

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

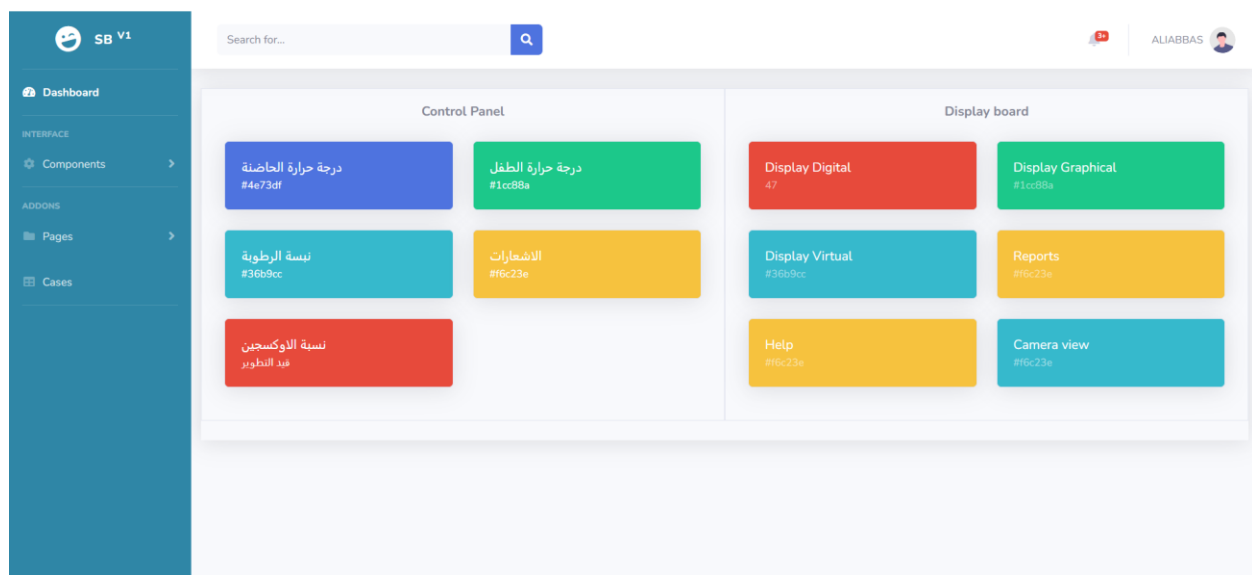
There are different types of accounts (doctor, nurse, family)

The screenshot shows a web application interface. On the left is a dark sidebar with a menu. The main content area is light gray. A modal window titled 'Form For Add User' is open in the center. The form has the following fields:

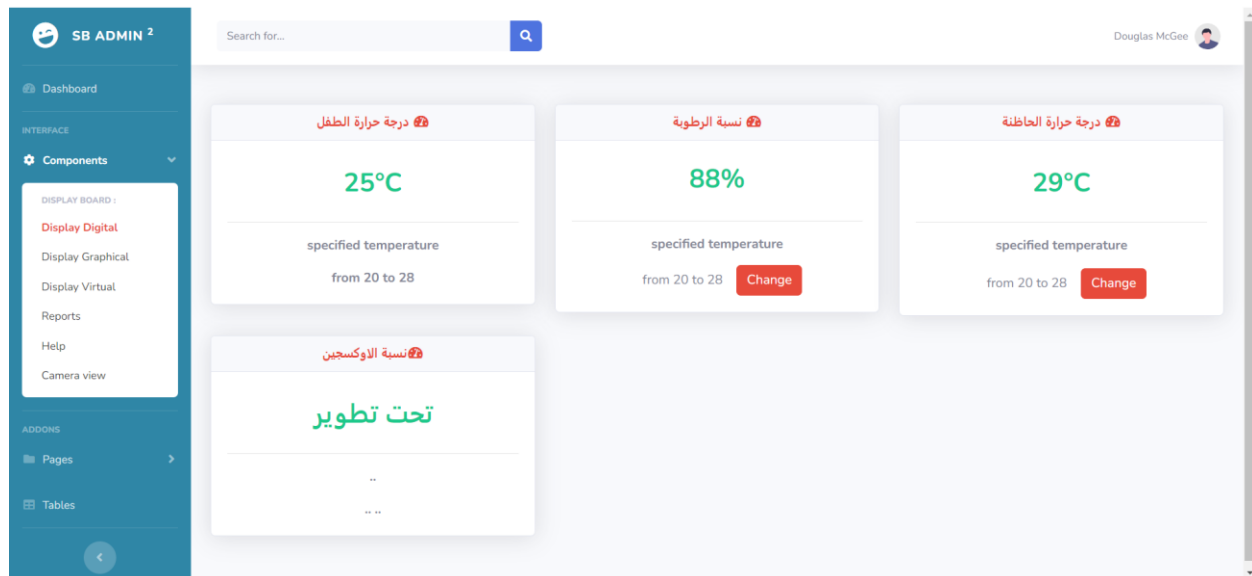
- Username: Text input with 'Tiger Nixon' as a placeholder.
- Password: Text input.
- Re Password: Text input.
- Date: Text input with a date picker icon and 'dd/mm/yyyy' as a placeholder.
- Account Power: A dropdown menu with '1' selected.
- Note: Text input.

