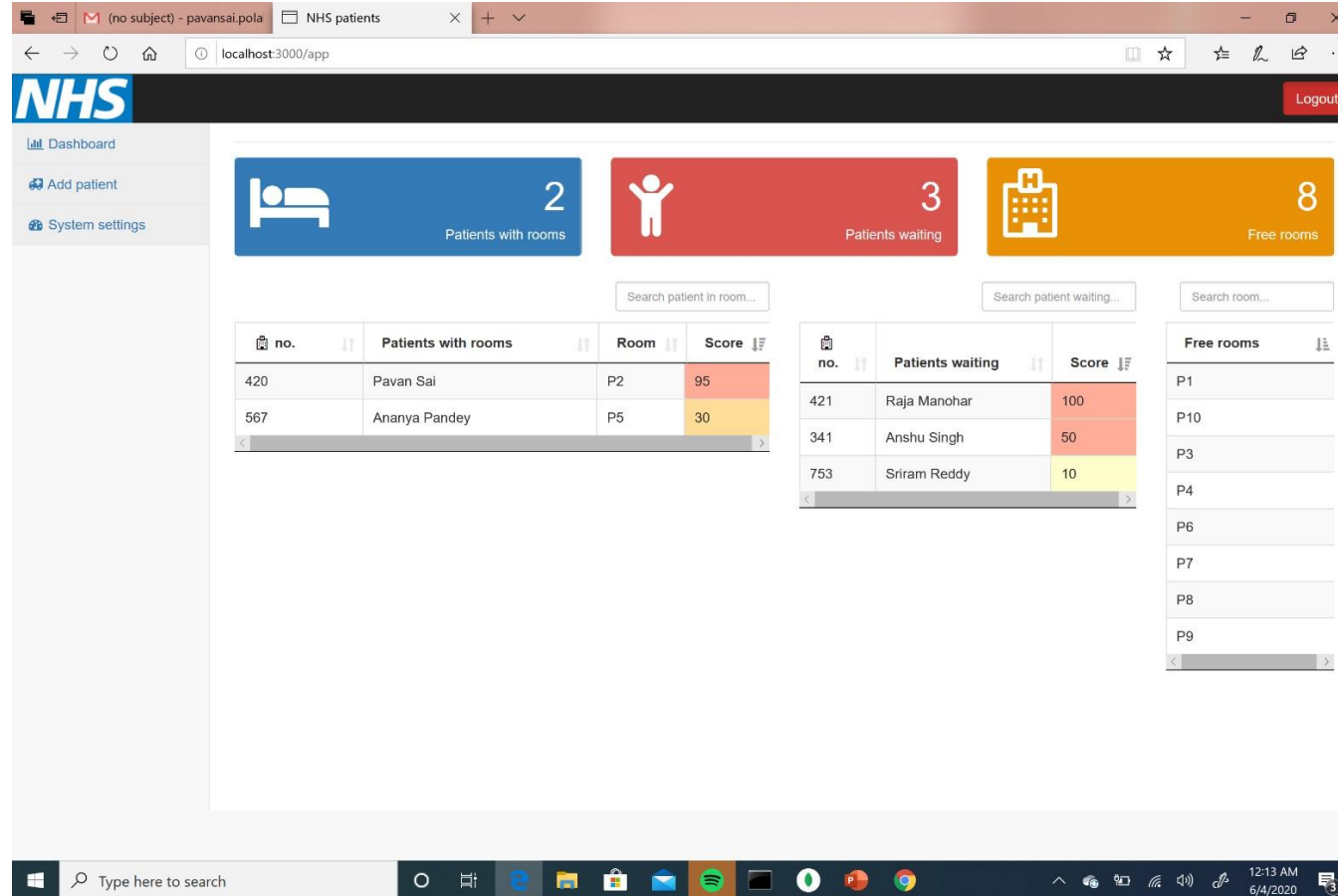
no.	Patients with rooms	Room	Score
No data available in table			

no.	Patients waiting	Score
421	Raja Manohar	100
420	Pavan Sai	95
341	Anshu Singh	50
567	Ananya Pandey	30
753	Sriram Reddy	10

Free rooms
P1
P10
P2
P3
P4
P5
P6
P7
P8
P9

The Windows taskbar at the bottom shows the search bar "Type here to search" and various application icons. The system clock indicates 12:13 AM on 6/4/2020.

Assigning rooms to patients



The screenshot shows a web application titled "NHS" with a sidebar containing "Dashboard", "Add patient", and "System settings". The main content area displays three summary cards: "Patients with rooms" (2), "Patients waiting" (3), and "Free rooms" (8). Below these are three tables for detailed data.

Patients with rooms table:

no.	Patients with rooms	Room	Score
420	Pavan Sai	P2	95
567	Ananya Pandey	P5	30

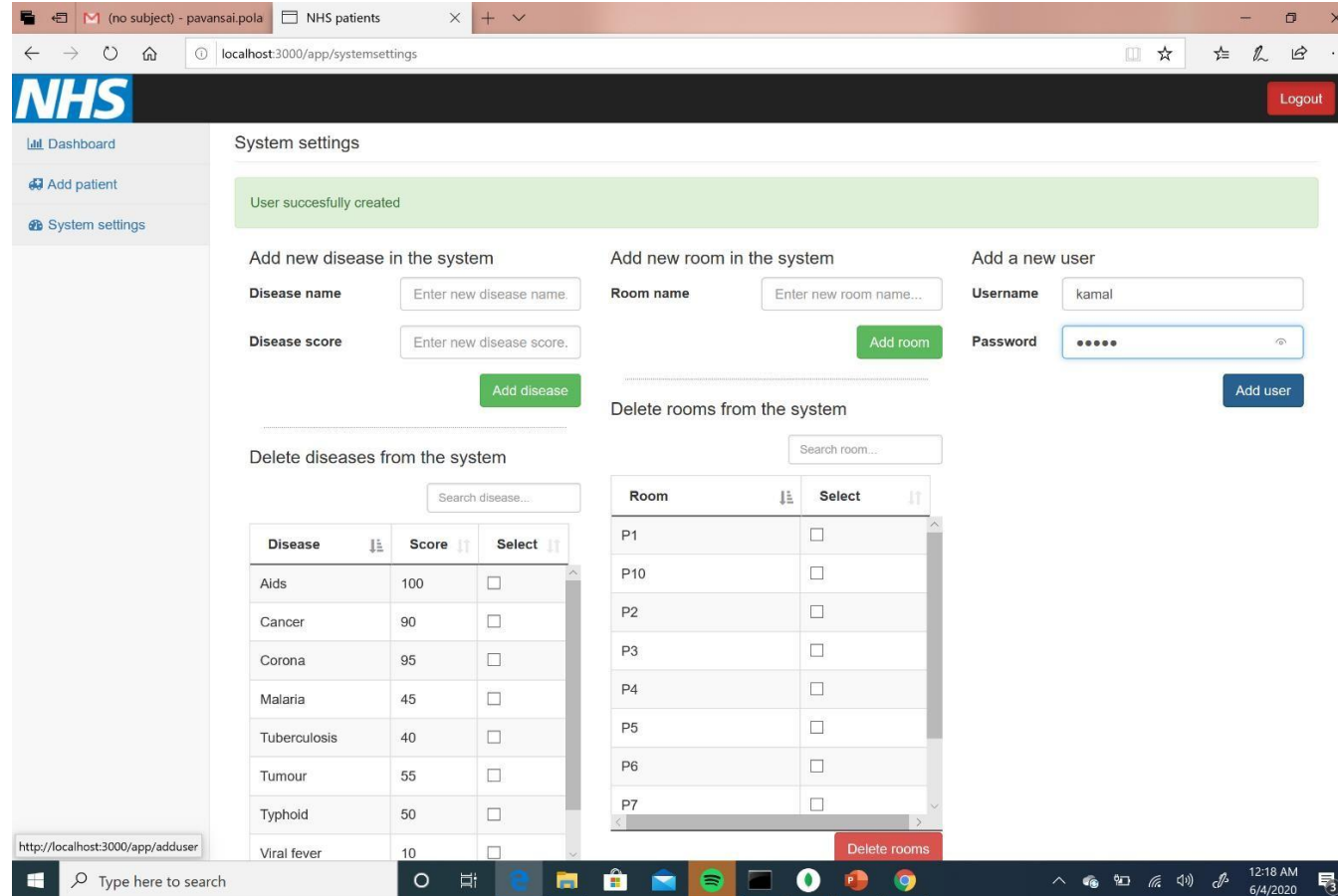
Patients waiting table:

no.	Patients waiting	Score
421	Raja Manohar	100
341	Anshu Singh	50
753	Sriram Reddy	10

Free rooms list:

Free rooms
P1
P10
P3
P4
P6
P7
P8
P9

Adding new user



The screenshot shows a web browser window with the URL `localhost:3000/app/systemsettings`. The page is titled "System settings" and features a sidebar with links to "Dashboard", "Add patient", and "System settings". A green notification banner at the top states "User successfully created".

