



West Visayas State University  
College of Information and  
Communications Technology



## E-Brgy Health Center Management System



MA. AMCEL T. MACABOTAS

CHARLENE MAE PURA

PRINCESS B. POJOL

COLEEN TABAGO

March 2022



# **“E-BRGY HEALTH CENTER MANAGEMENT SYSTEM”**

## **MANUAL GUIDE**

Institute of Information and Communications Technology

West Visayas State University

La Paz, Iloilo City

by

Maria Amcel T. Macabotas

Charlene Mae Pura

Princess B. Pojol

Colleen Tabago

June 2022

### **Disclaimer**

This software project and its corresponding documentation entitled "E-Brgy, Health Center Management System" is submitted to the College of Information and Communications Technology, West Visayas State University, in partial fulfillment of the requirements for the degree, Bachelor of Science in Information Systems and Information Technology. It is the product of our own work, except where indicated text.

We hereby grant the College of Information and Communications Technology permission to freely use, publish in local or international journal/conferences, reproduce, or distribute publicly the paper and electronic copies of this software project and its corresponding documentation in whole or in part, provided that we are acknowledged.

## **Table of Contents**

	Page
I.     Guide for deploying and using the system's main function	
a.    Introduction	5
b.    System Requirements	6
c.    Installation	7
II.    Troubleshooting for fixing possible bugs	15
III.   FAQ (Frequently Asked Questions)	20

## **Guide for deploying and using the system's main functions**

### **Introduction**

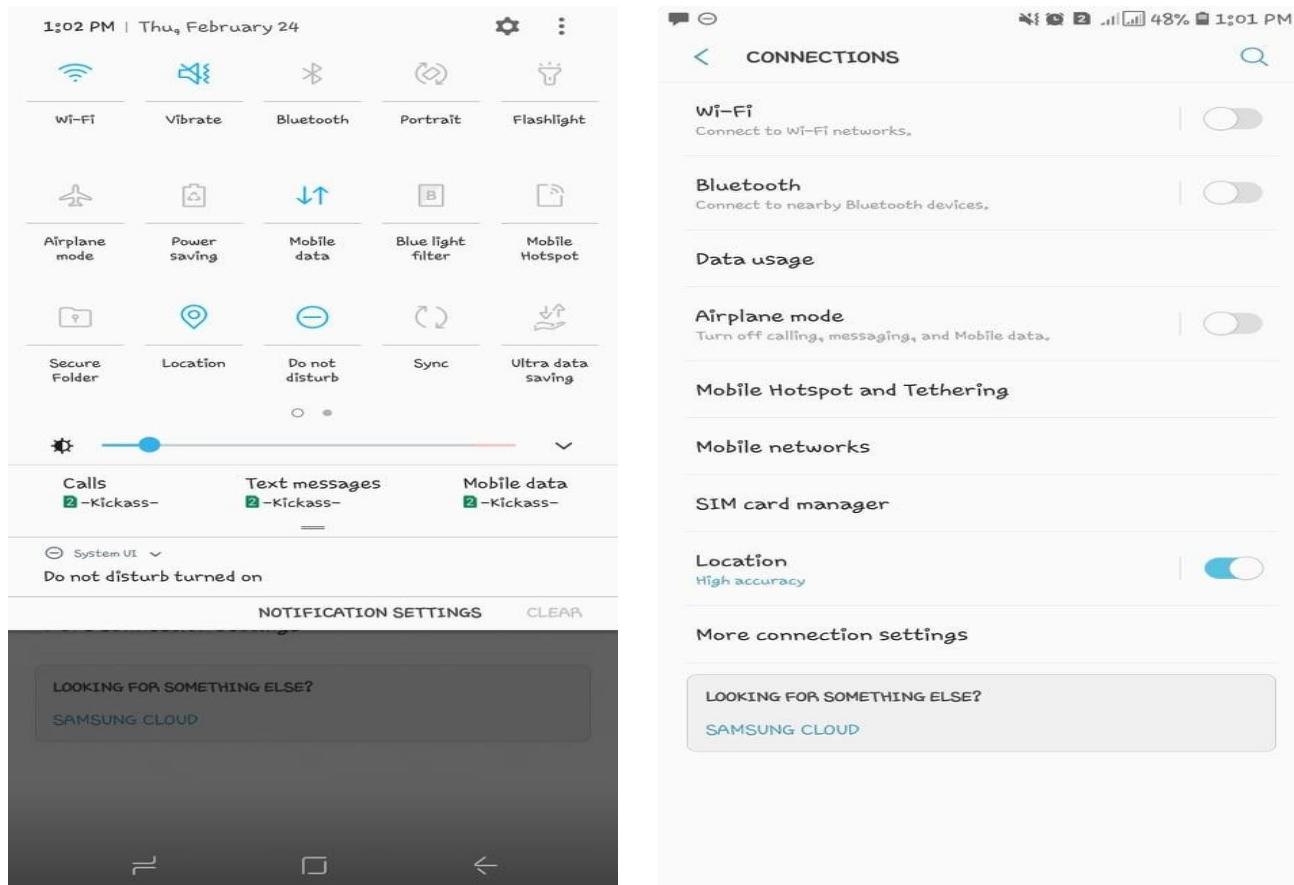
The brgy. health workers experience hard time tracking and reporting web in the real-time updating and monitoring the different patient's data. E-brgy. health center management system is a system for documenting data of patients and generate reporting and promotion tools for brgy. health workers. The system is composed of web applications to help the user systematize their datas and develop systems that will track, report, and give real-time update and monitoring of patients' incoming schedules. It generate brgy. health center data for the different stakeholders. Provide visualization analysis, interpretation of all patient's data and understand the relationship pattern and trends.