At the bottom of the modal is a 'Submit form' button. In the background, a sidebar menu has 'Users' highlighted. A table of users is partially visible, showing columns for 'Username', 'Date', and 'Note'.

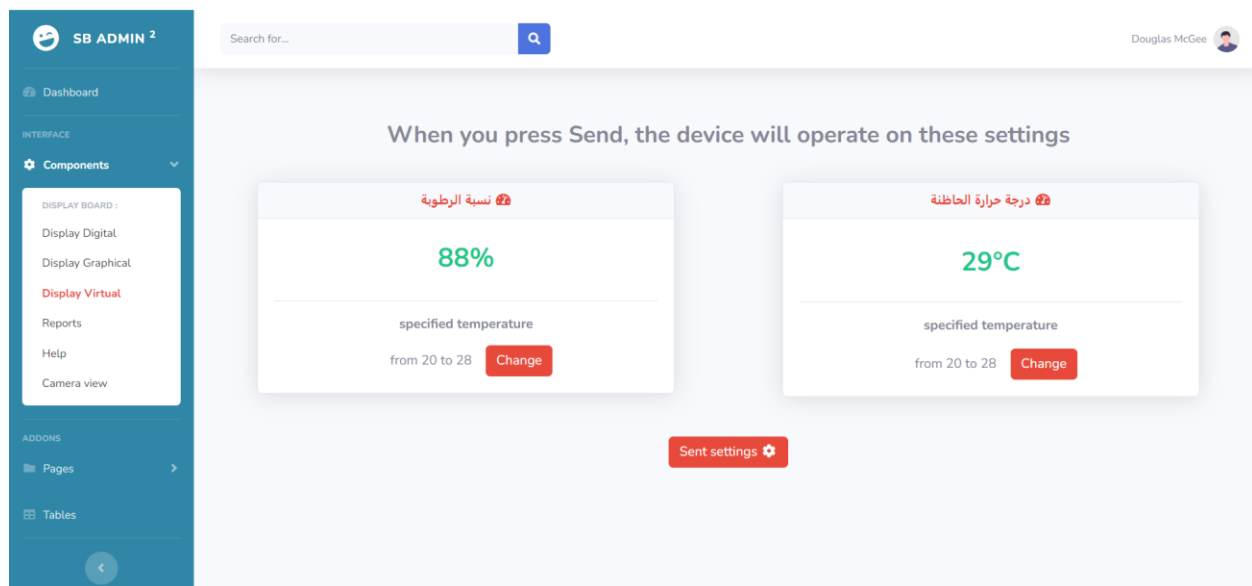
The control panel contains some shortcuts and displays data