The main content area is divided into three sections:

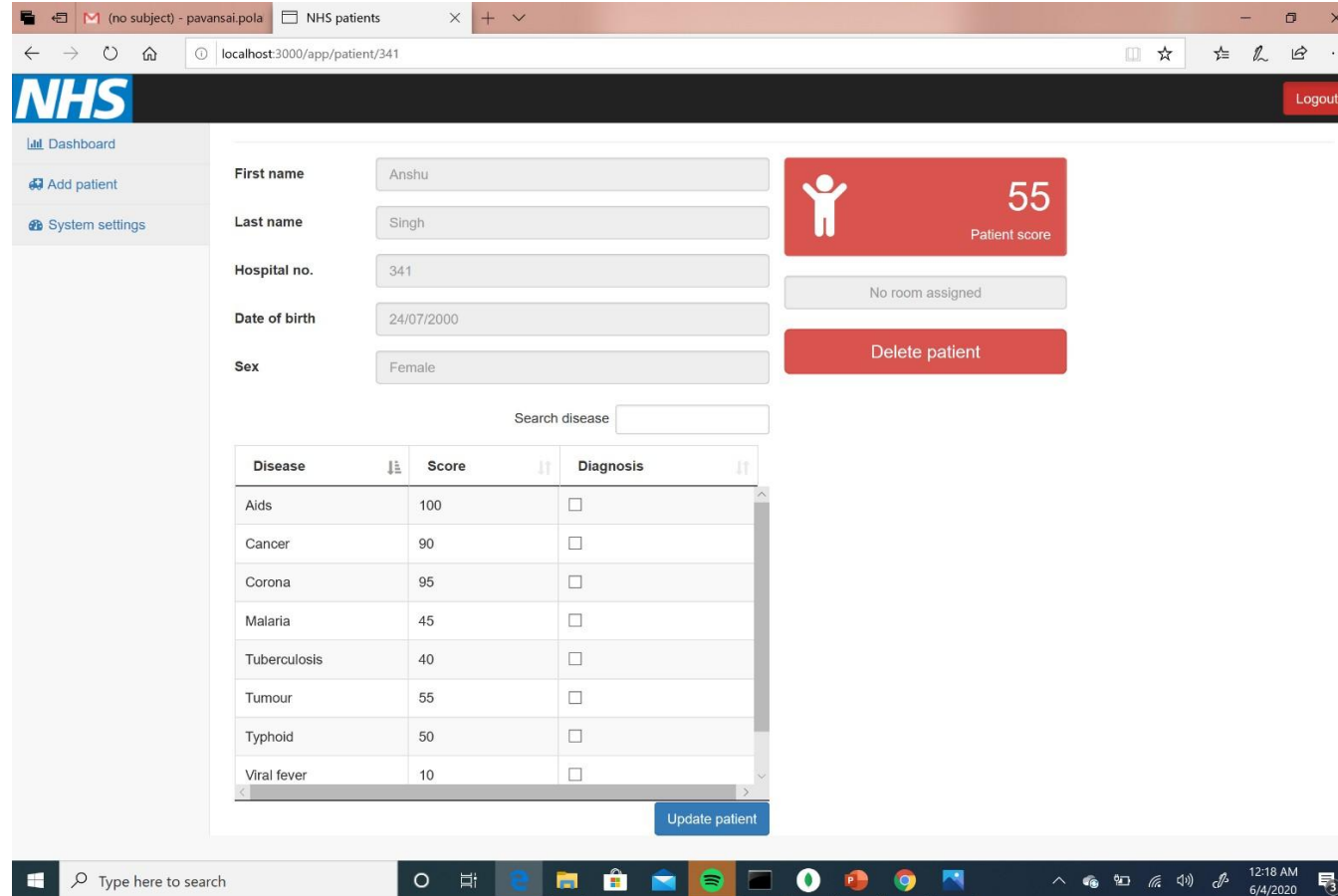
- Add new disease in the system:** Includes input fields for "Disease name" and "Disease score", and a green "Add disease" button.
- Add new room in the system:** Includes an input field for "Room name" and a green "Add room" button.
- Add a new user:** Includes input fields for "Username" (containing "kama") and "Password" (masked with dots), and a blue "Add user" button.

Below these sections are two tables for deleting items from the system:

- Delete diseases from the system:** A table with columns "Disease", "Score", and "Select". It lists various diseases with their scores and checkboxes for selection.
- Delete rooms from the system:** A table with columns "Room" and "Select". It lists rooms P1 through P7 with checkboxes for selection.

The Windows taskbar at the bottom shows the time as 12:18 AM on 6/4/2020.

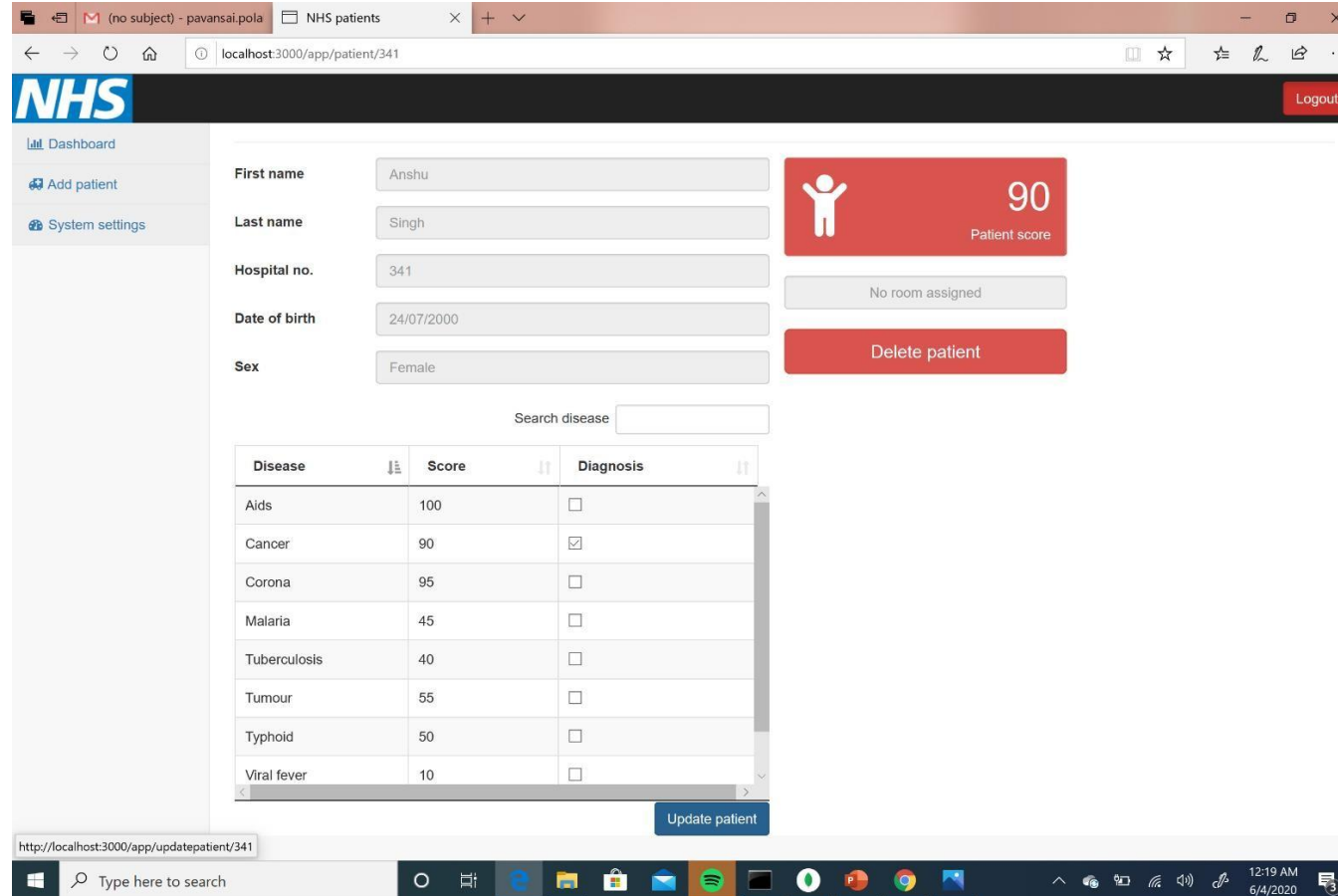
Updating the patient



The screenshot shows a web browser window with the URL `localhost:3000/app/patient/341`. The page features the NHS logo and a sidebar with navigation links: Dashboard, Add patient, and System settings. The main content area displays patient details for a patient named Anshu Singh, with hospital number 341, date of birth 24/07/2000, and sex Female. A red box indicates a patient score of 55. Below this, there is a button for 'No room assigned' and a red 'Delete patient' button. A search bar for diseases is present, and a table lists various diseases with their scores and checkboxes for diagnosis. The table includes columns for Disease, Score, and Diagnosis. The diseases listed are Aids (100), Cancer (90), Corona (95), Malaria (45), Tuberculosis (40), Tumour (55), Typhoid (50), and Viral fever (10). An 'Update patient' button is located at the bottom right of the table.