## **System Requirements**

- Wi-Fi or mobile data to enable internet access.
- Ready Brower
- SMS/ Mobile Phone Network

## System Installation

1. Activate the data connection phone if you have a mobile phone android, go to the menu Settings> Network and Internet> Mobile network select the SIM card you are using and put ON switch Data connection or WIFI.



2. Go to the browser of your device:

- For **Patients** just open this link <https://ccmp-ebrgy.site/patient-login> on your browser.

The screenshot shows a web browser window with the title bar "CCMP E-Management System for" and the URL "ccmp-ebrgy.site/patient-login". The main content area displays the "E-Management System for Brgy Health Center" logo and a login form. The form asks for "Email" and "Password", both with placeholder text "Please input your Email!" and "Please input your Password!". It includes a "Log in" button and a "Register" link.

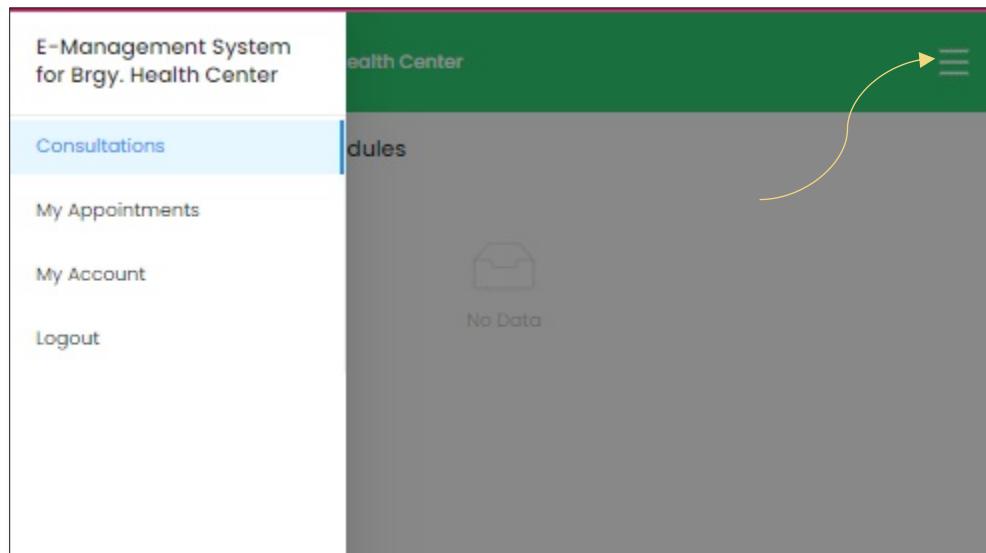
2.1. Then, click the register if you are not yet registered. Fill in the form for registration of consultation/updating status of your consultation then click submit

