SB SYSTEM

Project: Design and implementation of the baby incubator control unit

We designed a smart baby incubator using the ESP-32. The baby incubator we designed works on

12V (UPS) using a battery and a smart fast charger, and we connected the controller to the incubator

We designed a site using Wi-Fi technology where the doctor can set variable limits such as (degrees).

Temperature and humidity) remotely via the web. The vital signs of the subjected child can also be monitored

In the incubator (body temperature and blood oxygen level) as well as (temperature and humidity)

For remote incubators. Regular incubators do not have remote controls. Camera added

Web inside the incubator and use as an IP camera to enable real-time video monitoring of the baby inside

Babysitter. In addition to the medical staff and developers, parents can monitor their child inside

The incubator and his vital signs remotely (from outside the hospital) at distinct levels. The incubator contains

Also has a control and monitoring unit connected by a wired connection to the console. Lets design

Proposed future integration with other incubators to form a local or remote control and monitoring room.
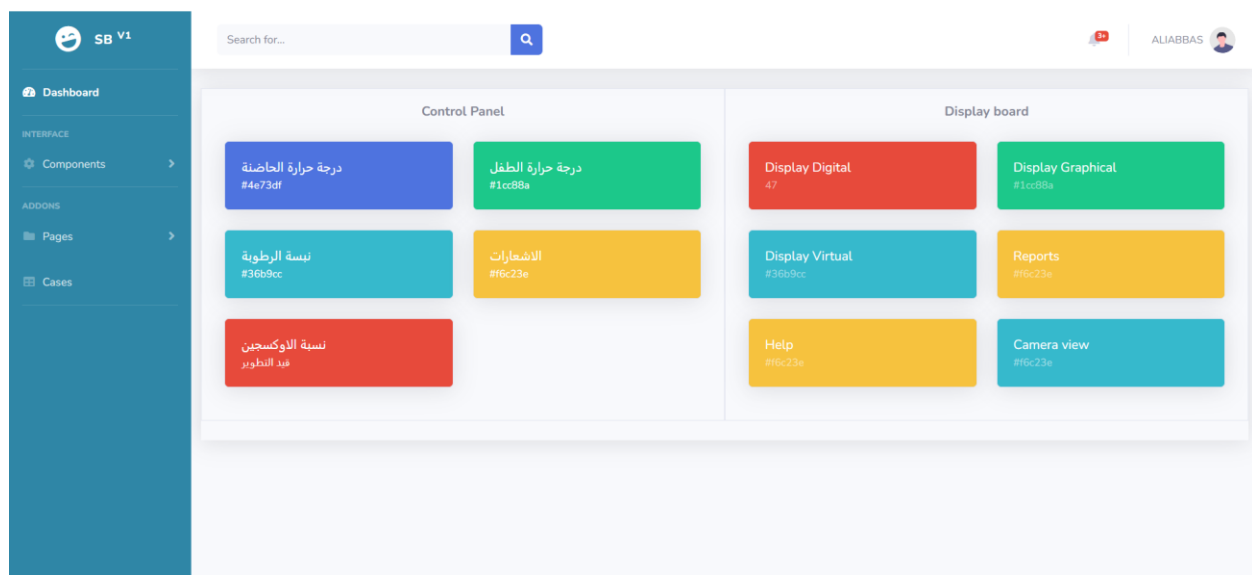
Here an account is created

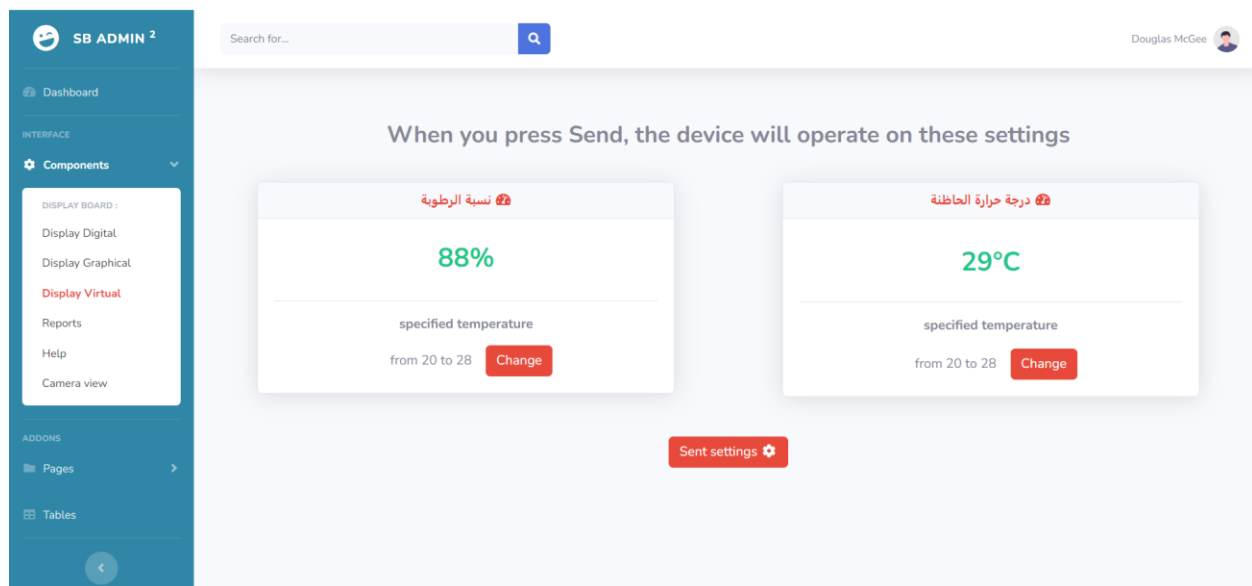There are different types of accounts (doctor, nurse, family)