Disease	Score	Diagnosis
Aids	100	<input type="checkbox"/>
Cancer	90	<input type="checkbox"/>
Corona	95	<input type="checkbox"/>
Malaria	45	<input type="checkbox"/>
Tuberculosis	40	<input type="checkbox"/>
Tumour	55	<input type="checkbox"/>
Typhoid	50	<input type="checkbox"/>
Viral fever	10	<input type="checkbox"/>

After updating the patient



The screenshot shows a web application for updating a patient's information. The browser address bar shows the URL `localhost:3000/app/patient/341`. The application has a sidebar with links for [Dashboard](#), [Add patient](#), and [System settings](#). The main content area displays the patient's details in a form:

- First name:** Anshu
- Last name:** Singh
- Hospital no.:** 341
- Date of birth:** 24/07/2000
- Sex:** Female

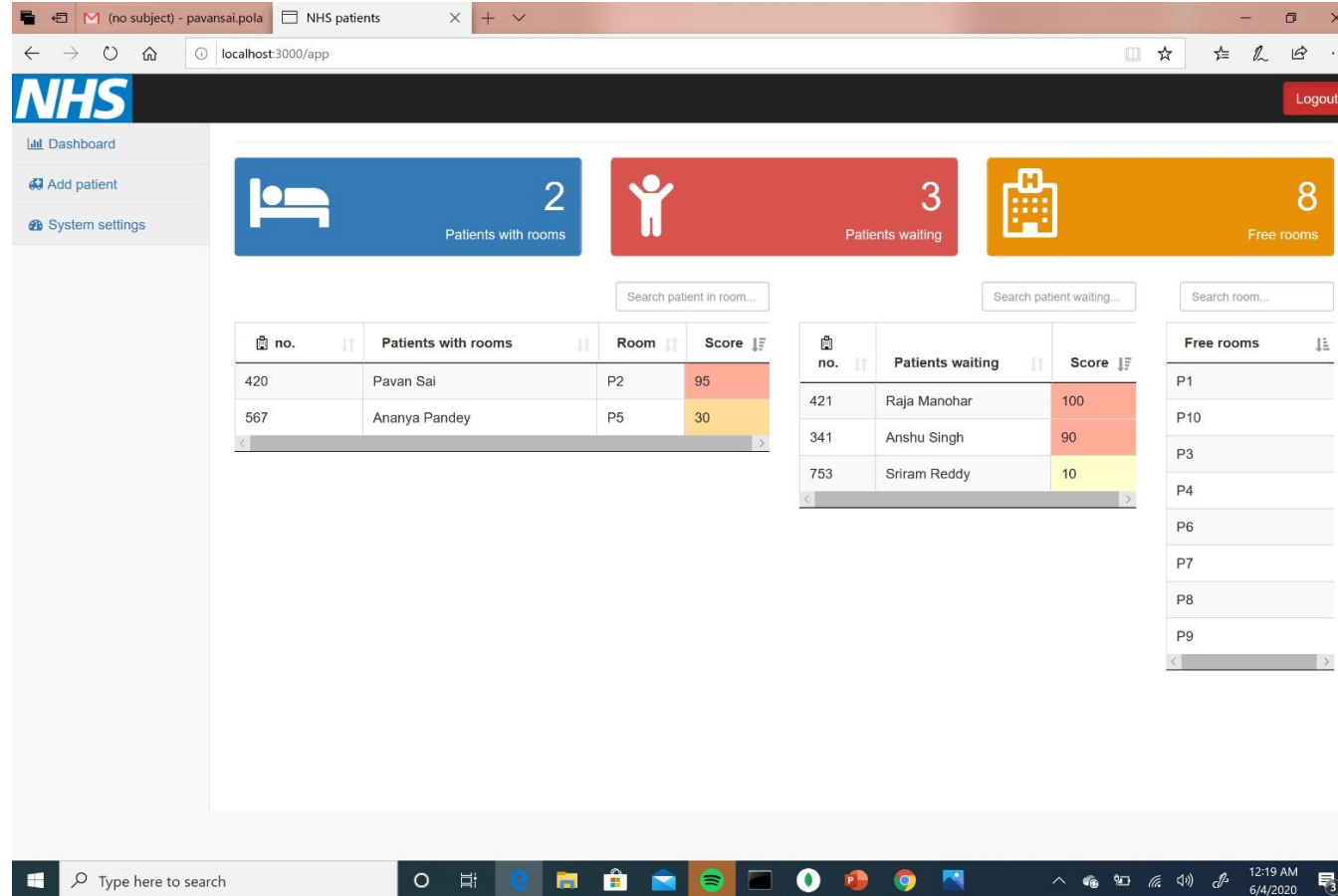
To the right of the form, there is a red box with a person icon and the text **90 Patient score**. Below this, there is a button labeled **No room assigned** and a red button labeled **Delete patient**. A search bar labeled **Search disease** is located below the form fields.

Below the search bar is a table with the following data:

Disease	Score	Diagnosis
Aids	100	<input type="checkbox"/>
Cancer	90	<input checked="" type="checkbox"/>
Corona	95	<input type="checkbox"/>
Malaria	45	<input type="checkbox"/>
Tuberculosis	40	<input type="checkbox"/>
Tumour	55	<input type="checkbox"/>
Typhoid	50	<input type="checkbox"/>
Viral fever	10	<input type="checkbox"/>

At the bottom of the form, there is a blue button labeled **Update patient**. The browser address bar at the bottom shows the URL `http://localhost:3000/app/updatepatient/341`.

Dashboard after updating the patient



The screenshot shows a web application titled "NHS" running on a browser at localhost:3000/app. The dashboard displays three main sections: "Patients with rooms" (2), "Patients waiting" (3), and "Free rooms" (8). Each section has a corresponding table below it.

Patients with rooms

no.	Patients with rooms	Room	Score
420	Pavan Sai	P2	95
567	Ananya Pandey	P5	30

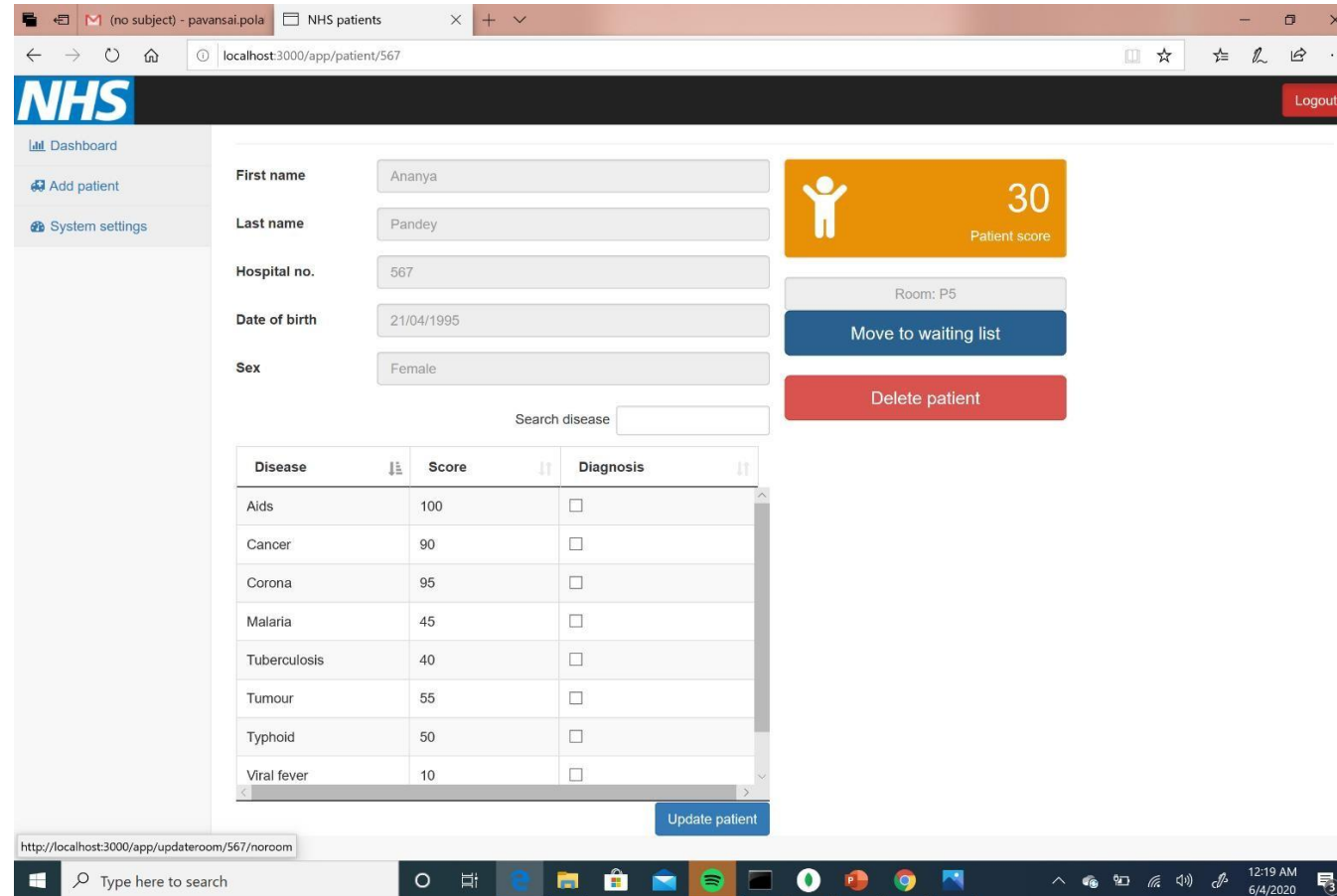
Patients waiting

no.	Patients waiting	Score
421	Raja Manohar	100
341	Anshu Singh	90
753	Sriram Reddy	10