The screenshot shows a web browser window with the title bar "CCMP E-Management System for" and the URL "ccmp-ebrgy.site/patient-registration". The main content area displays a "Registration Form" with various input fields. The fields include:

- \* Email Address: tadaymac@gmail.com
- \* Password: .....@
- \* Confirm Password: .....
- \* Firstname: Amcel
- \* Middlename: Today
- \* Lastname: Macabatas
- \* Birth date: June 11,1997
- \* Phone Number: 09517373534
- \* Gender: Male (radio button)
- \* Address Line: Molo Iloilo City
- \* City/Municipality: Iloilo City
- \* Province: Iloilo
- \* Civil Status: Single (dropdown menu)
- \* Occupation: N/A
- \* Educational Attainment: N/A
- Weight in kilograms: (Optional) 47
- Height in centimeter: (Optional) 167

A "Submit" button is located at the bottom right of the form.

2.2 After successfully creating an account and registering, you are now ready to start using the system. You can monitor the schedule of your appointment.



3. Once you are registered, automatically it will store to the database of the system.
- Here is the link for administrative support staff <https://ccmp-ebrgy.site/admin/doctors>.

Full Name	Address Line	Gender	Phone #	Email	Birth date	Educational Attainment	Phil Health No.	Occupation	Action
Amicel Taday Macabatcas	Compania Central, Iloilo City - Compania Iloilo City, Iloilo	Female	095173735534	tadamac@gmail.com	1997-06-11T00:00:00.000Z	N/A	N/A		<button>Delete</button>
Ryan John Talento Tamara	Brgy. Lanag Sur, Tubungan, Iloilo - Lanag Sur Tubungan, Iloilo	Male	+639099289615	johnl01@gmail.com	1990-12-27T00:00:00.000Z	College Level	N/A	Validator	<button>Delete</button>
che tamara candelaria	lanag sur - lanag sur tubungan, iloilo	Female	+639096955207	chet01@gmail.com	1990-12-01T00:00:00.000Z	vocational course	n/a	vendor	<button>Delete</button>
Chard Talento Tamara	lanag - lanag sur tubungan, iloilo	Male	+639099289615	chardt01@gmail.com	0195-09-23T00:00:00.000Z	college graduate	N/A	farmer	<button>Delete</button>
Ryan Talento Tamara	Brgy. Lanag Sur - Lanag sur Tubungan, Iloilo	Male	+639099289615	ryanjohnl01@gmail.com	1990-12-27T00:00:00.000Z	College Level		Farmer	<button>Delete</button>
Nalds Tagudando Tamara	Brgy. Lanag Sur, Tubungan, Iloilo - Lanag Sur Tubungan, Iloilo	Male	+639096955207	naldst01@gmail.com	1964-07-16T00:00:00.000Z	High School Level	N/A	Farmer	<button>Delete</button>
Andi Fiecas Tamara	Brgy. Lanag Sur, Tubungan, Iloilo - Lanag Sur Tubungan, Iloilo	Male	+639099289615	andit01@gmail.com	2014-09-17T00:00:00.000Z	Elementary Level	N/A	Tubungan	<button>Delete</button>
Annic Fiecas Tamara	Brgy. Lanag Sur, Tubungan, Iloilo - Lanag Sur Tubungan, Iloilo	Female	+639096955207	annit01@gmail.com	2016-07-16T00:00:00.000Z	Elementary Level	N/A	None	<button>Delete</button>
Richard Talento Tamara	Brgy. Adgoa, Tubungan, Iloilo - Adgoa Tubungan, Iloilo	Male	+639099289615	richardt01@gmail.com	1995-09-23T00:00:00.000Z	College Graduate		Farmer	<button>Delete</button>

