



# National Storage Centre: Health Records

## Theme

Healthcare

## Problem

Develop an online system for electronic health records of the citizens of the country with previous medical history.

## What is EMR/EHR?

The EMR/EHR [ electronic medical records/electronic health records ] system enables physicians to record patient histories, display test results, write prescriptions, enter orders, receive clinical reminders, use decision-support tools, and print patient instructions and educational materials.

## Solution

An electronic medical record includes information about a patient's health history, such as diagnoses, medicines, tests, allergies, immunizations, and treatment plans. Also called EHR and electronic health record.

So, We built a web app from scratch, to counter this issue.

**"National Storage Centre for Health Records"**, in short, **NSCHR**

A Web app built using various technologies to provide fast, accurate information about a patient right in front of Medical Practitioner in just a matter of few clicks!

Our solution is a gamified experience that enables the Employee (Medical Practitioner) of a hospital to easily fetch all the medical history of a patient quickly!

From fetching vitals of a patient to fetching their past prescriptions and allergies, all can be done with just a click!

## **What Medical Records comprises of?**

### **Assessments**

1. Vital Reports
2. Chief Complaints
3. Diagnosis
4. Pain Assessments

### **Prescriptions**

1. Medications
2. Clinical Orders
3. Diet Orders

### **Patient Documents**

1. Prescriptions PDF
2. Allergy Reports
3. Lab Reports
4. Discharge Summaries

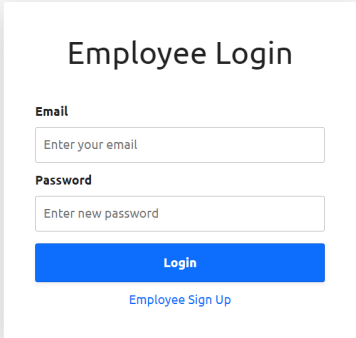
## **Working**

## Flow

1. An admin of the hospital may create credentials of an employee/medical practitioner using an admin key, to prevent illegal signups.
2. Then that employee/medical practitioner may login with those credentials to get to the Main Portal.
3. Once the portal is opened, he/she now has the option to enter the UHID (Aadhar in this case) of the patient to look up his/her details, and electronic medical/health records.
4. After landing upon the dashboard page, the user can see various types of categories available under which different reports are present, for e.g: Vital Reports section, diagnosis section, etc.
5. A new report can also be added using the "New Report +" button which will lead the user to upload new report form, where one can add a report name, additional comments, and pdf file which in this case is a report. This is same for all the different sections.
6. If the doctor wants register a new patient, he/she may click on the patient registration tab on the main dashboard as well as on the subsequent pages.

## Example Screenshots

### Employee Login



The screenshot shows a web form titled "Employee Login" centered on a light gray background. The form has a white background and a subtle drop shadow. It contains two input fields: "Email" with the placeholder text "Enter your email" and "Password" with the placeholder text "Enter new password". Below the password field is a blue "Login" button. At the bottom of the form, there is a blue link that says "Employee Sign Up".

## Employee Signup

### Employee Sign Up

**Name**

**Email**


**Password**

**Admin Key**

[Sign Up](#)

[Employee Login](#)

## Employee Dashboard [ Main Dashboard ]



### Welcome

Manav | manav.garg@hotmail.com

[Log Out](#)

**Search Patient:**

[Look up](#)

[Register A new Patient](#)

## Patient Registration

**Patient Sign Up**

**Name**

**Email**

**Contact**

**UHID [Aadhaar]**

**Country**

**Country code**

[Sign patient up](#)

[Go back](#)

## Patient Profile [ Before uploading any reports ]

**Patient Electronic Medical Records**

**Patient Name:** Manav 2  
**Patient UHID:** 999999999999  
**Patient Email:** garg.manav1108@gmail.com  
**Patient Contact:** 9818094442  
**Patient Country:** India  
**Patient Country Code:** 91

**Past Vitals Reports ▼ [ Latest 7 ]** [New Report +](#) [View all Reports >](#)

There are no vitals reports available!

**Past Chief Complaint Reports ▼ [ Latest 7 ]** [New Report +](#) [View all Reports >](#)

There are no past Chief Complaint reports available!

**Past Diagnostic Reports ▼ [ Latest 7 ]** [New Report +](#) [View all Reports >](#)

## Patient Profile [ After uploading a report ]

Patient Electronic Medical Records

Patient Name: Manav 2


Patient UHID: 999999999999

Patient Email: garg.manav1108@gmail.com

Patient Contact: 9818094442

Patient Country: India

Patient Country Code: 91



Past Vitals Reports ▾ [ Latest 7 ]

New Report +View all Reports >

Name: test report

Date: 25/7/2021

View full report >

Past Cheif Complaint Reports ▾ [ Latest 7 ]

New Report +View all Reports >

New Report Page [ Same format for all the categories ]

New Report

localhost:5000/patient/999999999999/vitals/new

Not syncing

Vitals Report Upload

Report Name

Enter Report Name

Additional Comments

Write additional comments ...