Free rooms

Free rooms
P1
P10
P3
P4
P6
P7
P8
P9

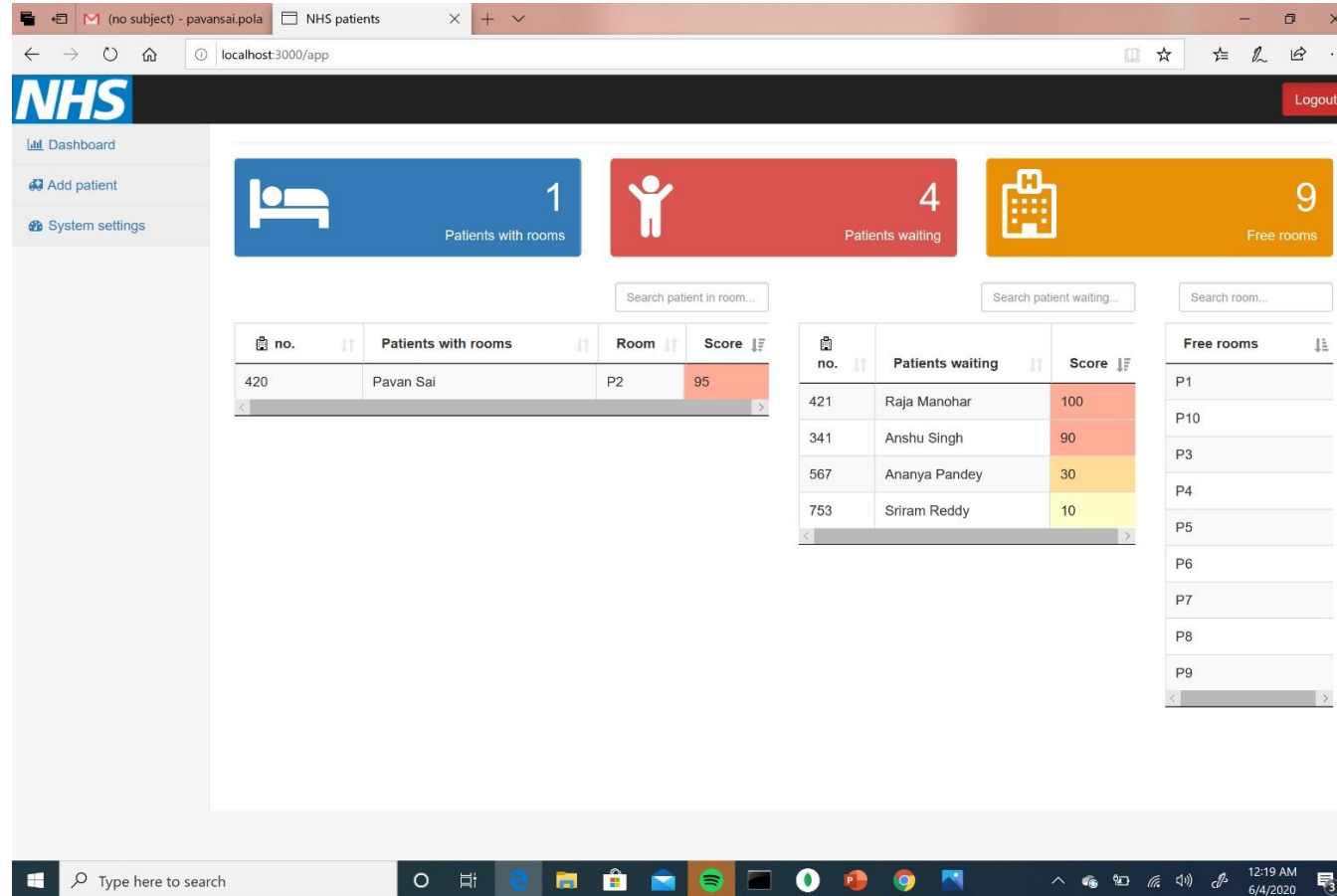
Moving patient to waiting list



The screenshot shows a web application interface for managing patients. The browser address bar indicates the URL is `localhost:3000/app/patient/567`. The application has a sidebar with links to [Dashboard](#), [Add patient](#), and [System settings](#). The main content area displays patient details for a patient named Ananya Pandey, with hospital number 567, date of birth 21/04/1995, and sex Female. A patient score of 30 is shown in an orange box. Below the details, there is a search bar for diseases and a table listing diseases with their scores and checkboxes for diagnosis. The diseases listed are Aids (100), Cancer (90), Corona (95), Malaria (45), Tuberculosis (40), Tumour (55), Typhoid (50), and Viral fever (10). To the right of the table, there are buttons for [Room: P5](#), [Move to waiting list](#), and [Delete patient](#). At the bottom of the table, there is an [Update patient](#) button. The browser's taskbar at the bottom shows the time as 12:19 AM on 6/4/2020.

Disease	Score	Diagnosis
Aids	100	<input type="checkbox"/>
Cancer	90	<input type="checkbox"/>
Corona	95	<input type="checkbox"/>
Malaria	45	<input type="checkbox"/>
Tuberculosis	40	<input type="checkbox"/>
Tumour	55	<input type="checkbox"/>
Typhoid	50	<input type="checkbox"/>
Viral fever	10	<input type="checkbox"/>

Dashboard after moving the patient to waiting list



The screenshot shows a web application interface for NHS patients. The browser address bar indicates the URL is localhost:3000/app. The NHS logo is visible in the top left corner, and a Logout button is in the top right corner.

The dashboard features three main status cards at the top:

- Patients with rooms:** 1 (represented by a bed icon)
- Patients waiting:** 4 (represented by a person icon)
- Free rooms:** 9 (represented by a building icon)

Below these cards are three search bars:

- Search patient in room...
- Search patient waiting...
- Search room...

There are three data tables displayed:

Patients with rooms

no.	Patients with rooms	Room	Score
420	Pavan Sai	P2	95

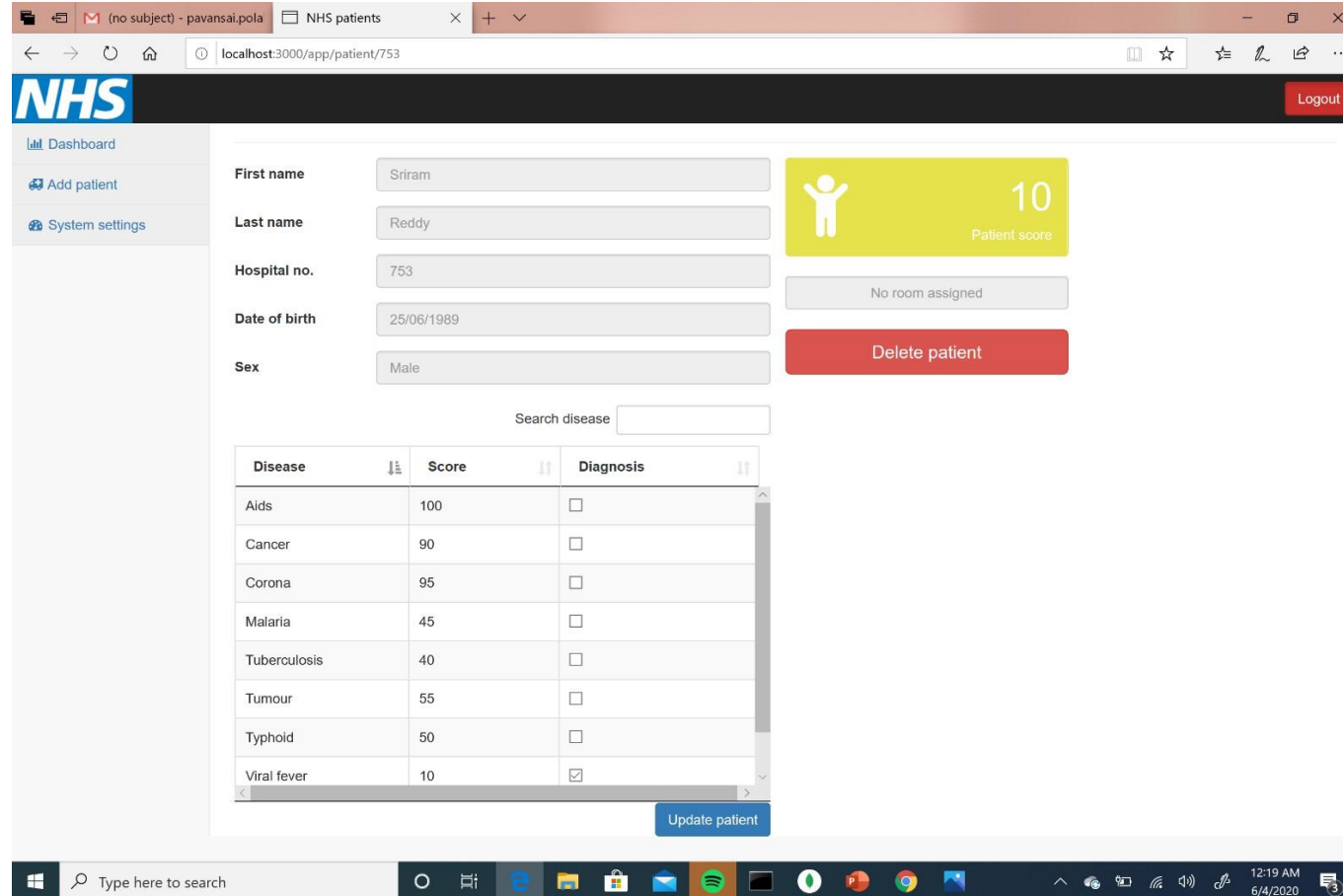
Patients waiting

no.	Patients waiting	Score
421	Raja Manohar	100
341	Anshu Singh	90
567	Ananya Pandey	30
753	Sriram Reddy	10