- 3.1. Here is dashboard of the system where the admin can monitor/track the patients' appointments and status of consultation and also up to date the queue system of patients and doctor. Click next to inform for the next queue.

The screenshot shows the E-Management System for Brgy Health Center dashboard. The left sidebar contains navigation links: Dashboard, Consultations, Schedules, Doctors, Patients, and Reports. The main area displays various statistics and patient queues for two doctors.

**Statistics:**

- Consultations Conducted: 7
- Upcoming Consultations: 21
- Registered Patients: 33
- Consulted Patients: 68
- On Going Consultations: 9

**Queues:**

**Nutritionist - Joel De Castro Queue:**

- Current Patient: MAYAD NGA GAB.E! - August 31, 2021 08:16 pm
- Current Patient: Sammyr Pura Espinosa
- Queue Number: 3
- Next button

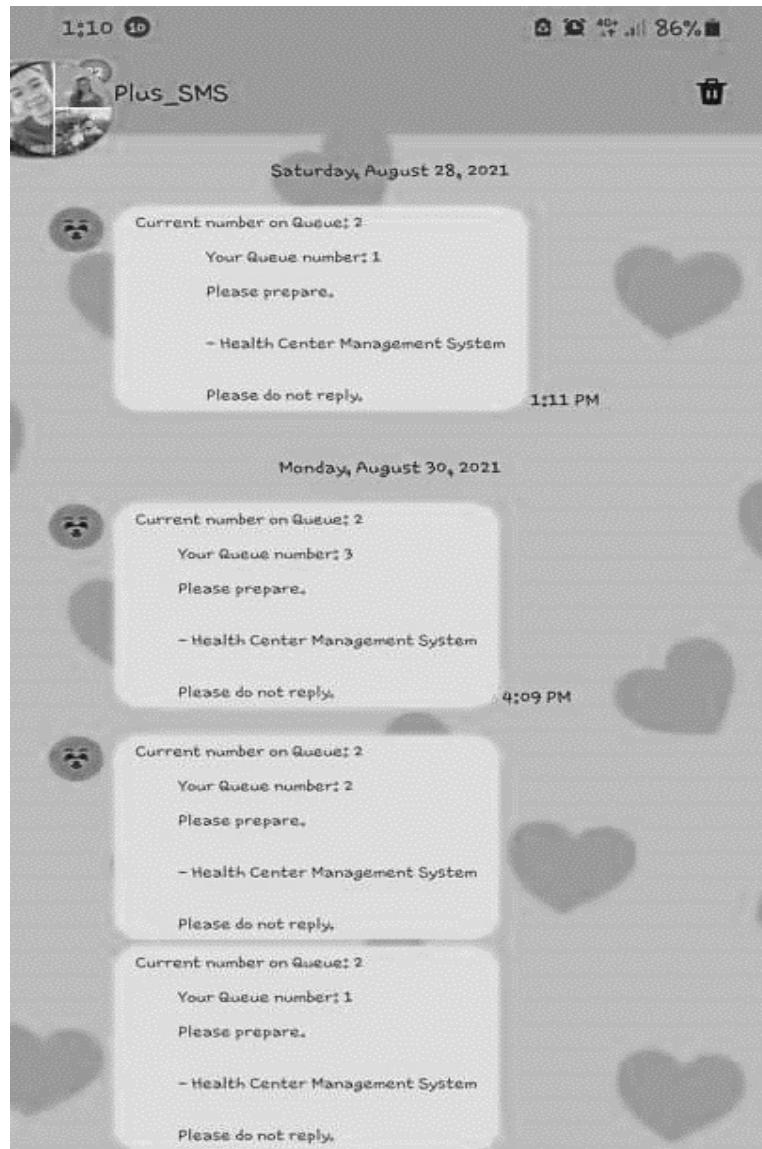
Full Name	Queue Number	Phone #
Alfonso Pura Almira	4	+63917/205824
Avianna Pura Almira	5	+63917/205824

