

# Health Clinical System

COMP308 Group Project

Professor: Ilia Nika

Liping Wu

Zhaobin Bu

Yanbo Wang

2020/4/17



# Team

## ▶ Liping Wu

- ▶ Business and Requirements Analysis and Design
- ▶ Database Models design and implementation
- ▶ Back End / Front-End/ REACT AI/ Youtube
- ▶ Testing / Code Organization
- ▶ Documentation

## ▶ Zhaobin Bu

- ▶ project analysis and design
- ▶ Back End / Front-End/Diagram

## ▶ Yanbo Wang

- ▶ Sign up and log in



## Project Architecture and Technology

- Back-end: NODE.JS / MONGODB / EXPRESS
- Front-end : REACT
- AI- Tensorflow
- Creative: Youtube framework, Diagram



# Home Page

## Clinic System - Homepage

**we do support three different roles: admin, nurse and patient. you can only register a new nurse or patient user account.**

- View my profile
- Register
- login/logout
- Nurse add/drop patient
- Nurse Send/preview/delete Daily motivational tips to a specific patient
- Nurse entry/preview/delete the vital signs for a specific patient
- Nurse view all history data of patient's vital signs
- Nurse view/reply the daily information of patient
- Nurse view/reply patient's emergency alerts
- patient view his/her Daily motivational tips and play the youtube video sending from nurse
- patient send emergency alerts to nurse
- patient view all my emergency alerts and response from nurse
- patient add daily information of vital signs
- patient view health history and nurse reply
- AI to predict health risk
- Patient can read Diagrams of all his health data

# Patient sign up

Please Sign Up

Email Address:	p005@test.com
Password:	*****
First Name:	John
Last Name:	John
Address:	1 front st
City:	toronto
Phone Number:	6471112222
Date of Birth:	2020-04-20
User Role:	<input checked="" type="radio"/> Patient <input type="radio"/> Nurse

DoB must be past.

Register

Please Sign Up

Email Address:	nancy@test.com
Password:	*****
First Name:	nancy
Last Name:	white
Address:	123 Mccowan Rd
City:	toronto
Phone Number:	647-111-2222
Date of Birth:	1969-01-01
User Role:	<input type="radio"/> Patient <input checked="" type="radio"/> Nurse

Register

# Admin

Please sign in

Email Address

nancy@test.com

Password

\*\*\*\*\*

user account is not activated yet

Login in

## Modify Role

Email:

p005@test.com

first Name:

John

Last Name:

John

Role:

patient

Activated: ☒ Yes ☐ No

Update users

## User Account Management

Email	First Name	Last Name	Role	Activated		
nurse@test.com	Agenla	Wu	nurse	Yes	<a href="#">Edit</a>	<a href="#">Delete</a>
p002@test.com	Tina	Wu	patient	Yes	<a href="#">Edit</a>	<a href="#">Delete</a>
admin@test.com	Admin	Wu	admin	Yes	<a href="#">Edit</a>	<a href="#">Delete</a>
p001@test.com	Kathy	Chen	patient	Yes	<a href="#">Edit</a>	<a href="#">Delete</a>
nurse2@test.com	Grace	Wu	nurse	Yes	<a href="#">Edit</a>	<a href="#">Delete</a>
p003@test.com	Vivian	Wu	patient	Yes	<a href="#">Edit</a>	<a href="#">Delete</a>
foxpeer@gmail.com	LIPING	Wen	patient	No	<a href="#">Edit</a>	<a href="#">Delete</a>
p005@test.com	John	John	patient	No	<a href="#">Edit</a>	<a href="#">Delete</a>

## Modify Role

Email:

nancy@test.com

first Name:

nancy

Last Name:

white

Role:

nurse

Activated: ☒ Yes ☐ No

Update users

## Nurse-view all patients

### Patients

Email	First Name	Last Name	Activated	
p002@test.com	Tina	Wu	Yes	<a href="#">Accept</a>
p001@test.com	Kathy	Chen	Yes	<a href="#">Accept</a>
p003@test.com	Vivian	Wu	Yes	<a href="#">Accept</a>
foxpeer@gmail.com	LIPING	Wen	Yes	<a href="#">Accept</a>
p005@test.com	John	John	Yes	<a href="#">Accept</a>