Free rooms

Free rooms
P1
P10
P3
P4
P5
P6
P7
P8
P9

Deleting a patient



Browser tabs: (no subject) - pavansai.pola, NHS patients

Browser address bar: localhost:3000/app/patient/753

NHS logo

Logout

Dashboard

Add patient

System settings

First name: Sriram

Last name: Reddy

Hospital no.: 753

Date of birth: 25/06/1989

Sex: Male

Search disease

Disease	Score	Diagnosis
Aids	100	<input type="checkbox"/>
Cancer	90	<input type="checkbox"/>
Corona	95	<input type="checkbox"/>
Malaria	45	<input type="checkbox"/>
Tuberculosis	40	<input type="checkbox"/>
Tumour	55	<input type="checkbox"/>
Typhoid	50	<input type="checkbox"/>
Viral fever	10	<input checked="" type="checkbox"/>

Update patient

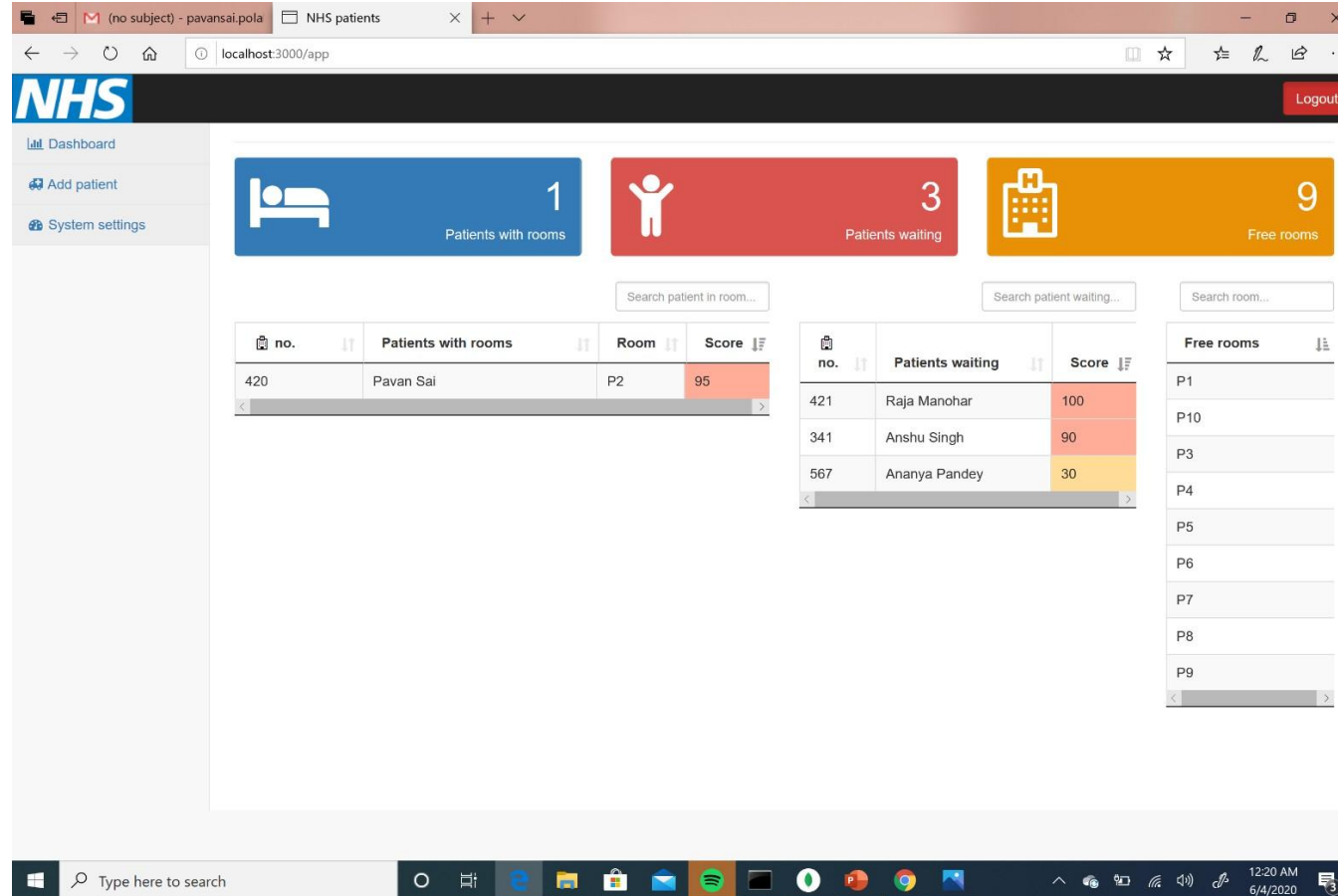
10 Patient score

No room assigned

Delete patient

Windows taskbar: Type here to search, 12:19 AM 6/4/2020

Dashboard after deleting the patient



The dashboard displays the following data:

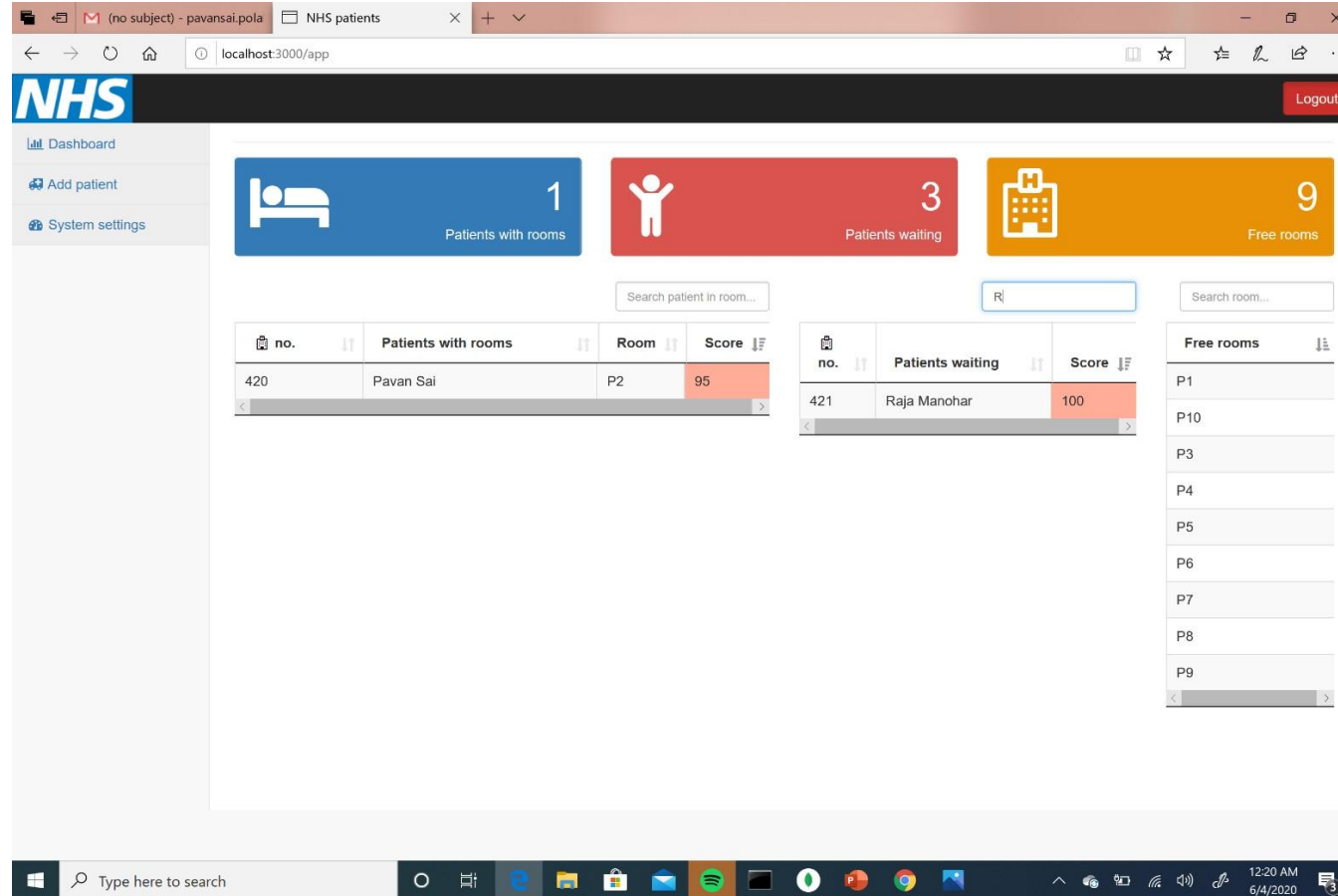
- Patients with rooms:** 1 patient in room P2 with a score of 95.
- Patients waiting:** 3 patients waiting, with scores 100, 90, and 30.
- Free rooms:** 9 free rooms (P1 to P9).

no.	Patients with rooms	Room	Score
420	Pavan Sai	P2	95

no.	Patients waiting	Score
421	Raja Manohar	100
341	Anshu Singh	90
567	Ananya Pandey	30

Free rooms
P1
P10
P3
P4
P5
P6
P7
P8
P9

Searching the patient waiting



The screenshot shows a web application interface for NHS patients. The browser window has tabs for "(no subject) - pavansai.pola" and "NHS patients". The address bar shows "localhost:3000/app". The NHS logo is in the top left, and a "Logout" button is in the top right.