**Nutritionist - Joel De Castro Queue:**

- Current Patient: NEW TRIAL SMS TRIAL W/ SIR JOEL - August 31, 2021 01:59 pm
- Current Patient: Alfonso Pura Almira
- Queue Number: 3
- Next button

Full Name	Queue Number	Phone #
Norjanah Hilado Pura	4	+63917/205824
Victoria Pura Espinosa	5	+63917/205824

- 3.2. Patients can get SMS notifications with reminders of their appointments, information about how to prepare for their appointment. With messaging through possible to share details such as the number of open counters, current waiting, and transaction time.



- 3.3. Admin can create schedule for the availability and consultation of the doctor/medical staff and for updating. Just click "create schedule".

Consultation	Title	Description	Health Worker	Number of slots	Date & Time	Number of slots	Status	Current Number	Action
Nutritionist	MAYAD NGA GABEI	TRIAL FOR TONIGHT	Joel De Castro	5	August 31, 2021 8:15:59 pm	5	Started	4	<a href="#">Edit</a> <a href="#">Delete</a>
Nutritionist	NEW TRIAL SMS TRIAL W/ SIR JOEL	SMS TRIAL WITH SIR JOEL	Joel De Castro	5	August 31, 2021 15:54:49 pm	5	Started	3	<a href="#">Edit</a> <a href="#">Delete</a>
Individual Treatment	NEW TRIAL (5 slots para indi ma ubos) hahahahaha	5 slots Ing hahahaha	Amora Truman Talento	5	August 30, 2021 8:45:58 pm	5	Started	4	<a href="#">Edit</a> <a href="#">Delete</a>
Nutritionist	NEW TRIAL TRIAL NOTIFICATION	NOTIFICATION TRIAL	Arnel M. Macabatas	10	August 29, 2021 12:50:19 pm	10	Done	10	<a href="#">Edit</a> <a href="#">Delete</a>
Nutritionist	Updating Data	TRIAL (NEW TRIAL)	Joel De Castro	15	August 28, 2021 2:50:28 pm	15	Done	10	<a href="#">Edit</a> <a href="#">Delete</a>
Nutritionist	TRIAL	TRIAL ONLY	Arnel M. Macabatas	10	August 18, 2021 8:02:52 pm	10	Done	10	<a href="#">Edit</a> <a href="#">Delete</a>
Individual Treatment	General Check up	Update data	Joel De Castro	15	August 17, 2021 7:00:00 pm	15	Done	13	<a href="#">Edit</a> <a href="#">Delete</a>

- 3.4. After you click the "create schedule" bottom. Fill in the form then, click submit.

**Create Schedule Form**

**Consultation:** Nutritionist

**Title:**  **Please input title!**

**Description:**

**Health Worker Name:** Jamar Today Quijano **Number of Slots:**  **Please input number of slots!**

**Consultation Date:**  **Please input consultation date!** **Consultation Time:**  **Please input consultation time!**

**Close** **Submit**

- 3.5. Click report where you can find all the input data in the system. It can also print out the data of consulted patients and consultations conducted.