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

SB V1

Dashboard

INTERFACE

Components

DISPLAY BOARD :

Display Digital

Display Graphical

Display Virtual

Reports

Help

Camera view

ADDONS

Pages

Cases

Search for...

q

Douglas McGee

Baby name :

Id:

Address

Search

Reset

Show 10 entries

Search:

Baby name	Father's name	Mother's full name	Date	Place of birth	Baby sex	Baby ststus	Baby weight	Length stay Baby	Address
Tiger Nixon	System Architect	Edinburgh	61	2011/04/25	\$320,800	61	2011/04/25	\$320,800	61
Tiger Nixon	System Architect	Edinburgh	61	2011/04/25	\$320,800	61	2011/04/25	\$320,800	61
Tiger Nixon	System Architect	Edinburgh	61	2011/04/25	\$320,800	61	2011/04/25	\$320,800	61
Tiger Nixon	System Architect	Edinburgh	61	2011/04/25	\$320,800	61	2011/04/25	\$320,800	61

Here the status is displayed

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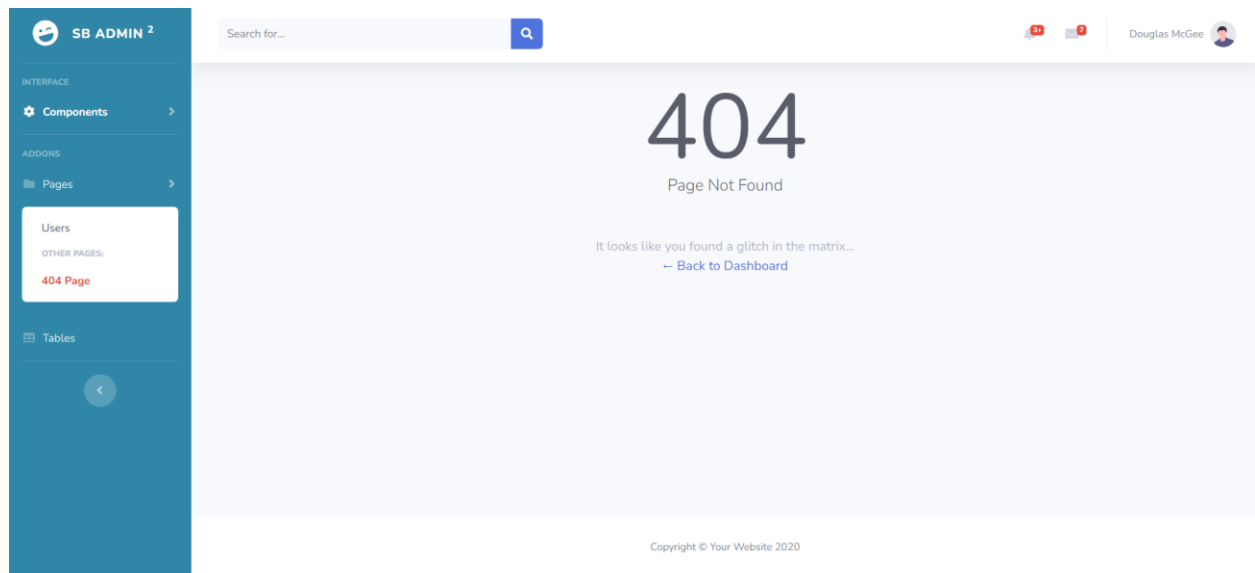
Search for...

q

Douglas McGee

Live .

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

The screenshot shows the SB V1 interface. A 'Form for Add' modal is open in the center, allowing users to add a new case. The form contains the following fields:

- Baby name
- Father's name
- Mother's full name
- Date (with a calendar icon)
- Place of birth
- Baby sex
- Baby ststus
- Baby weight
- Length stay Baby

A 'Submit form' button is located at the bottom of the modal. In the background, a table of cases is visible, with columns for Baby name, Date, Place of birth, Baby weight, Length stay Baby, and others. The table includes entries for 'Tiger Nixon' and 'ali abbas'.