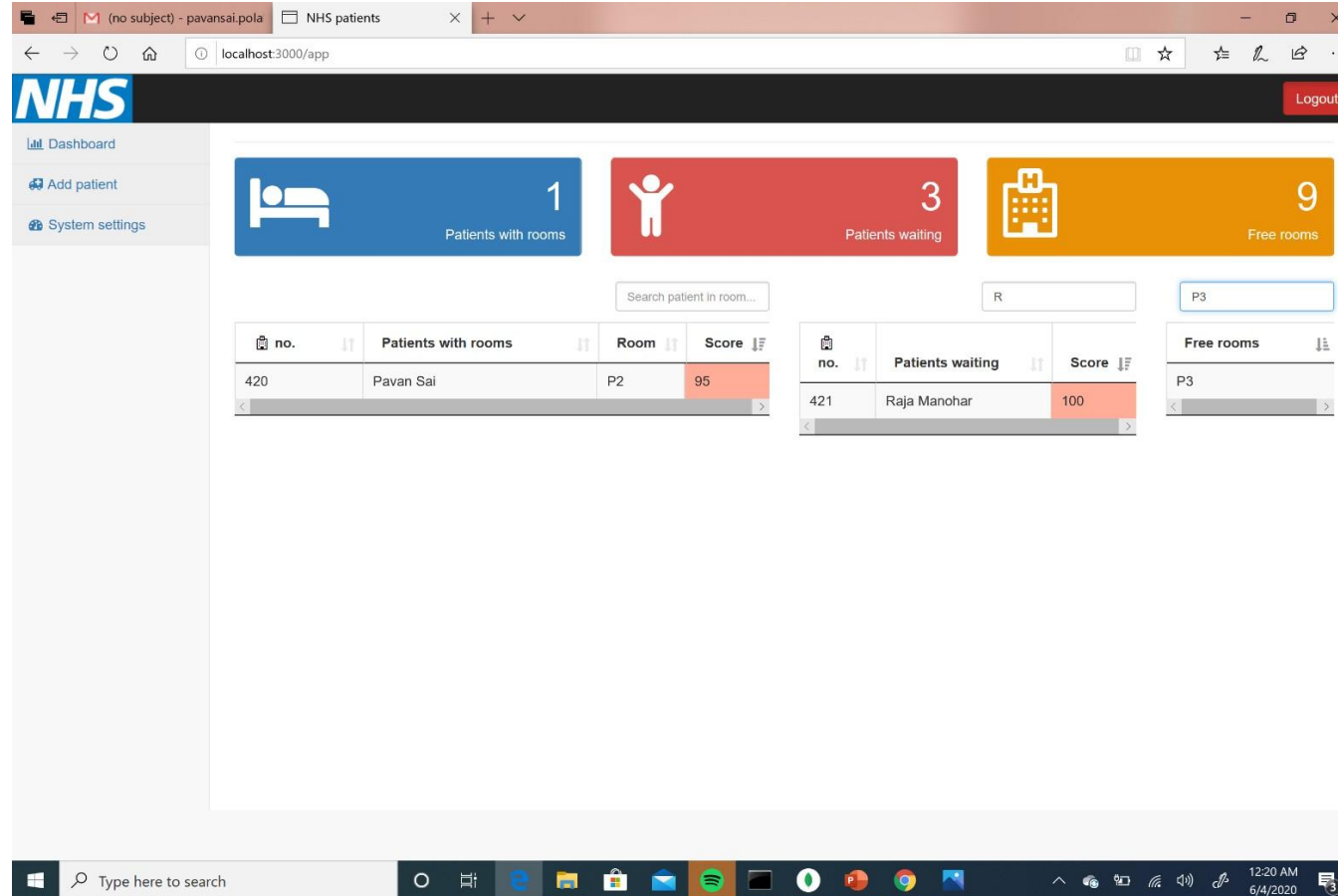
The dashboard features three main sections:

- Patients with rooms:** A blue box with a bed icon, showing 1 patient. Below it is a table with columns: no., Patients with rooms, Room, and Score. The table contains one entry: 420, Pavan Sai, P2, 95.
- Patients waiting:** A red box with a person icon, showing 3 patients. Below it is a table with columns: no., Patients waiting, and Score. The table contains one entry: 421, Raja Manohar, 100.
- Free rooms:** An orange box with a building icon, showing 9 free rooms. Below it is a list of room numbers: P1, P10, P3, P4, P5, P6, P7, P8, P9.

Each section has a search input field above its table. The "Patients with rooms" table has a search input labeled "Search patient in room...". The "Patients waiting" table has a search input labeled "R". The "Free rooms" table has a search input labeled "Search room...".

The Windows taskbar at the bottom shows the search bar "Type here to search" and various application icons. The system clock shows 12:20 AM on 6/4/2020.

Searching free rooms



The screenshot shows a web application interface for managing patients and rooms. The browser window has tabs for "(no subject) - pavansai.pola" and "NHS patients". The address bar shows "localhost:3000/app". The NHS logo is in the top left, and a "Logout" button is in the top right.

The dashboard features three main status cards:

- Patients with rooms:** 1 (blue card with bed icon)
- Patients waiting:** 3 (red card with person icon)
- Free rooms:** 9 (orange card with building icon)

Below these cards are three tables. The first table, "Patients with rooms", has a search bar "Search patient in room..." and a table with columns "no.", "Patients with rooms", "Room", and "Score".

no.	Patients with rooms	Room	Score
420	Pavan Sai	P2	95

The second table, "Patients waiting", has a search bar "R" and a table with columns "no.", "Patients waiting", and "Score".

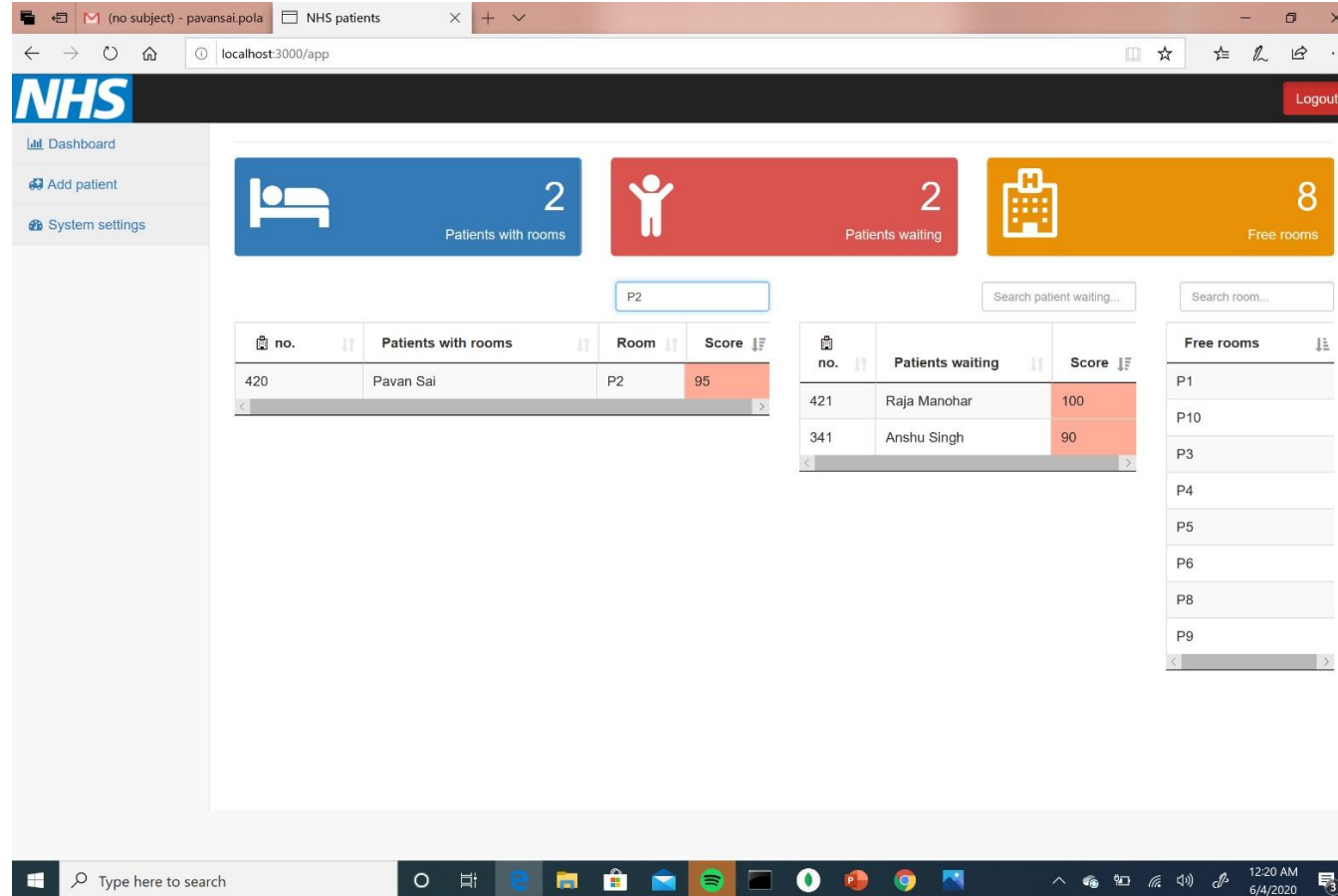
no.	Patients waiting	Score
421	Raja Manohar	100

The third table, "Free rooms", has a search bar "P3" and a table with columns "no." and "Score".

no.	Score
P3	

The Windows taskbar at the bottom shows the search bar "Type here to search" and various application icons. The system clock indicates 12:20 AM on 6/4/2020.