The screenshot shows the E-Management System interface for Brgy Health Center. On the left, a sidebar menu includes Dashboard, Consultations, Schedules, Doctors, Patients, and Reports (which is highlighted with a blue oval). The main area displays a summary of reports: Consultations Conducted (7), Upcoming Consultations (7), Registered Patients (33), Consulted Patients (70), and On Going Consultations (0). Below this is a table titled 'Consulted Patients' with columns: Full Name, Address Line, Contact #, Consultation, Consultation Title, Schedule, Appointment Date, Appointment Status, and Queue Num. Three rows of patient data are listed.

**Consultations Conducted:**

Consultation	Title	Description	Health Worker	Number of slots	Date & Time	Number of slots	Status	Current Number
Nutritionist	NEW TRIAL TRIAL NOTIFICATION	NOTIFICATION TRIAL	Armel M. Macabotas	10	August 29, 2021 12:50:19 pm	10	Done	10
Nutritionist	Updating Data	TRIAL (NEW TRIAL)	Joel De Castro	15	August 28, 2021 2:50:28 pm	15	Done	10
Nutritionist	TRIAL	TRIAL ONLY	Armel M. Macabotas	10	August 18, 2021 8:02:52 pm	10	Done	10
Individual Treatment	General Check up	Update data	Joel De Castro	15	August 17, 2021 7:00:00 pm	15	Done	13
Nutritionist	update	updating	Armel M. Macabotas	10	August 11, 2021 1:22:19 pm	10	Done	10

**Print Options:**

- Print button (highlighted with a blue oval)
- 5 sheets of paper
- Destination: EPSON L120 Series
- Pages: All
- Copies: 1
- Layout: Portrait
- Color: Black and white
- More settings (dropdown menu)
- Print and Cancel buttons

- 3.6. Click doctor for the data information of medical staff in health center and for the creation of E-Brgy, Health Center Management System (EBH CMS) account for doctor.

Full Name	Email	Address Line	Gender	Phone #
Jomar Today Quijano	tadaymac@gmail.com	Molo Iloilo City - Compania Iloilo City, Iloilo	Male	09517375534
Amara Truman Talento	amara@gmail.com	Brgy. Tabat, Tubungan, Iloilo - Tabat Tubungan, Iloilo	Female	09099289614
Amcel M. Macalobatas	Amcel@gmail.com	Molo - North Iloilo, Iloilo	Female	09096955206
Joel De Castro	doctor@gmail.com	Pavia, Parc Regency - Pavia Pavia, Iloilo	Male	09080812123

- 3.7. Click “add a doctor” if not yet registered. And here’s the form below.

\* Fristname: \_\_\_\_\_

\* Middlename: \_\_\_\_\_

\* Lastname: \_\_\_\_\_

\* Phone Number: \_\_\_\_\_

\* Gender:  Male  Female

\* Address Line: \_\_\_\_\_

\* Brgy.: \_\_\_\_\_

\* City/Municipality: \_\_\_\_\_

\* Province: \_\_\_\_\_

4. After creating an account for doctor, go to the website: <https://ccmp-ebrgy.site/doctor/patients>.

Then sign in the registered account of doctor, enable to receive, and review patients' data of information. Here's is the form below.

Full Name	Address Line	Gender	Phone #	Email	Birth date	Educational Attainment	Phil Health No.	Occupation
Col Taburnfarma Tabago	Brgy. Balicua, Tubungan, Iloilo - Balicua Tubungan, Iloilo	Female	+6390996955207	coltabs@gmail.com	1997-12-28T00:00:00.000Z	College Level	N/A	None
Amiel Today Macalbotas	Compania Central, Molo, Iloilo City - Compania Molo, Iloilo City, Iloilo City	Female	095123735534	todamoc@gmail.com	1997-06-11T00:00:00.000Z	N/A	N/A	
Ryan John Talento Tamara	Brgy. Lanag Sur, Tubungan, Iloilo - Lanag Sur Tubungan, Iloilo	Male	+639099289615	john101@gmail.com	1996-12-27T00:00:00.000Z	College Level	N/A	Validator
che tamara candelaria	Lanag sur - lanag sur tubungan, Iloilo	Female	+6390996955207	che101@gmail.com	1980-12-01T00:00:00.000Z	vocational course	n/a	vendor
Chard Talento Tamara	Lanag - lanag sur tubungan, Iloilo	Male	+639099289615	chard101@gmail.com	0195-09-23T00:00:00.000Z	college graduate	N/a	farmer
Ryan Talento Tamara	Brgy. Lanag sur - Lanag sur Tubungan, Iloilo	Male	+639099289615	ryanjohn101@gmail.com	1996-12-27T00:00:00.000Z	College Level	N/A	Farmer
Nalds Tagulando Tamara	Brgy. Lanag Sur, Tubungan, Iloilo - Lanag Sur Tubungan, Iloilo	Male	+6390996955207	nalds101@gmail.com	1964-07-16T00:00:00.000Z	High School Level	N/A	Farmer