# Nurse-accept /drop patient

Accept Patient

Email:

p005@test.com

first Name:

John

Last Name:

John

health Card Number:

Nurse:

=>

Accept

My Patients

Email	First Name	Last Name	Health Card	Nurse					
p005@test.com	John	John	123215677688	nancy white	<a href="#">Health History</a>	<a href="#">Emergency Alert</a>	<a href="#">Daily tips</a>	<a href="#">Drop</a>	

Drop Patient From My Patient List

Email:

p005@test.com

first Name:

John

Last Name:

John

Last Name:

123215677688

Nurse:

nancy white

=> null

Drop



# Nurse- Patient health history

## Patient Health History

[Enter Vital Signs](#)

Patient	Measured Date	Measured method	Read by Nurse	Notes from Nurse		
John John	2020-04-17	Daily info	No	No	<a href="#">Details</a>	<a href="#">Add Notes</a>
John John	2020-04-15	Daily info	No	No	<a href="#">Details</a>	<a href="#">Add Notes</a>
John John	2020-04-01	Daily info	No	No	<a href="#">Details</a>	<a href="#">Add Notes</a>
John John	2020-04-03	Daily info	No	No	<a href="#">Details</a>	<a href="#">Add Notes</a>

## Add Vital Sign

Patient: John John  
Measured Method: Daily information  
first responder: nancy white  
Measured Time: 2020-04-17

Body Temperature:

40

Heart Rate:

90

Respiratory Rate:

18

High Blood Pressure:

120

Low Blood Pressure:

80

Weight:

79

Nurse Notes:

Take 2 Tylenol every 4-6 hours. Keep monitoring your temperature.  
I will follow up every 4-6 hours.  
If the breath is difficult, call 911 directly



Save

# Nurse- Patient's Emergency Alerts

## Emergency Alerts List

Patient	Request Time	first responder	Nurse Checked	Nurse Replied	
John John	2020-04-17T12:57:58.983Z	nancy white	No	No	<a href="#">Details</a> <a href="#">Reply</a>
John John	2020-04-17T13:09:43.390Z	nancy white	No	No	

## Patient Emergency Alert Details

Patient: John John  
firt responder: nancy white  
Request Time: 2020-04-17T12:57:58.983Z  
patient comments: I have a fever above 40 degree  
common symptoms: Fever Cough Short of Breath Vomit  
Nurse Checked: No  
reply\_time:  
Nurse reply:

[Reply](#)

## Add Emergency Alert

Patient: John John  
firt responder: nancy white  
Request Time: 2020-04-17T12:57:58.983Z  
patient comments: I have a fever above 40 degree  
common symptoms: Fever Cough Short of Breath Vomit  
Nurse Checked: Yes  
Nurse Notes:

Take 2 Tylenol every 4-6 hours.  
Keep monitoring your temp.  
If needed, call me @ any time or call 911

Save

# Nurse -add Daily tips to a patient

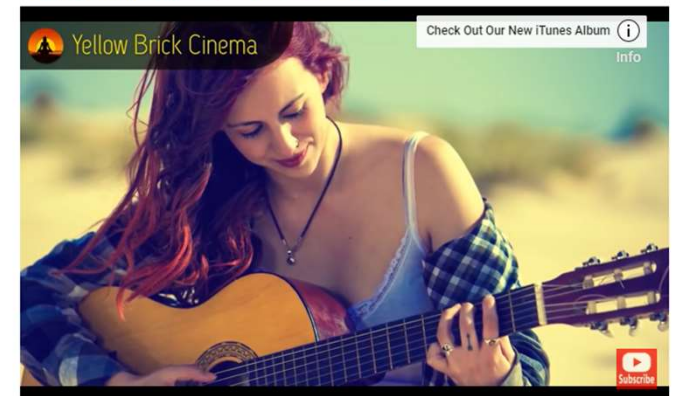
## Add Daily Tips

Patient	John John
first responder:	nancy
Tips Title:	keep fit
Start Date:	04/17/2020
End Date:	05/17/2020
Nurse Comments:	Stay Home Stay Healthy Keep fit
motivational video url:	<a href="https://www.youtube.com/watch?v=ss7EJ-PW2Uk">https://www.youtube.com/watch?v=ss7EJ-PW2Uk</a>