Searching patient with rooms



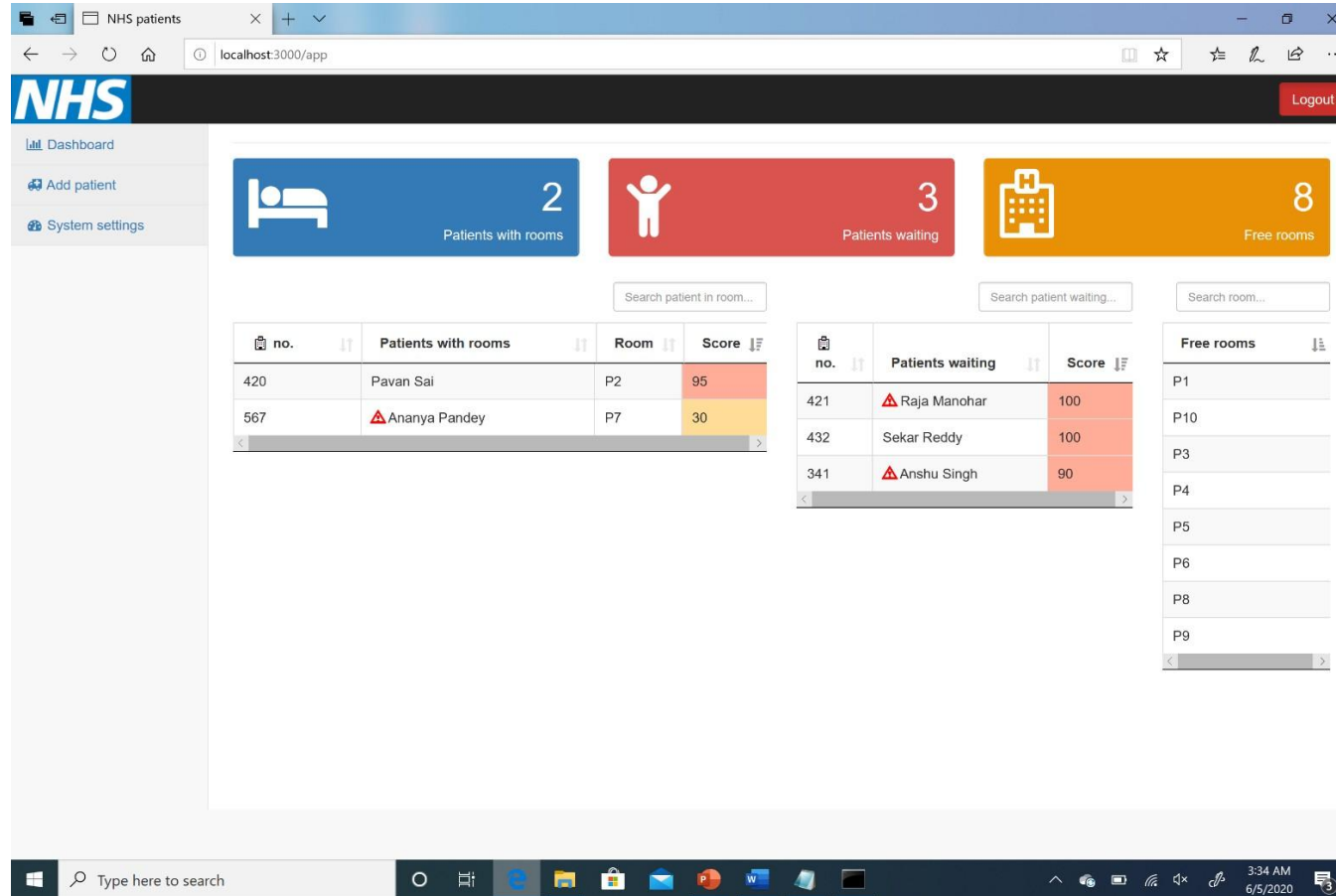
The screenshot shows a web application interface for patient management. The top navigation bar includes the NHS logo and a 'Logout' button. The left sidebar contains links for 'Dashboard', 'Add patient', and 'System settings'. The main content area displays three summary cards: 'Patients with rooms' (2), 'Patients waiting' (2), and 'Free rooms' (8). Below these cards are three search filters: 'P2', 'Search patient waiting...', and 'Search room...'. The 'Patients with rooms' table shows a single entry for Pavan Sai in room P2 with a score of 95. The 'Patients waiting' table shows two entries: Raja Manohar (score 100) and Anshu Singh (score 90). The 'Free rooms' table lists rooms P1 through P9.

no.	Patients with rooms	Room	Score
420	Pavan Sai	P2	95

no.	Patients waiting	Score
421	Raja Manohar	100
341	Anshu Singh	90

Free rooms
P1
P10
P3
P4
P5
P6
P8
P9

Warning to update the patient diagnosis



The screenshot shows a web application titled "NHS patients" running on localhost:3000/app. The dashboard features three main status cards: "Patients with rooms" (2), "Patients waiting" (3), and "Free rooms" (8). Below these cards are three tables for patient data.

Patients with rooms table:

no.	Patients with rooms	Room	Score
420	Pavan Sai	P2	95
567	⚠️ Ananya Pandey	P7	30

Patients waiting table:

no.	Patients waiting	Score
421	⚠️ Raja Manohar	100
432	Sekar Reddy	100
341	⚠️ Anshu Singh	90

Free rooms table:

Free rooms
P1
P10
P3
P4
P5
P6
P8
P9

The warning icon (⚠️) next to the patient names in the "Patients with rooms" and "Patients waiting" tables indicates a need to update the diagnosis.

Update the patient to remove the warning sign

NHS patients

localhost:3000/app/patient/567

NHS Logout

Dashboard
Add patient
System settings

First name: Ananya
Last name: Pandey
Hospital no.: 567
Date of birth: 21/04/1995
Sex: Female

Search disease

30 Patient score

Room: P7

Move to waiting list

Delete patient

Disease	Score	Diagnosis
Aids	100	<input type="checkbox"/>
Cancer	90	<input type="checkbox"/>
Corona	95	<input type="checkbox"/>
Malaria	45	<input type="checkbox"/>
Tuberculosis	40	<input type="checkbox"/>
Tumour	55	<input type="checkbox"/>
Typhoid	50	<input type="checkbox"/>
Viral fever	10	<input type="checkbox"/>