Consultation	Title	Description	Health Worker	Number of slots	Date & Time	Number of slots	Status	Current Number	Action
Individual Treatment	NEW TRIAL (5 slots para indi ma ubos) hahahahaha	5 slots ing hahahaha	Amara Truman Talento	5	August 30, 2021 8:45:58 pm	5	Started	4	<button>View Patients</button>
Obstetric and Gynaecological	I	I	Amara Truman Talento	12	August 03, 2021 5:35:47 pm	12	Started	1	<button>View Patients</button>
Nutritionist	I2	I2	Amara Truman Talento	10	July 30, 2021 3:28:02 pm	10	Started	4	<button>View Patients</button>
Family Planning	Family Planning Consultation	Family Planning Consultation	Amara Truman Talento	5	July 22, 2021 3:20:37 pm	5	Pending		<button>View Patients</button>
Nutritionist	General Checkup	Over weight and under weight children	Amara Truman Talento	10	July 16, 2021 8:00:00 am	10	Done	3	<button>View Patients</button>
Cancer Control and Prevention Program	General Checkup	Change of medicine and update of medicine	Amara Truman Talento	5	July 20, 2021 8:00:00 am	5	Pending		<button>View Patients</button>
Individual Treatment	General Checkup	individual check up and follow up check up	Amara Truman Talento	5	July 19, 2021 10:00:00 am	5	Pending		<button>View Patients</button>

## Troubleshooting for fixing possible bugs

(APP.tsx)

```
import React, { lazy, Suspense, useEffect } from "react";
import Spinner from "./components/hoc/spinner/spinner.component";
import ErrorBoundary from "./components/hoc/error-boundary/error-boundary.component";
import { Route, Switch } from "react-router-dom";
import setAuthToken from "./utils/setAuthToken";
import PatientLoginPage from "./pages/patients/login-form/login.page";

const SecretaryRoutes = lazy(() => import("./routes/secretary.routes"));

const LoginPage = lazy(() => import("./pages/secretary/login/login.page"));

const PatientRegistrationPage = lazy(
() => import("./pages/patients/registration-form/registration.page")
);

const PatientsRoutes = lazy(() => import("./routes/patients.routes"));

const DoctorRoutes = lazy(() => import("./routes/doctor.routes"));
const DoctorLogin = lazy(() => import("./pages/doctor/login/login.page"));

const App: React.FC = () => {
useEffect(() => {
  setAuthToken(localStorage.getItem("atkn"));
}, []);
return (

```

```
<>

<Suspense fallback={<Spinner />}>

  <ErrorBoundary>

    <Switch>

      <Route path="/admin" component={SecretaryRoutes} />
      <Route path="/login" component={LoginPage} />

      <Route path="/patients" component={PatientsRoutes} />
      <Route path="/patient-login" component={PatientLoginPage} />

      <Route path="/doctor" component={DoctorRoutes} />
      <Route path="/doctor-login" component={DoctorLogin} />

      <Route
        path="/patient-registration"
        component={PatientRegistrationPage}
      />
    </Switch>
  </ErrorBoundary>
</Suspense>
</>
);

};

export default App;
```