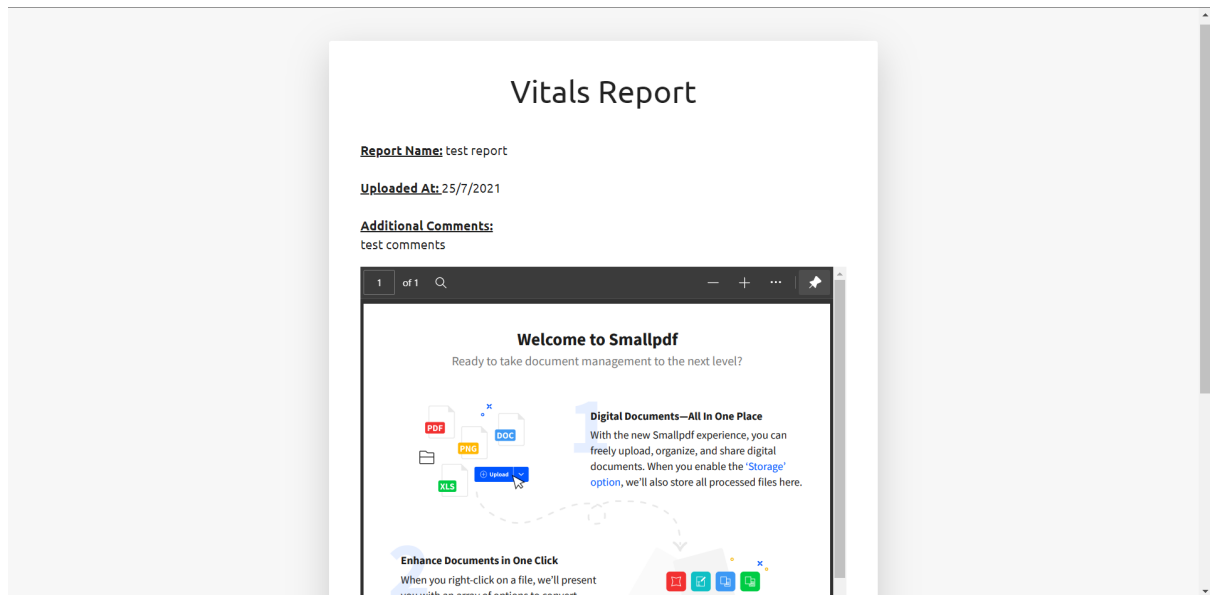
Choose File

No file chosen

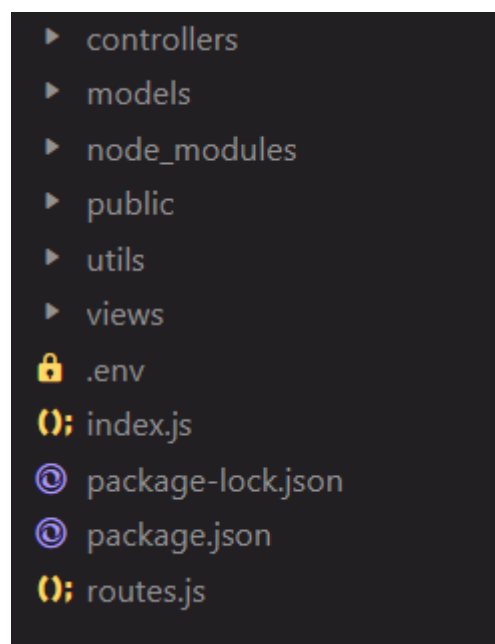
Upload

Go back

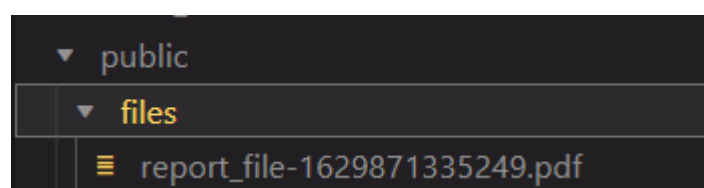




File structure of the app [ in VSCode ]



Location where the uploaded PDFs are saved





## **Demo**

URL: <https://youtu.be/MW7uK-72l9I>

## **Tech Stack**

1. NodeJS
2. ExpressJS
3. Embedded Javascript
4. Javascript
5. MySQL
6. MongoDB

## **Different Libraries Used**

1. Bcryptjs - for hashing passwords
2. body-parser
3. cors
4. dotenv - for environment variables
5. ejs
6. express
7. express-session - to locally store an employee session to keep him logged in.
8. mongoose - for storing patient data in MongoDB
9. multer - to handle file uploads
10. mysql2 - advanced nodejs lib to communicate with any MySQL server with promises.

## **Created By:-**

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