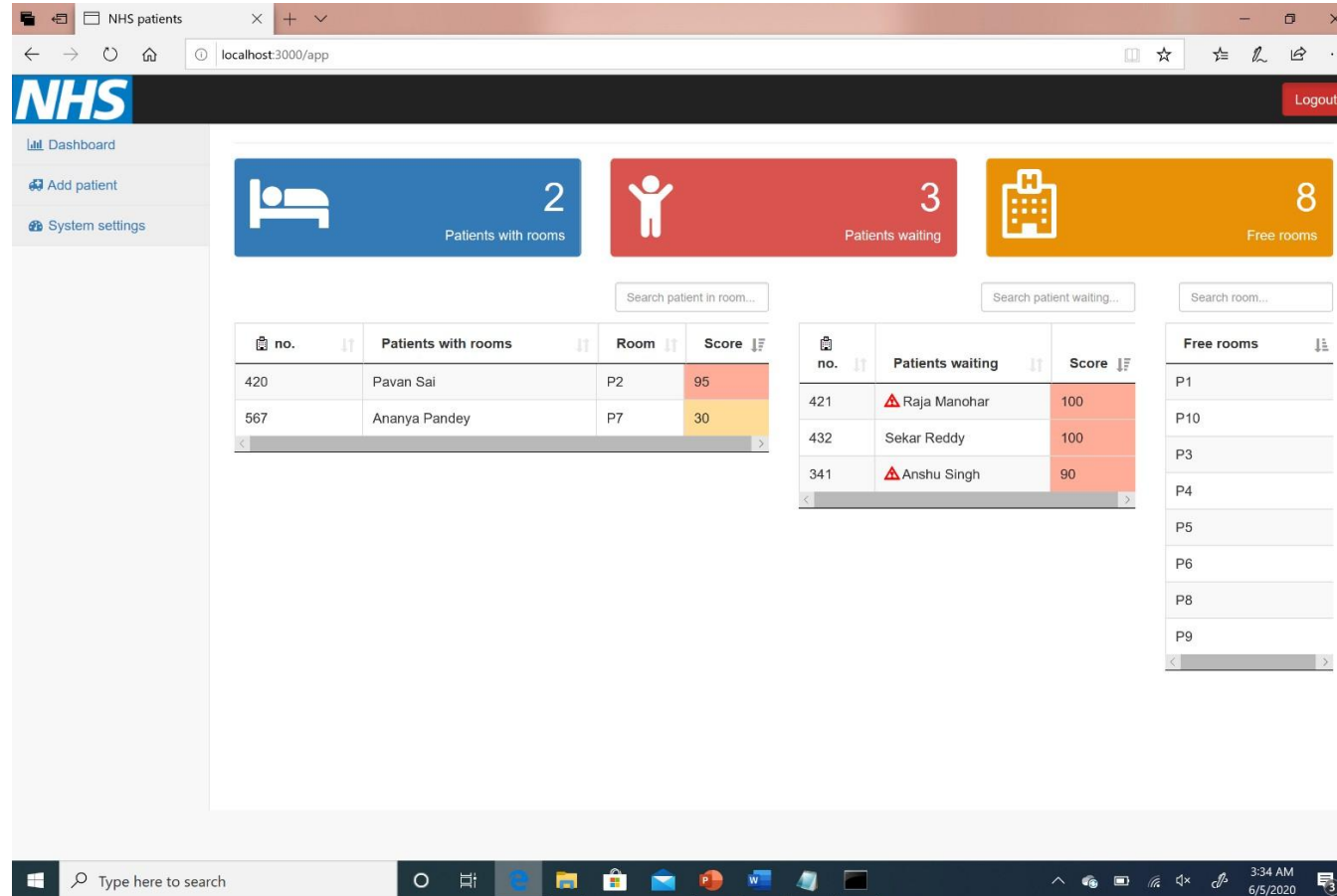
Update patient

http://localhost:3000/app/updatepatient/567

Type here to search

3:34 AM 6/5/2020

After updating the warning sign is removed



The screenshot shows a web application titled "NHS patients" running on localhost:3000/app. The dashboard features three main status cards: "Patients with rooms" (2), "Patients waiting" (3), and "Free rooms" (8). Below these cards are three tables for detailed data.

Patients with rooms table:

no.	Patients with rooms	Room	Score
420	Pavan Sai	P2	95
567	Ananya Pandey	P7	30

Patients waiting table:

no.	Patients waiting	Score
421	⚠ Raja Manohar	100
432	Sekar Reddy	100
341	⚠ Anshu Singh	90

Free rooms table:

Free rooms
P1
P10
P3
P4
P5
P6
P8
P9

The warning signs (⚠) have been removed from the "Patients waiting" table, indicating a successful update.

Sample Code

DB connectivity code:

```
var mongoose = require ('mongoose');  
  
mongoose.Promise = global.Promise;  
  
mongoose.connect("mongodb://localhost:27017");  
  
module.exports = {mongoose};
```

For disease table

MongoDB Compass Community - localhost:27017/test.diseases

Connect View Collection Help

Local

3 DBS 4 COLLECTIONS

☆ FAVORITE

HOST
localhost:27017

CLUSTER
Standalone

EDITION
MongoDB 4.2.6 Community

Filter your data

> admin

> config

test

diseases

patients

rooms

users

test.diseases Documents

DOCUMENTS 9 TOTAL SIZE 548B AVG. SIZE 61B INDEXES 2 TOTAL SIZE 72.0KB AVG. SIZE 36.0KB

Documents Aggregations Explain Plan Indexes

FILTER

ADD DATA

VIEW

Displaying documents 1 - 9 of 9

REFRESH

```
{ "_id": ObjectId("5ed7ecf711b5c53a6c8b8efa"),  
  "name": "Corona",  
  "score": 95,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ed0511b5c53a6c8b8efb"),  
  "name": "Typhoid",  
  "score": 50,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ed1b11b5c53a6c8b8efc"),  
  "name": "Malaria",  
  "score": 45,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ed2211b5c53a6c8b8efd"),  
  "name": "Yellow fever",  
  "score": 30,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ed3311b5c53a6c8b8efe"),  
  "name": "Cancer",  
  "score": 90,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ed3911b5c53a6c8b8eff"),  
  "name": "Aids",  
  "score": 100,  
  "__v": 0 }
```


For patients table

MongoDB Compass Community - localhost:27017/test.patients

Connect View Collection Help

Local

3 DBS 4 COLLECTIONS

☆ FAVORITE

HOST
localhost:27017

CLUSTER
Standalone

EDITION
MongoDB 4.2.6 Community

Filter your data

> admin

> config

▼ test

diseases

patients

rooms

users

test.patients Documents

DOCUMENTS 4 TOTAL SIZE 840B AVG. SIZE 210B INDEXES 2 TOTAL SIZE 72.0KB AVG. SIZE 36.0KB

Documents Aggregations Explain Plan Indexes

FILTER

ADD DATA

VIEW

Displaying documents 1 - 4 of 4

REFRESH

```

{
  "_id": ObjectId("5ed7ee9911b5c53a6c8b8f0c"),
  "firstName": "Pavan",
  "lastName": "Sai",
  "dateOfBirth": "28/03/2000",
  "hospitalNumber": "420",
  "lastUpdate": 1591209625017,
  "room": "P2",
  "score": 95,
  "diseases": Array,
  "sex": true,
  "__v": 0
}

{
  "_id": ObjectId("5ed7eec611b5c53a6c8b8f0d"),
  "firstName": "Raja",
  "lastName": "Manohar",
  "dateOfBirth": "14/06/1999",
  "hospitalNumber": "421",
  "lastUpdate": 1591209670047,
  "room": "noroom",
  "score": 100,
  "diseases": Array,
  "sex": true,
  "__v": 0
}

{
  "_id": ObjectId("5ed7eee411b5c53a6c8b8f0e"),
  "firstName": "Anshu",
  "lastName": "Singh",
  "dateOfBirth": "24/07/2000",
  "hospitalNumber": "341",
  "lastUpdate": 1591210146290,
  "room": "noroom",
  "score": 90,
  "diseases": Array,
  "sex": false,
  "__v": 0
}

```

Type here to search

12:35 AM 6/4/2020

For rooms table

MongoDB Compass Community - localhost:27017/test.rooms

Connect View Collection Help

Local

3 DBS 4 COLLECTIONS

☆ FAVORITE

HOST
localhost:27017

CLUSTER
Standalone

EDITION
MongoDB 4.2.6 Community

Filter your data

> admin

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patients

rooms

users

test.rooms

Documents

DOCUMENTS 11 TOTAL SIZE 654B AVG. SIZE 59B INDEXES 2 TOTAL SIZE 72.0KB AVG. SIZE 36.0KB

Documents Aggregations Explain Plan Indexes

FILTER

ADD DATA

VIEW

Displaying documents 1 - 11 of 11

REFRESH

```
{ "_id": ObjectId("5ed7ce2011b5c53a6c8b8ef5"),  
  "name": "noroom",  
  "availability": false,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ee0a11b5c53a6c8b8f02"),  
  "name": "P1",  
  "availability": false,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ee0e11b5c53a6c8b8f03"),  
  "name": "P2",  
  "availability": true,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ee1211b5c53a6c8b8f04"),  
  "name": "P3",  
  "availability": false,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ee1511b5c53a6c8b8f05"),  
  "name": "P4",  
  "availability": false,  
  "__v": 0 }  
  
{ "_id": ObjectId("5ed7ee1711b5c53a6c8b8f06"),  
  "name": "P5",  
  "availability": false,  
  "__v": 0 }
```

For user table

MongoDB Compass Community - localhost:27017/test.users

Connect View Collection Help

Local

3 DBS 4 COLLECTIONS

☆ FAVORITE

HOST
localhost:27017

CLUSTER
Standalone

EDITION
MongoDB 4.2.6 Community

Filter your data

- admin
- config
- test
 - diseases
 - patients
 - rooms
 - users

test.users

Documents

DOCUMENTS 5 TOTAL SIZE 631B AVG. SIZE 126B INDEXES 2 TOTAL SIZE 72.0KB AVG. SIZE 36.0KB

Documents Aggregations Explain Plan Indexes

FILTER

ADD DATA

VIEW

Displaying documents 1 - 5 of 5

REFRESH

```

{
  "_id": ObjectId("5ed7ce2011b5c53a6c8b8ef4"),
  "username": "admin",
  "password": "$2a$10$YTP4yyzVr0Z.0jzRismSOU4QpFRAKCC4409K2obrV1PPRQNH1YR2",
  "__v": 0
}

{
  "_id": ObjectId("5ed7e18711b5c53a6c8b8ef9"),
  "username": "pavan",
  "password": "$2a$10$QvD0bptqDmChzywp5i0020.hTId3h1b6g.SXuFVh4gxI6/35qrzES",
  "__v": 0
}

{
  "_id": ObjectId("5ed7f01c11b5c53a6c8b8f12"),
  "username": "gopi",
  "password": "$2a$10$PaN0vXkaGP0BZQm7Yz1wuLCHRpVb1ynBq1hT8TawuA0702AcG2IW",
  "__v": 0
}

{
  "_id": ObjectId("5ed7f02a11b5c53a6c8b8f13"),
  "username": "krishna",
  "password": "$2a$10$u0GmqF9gd5vu.JV417gFu3P3hG1S9yLIyEQFM5/ehHPWEVp5cEX2",
  "__v": 0
}

{
  "_id": ObjectId("5ed7f06c11b5c53a6c8b8f14"),
  "username": "kamal",
  "password": "$2a$10$ggDw8Po1bpEsE0xhGHV0zuo4cdLnc8KCT6kj255c11f4L53ErQp0K",
  "__v": 0
}

```

Type here to search

12:37 AM
6/4/2020

Password appears encrypted because we used bcryptjs hashing function

```
const mongoose = require ('mongoose');
const bcrypt = require ('bcryptjs');
var UserSchema = mongoose.Schema({
  username: {
    type: String,
    required: true,
    unique: true  },
    password: {
      type: String,
      required: true
    },
  },
});
```

Thank you.