### (Packagejson)

```
{  
  "name": "health-center-client",  
  "version": "0.1.0",  
  "private": true,  
  "dependencies": {  
    "@loadable/component": "^5.15.0",  
    "@reduxjs/toolkit": "^1.5.1",  
    "@testing-library/jest-dom": "^5.11.10",  
    "@testing-library/react": "^11.2.6",  
    "@testing-library/user-event": "^12.8.3",  
    "@types/jest": "^26.0.22",  
    "@types/node": "^12.20.10",  
    "@types/react": "^17.0.3",  
    "@types/react-dom": "^17.0.3",  
    "@types/react-query": "^1.1.2",  
    "@types/react-redux": "^7.1.16",  
    "@types/react-router-dom": "^5.1.7",  
    "@types/redux": "^3.6.0",  
    "@types/redux-logger": "^3.0.8",  
    "@types/styled-components": "^5.1.9",  
    "antd": "^4.15.1",  
    "axios": "^0.21.1",  
    "dotenv": "^8.2.0",  
    "moment": "^2.29.1",  
    "react": "^17.0.2",  
    "react-dom": "^17.0.2",  
    "react-query": "^3.13.10",
```

```
"react-redux": "^7.2.3",
"react-router-dom": "^5.2.0",
"react-scripts": "4.0.3",
"react-snap": "^1.23.0",
"react-to-print": "^2.12.6",
"redux": "^4.0.5",
"redux-logger": "^3.0.6",
"redux-thunk": "^2.3.0",
"reselect": "^4.0.0",
"sass": "^1.32.10",
"styled-components": "^5.2.3",
"typescript": "^4.2.4",
"typescript-fsa-redux-thunk": "^2.10.1",
"uuid": "^8.3.2",
"web-vitals": "^1.1.1"

},
"scripts": {
  "start": "react-scripts start",
  "build": "react-scripts build",
  "test": "react-scripts test",
  "eject": "react-scripts eject",
  "postbuild": "react-snap"
},
"eslintConfig": {
  "extends": [
    "react-app",
    "react-app/jest"
  ]
}
```

```
},  
"browserslist": {  
  "production": [  
    ">0.2%",  
    "not dead",  
    "not op_mini all"  
,  
  "development": [  
    "last 1 chrome version",  
    "last 1 firefox version",  
    "last 1 safari version"  
,  
  ],  
},  
"devDependencies": {  
  "@types/loadable__component": "^5.13.3"  
}  
}
```

## Frequently Asked Questions

### 1.) What is e-brgy health center management system?

- E-brgy. health center management system is a system for documenting data of patients and generate reporting and promotion tools for brgy. health workers. Helps user to systematize their datas and develop systems that will track, report, and give real-time update and monitoring of patients' incoming schedules.

### 2.) What is e-brgy health center management system software?

- Virtual queuing via smartphone
- Staff apps to arrive and serve customers
- Patients and healthcare staff notifications
- Real-time monitoring of operations

### 3.) How can using e-brgy health center management system benefit my practice?

- Improve access to services with appointment scheduling – by offering patients to schedule appointments, can estimate the expected number of patients.
- Decrease actual waiting time by better time management and with the regulations to maintain a safe distance and a limit of maximum number of people in indoor space.
- Provide visualization analysis, interpretation of all patient's data and understand the relationship pattern and trends.
- Providing accurate, up-to-date, and complete information about patients.
- Enhancing privacy and security of patient data.

### 4.) Which industries benefit the most of e-brgy health center management system?

- Local Government Unit
- Health center
- Health care
- Public Sector

## Contact details of the development team



---

Ms. Maria Amcel T. Macabotas	—	09517375534
Ms. Princess B. Pojol	—	09951950046
Ms. Charlene Mae Pura	—	09275591944
Ms. Coleen Tabago	—	09096966207

---