Add

## Patient Daily Tips Details

Patient	John John
first responder:	nancy white
Post Time:	2020-04-17T12:49:31.952Z
start date:	2020-04-17
end date:	2020-05-17
Daily Tips:	keep fit
Nurse Comments:	Stay Home Stay Healthy Keep fit
Motivational Video:	<a href="https://www.youtube.com/watch?v=ss7EJ-PW2Uk">https://www.youtube.com/watch?v=ss7EJ-PW2Uk</a>



Delete

# Nurse- Creat a Post to all her patients

## Create A Post

Title:

Stay home and drink more water

Content:

Stay home and drink more water



Push The Post

# Patient- View my daily Motivational tips

## Patient's Daily Motivational tips

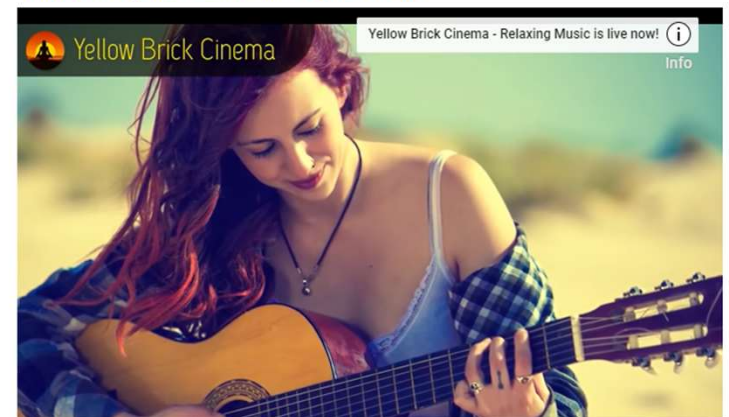
Patient	first responder	Start Date	End Date	Daily Tips
John John	nancy white	2020-04-17	2020-05-17	keep fit <a href="#">Details</a>

## Patient Daily Tips Details

Patient: John John  
first responder: nancy white  
Post Time: 2020-04-17T12:49:31.952Z  
start date: 2020-04-17  
end date: 2020-05-17  
Daily Tips: keep fit  
Nurse Comments: Stay Home Stay Healthy Keep fit

Motivational  
Video:

<https://www.youtube.com/watch?v=ss7EJ-PW2Uk>



# Patient- add an Emergency alert to the nurse

Add Emergency Alert

Patient

John John

first responder:

nancy white

Patient Comments:

I have a fever above 40 degree

common symptoms:

Fever  
Cough  
Short of Breath  
Vomit

Add

Emergency Alerts List					
<a href="#">Send an Emergency Alert</a>					
Patient	Request Time	first responder	Nurse Checked	Nurse Replied	
John John	2020-04-17T12:57:58.983Z	nancy white	No	No	<a href="#">Details</a>
John John	2020-04-17T13:09:43.390Z	nancy white	No	No	<a href="#">Details</a>

# Patients- add daily vital signs

## Add Vital Sign

Patient:	John John
first responder:	nancy white
Measured Time:	04/17/2020
Body Temperature:	40
Heart Rate:	90
Respiratory Rate:	18
High Blood Pressure:	120
Low Blood Pressure:	80
Weight:	79