The control panel contains some shortcuts and displays data

On the digital display page, real values are displayed, and the humidity and incubator temperature can also be changed
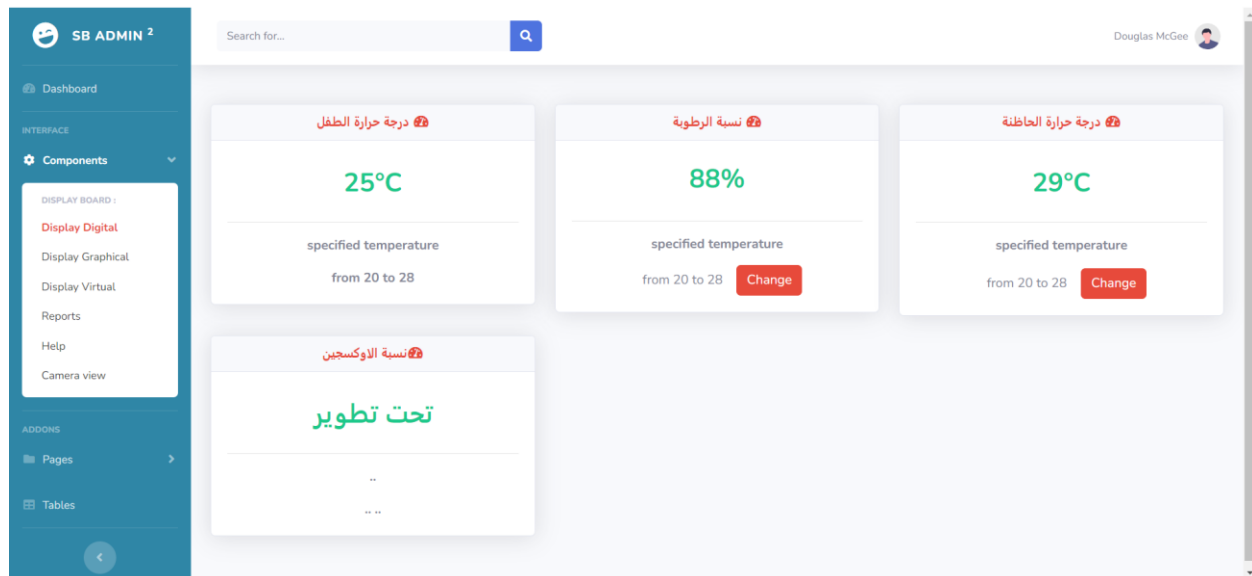
When a new case is admitted to a hospital, the device must be set to these settings, and the values can also be changed (depending on the case)

A detailed report on all cases entering and leaving the hospital

Here the status is displayed
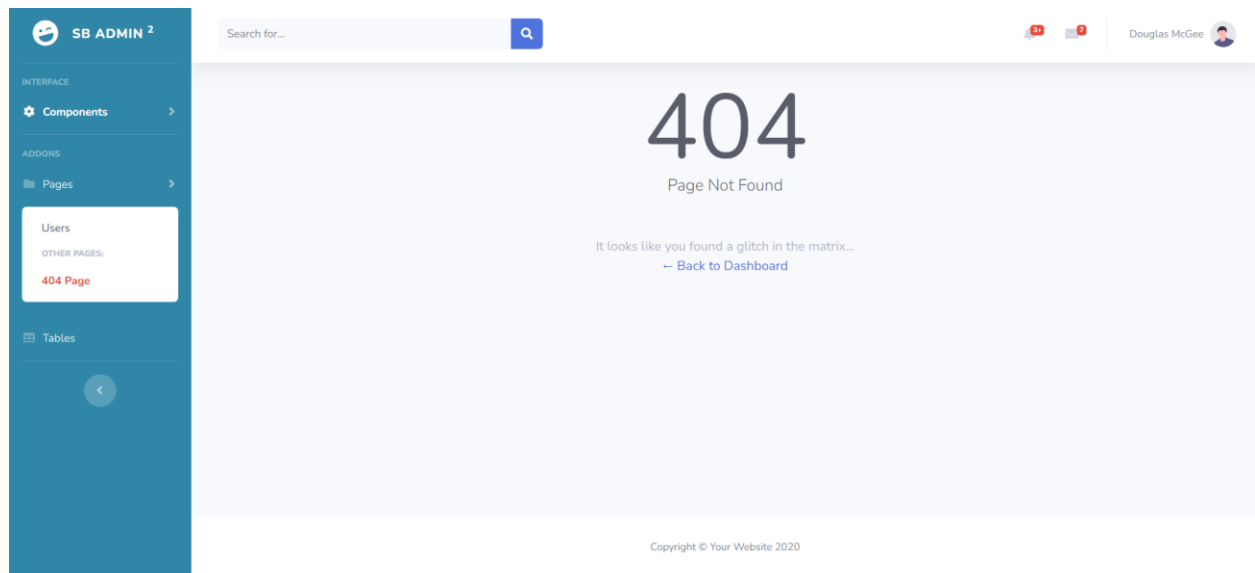
This page appears in the event of a technical defect in the device or system

You must enter the data required when cases are admitted to the hospital