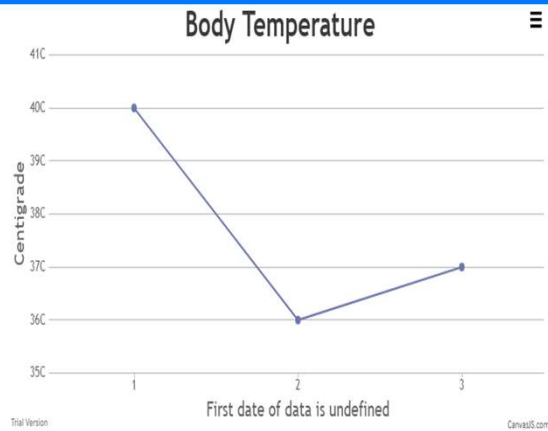
Add patient vital sign successfully

Add

## Patient Health History

Patient	Measured Date	Measured method	Read by Nurse	Notes from Nurse	
John John	2020-04-17	Daily info	No	No	<a href="#">Details</a>
John John	2020-04-15	Daily info	No	No	<a href="#">Details</a>

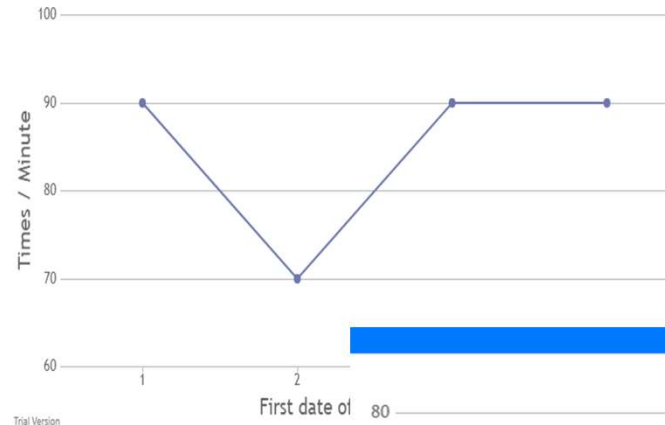
# Diagrams



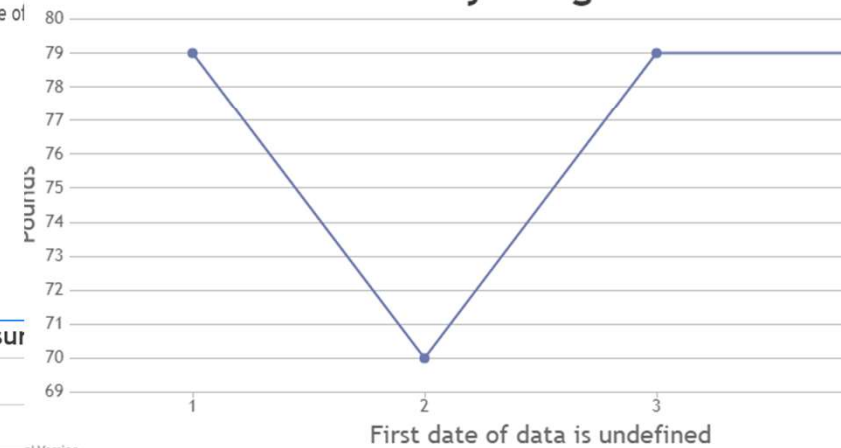
### Respiratory Rate



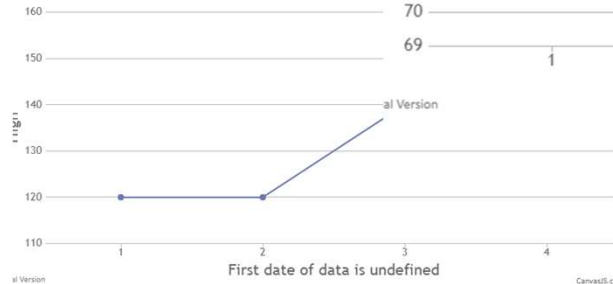
### Heart Rate



### Body Weight



### Blood Pressure





AI

### AI Game - predict your health risk in the future (still testing and improving)

Body Temperature:

37.2

Heart Rate:

60

Respiratory Rate:

14

High Blood Pressure:

120

Query

Health Risk:

dont know

### AI Game - predict your health risk in the future (still testing and improving)

Body Temperature:

37.2

Heart Rate:

60

Respiratory Rate:

14

High Blood Pressure:

120

Query

Health Risk:

hypertension

Q&A

Thank you!

