

HKU SPACE & PLYMOUTH UNIVERSITY
BSc (Hons) Computer and Information Security

PRCO204HK Integrating Project

Project Topic:

An integrated Health Care System for Elderly home in Hong Kong

Student Names:	WONG Tsz-fung,	Student ID: 20152658
	WONG Chun-kit,	Student ID: 20136820
	YAU Chak-man,	Student ID: 10072329

Screenshots of the Solution

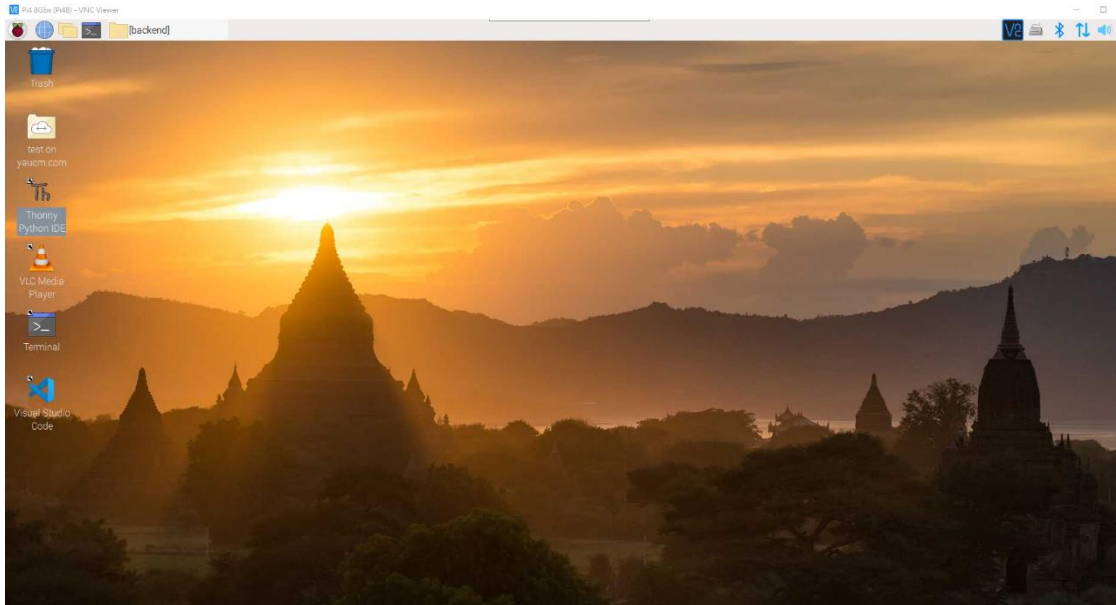


Figure 1. Raspberry OS interface

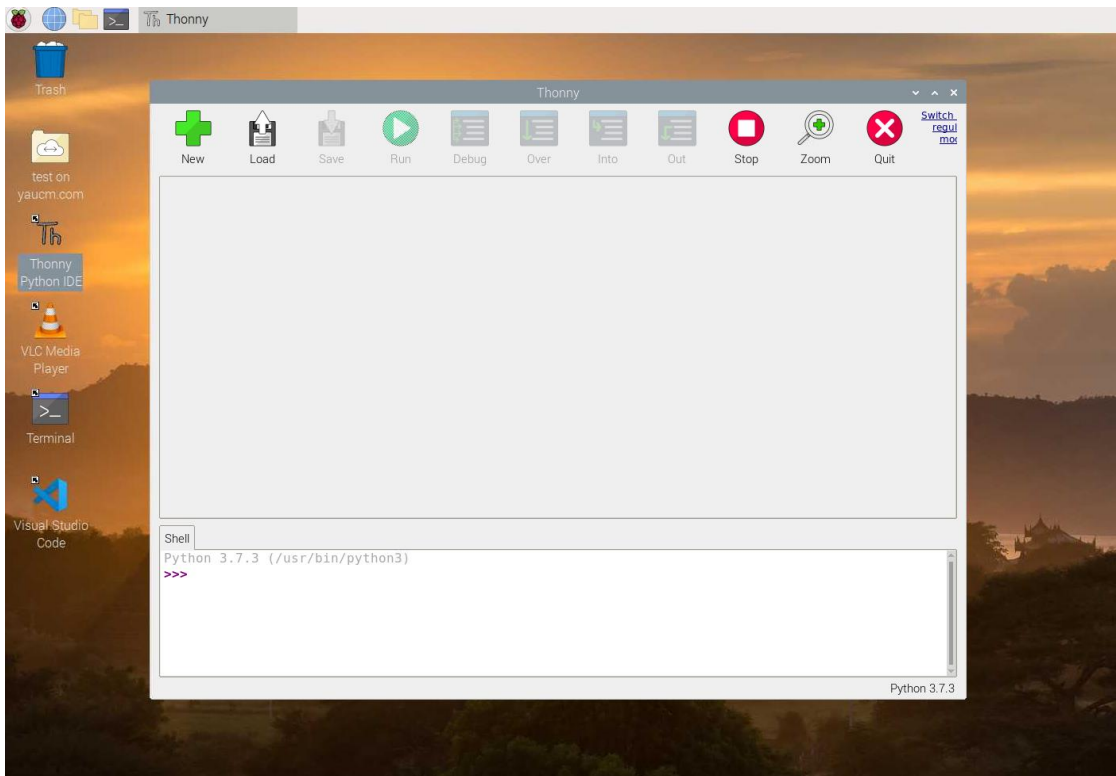


Figure 2. Thonny python IDE → click the Load button and open files

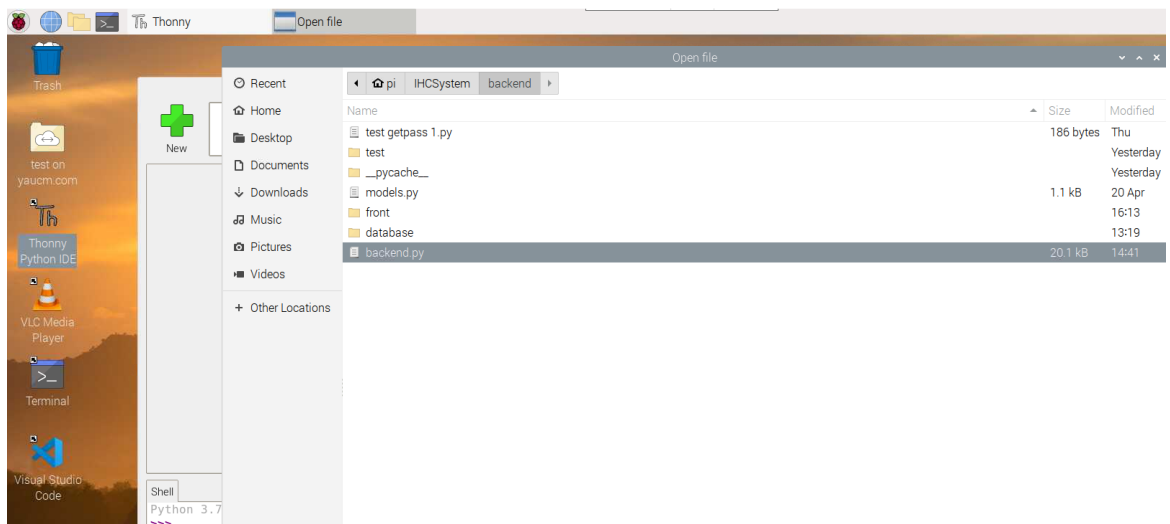


Figure 3. Execute the backend.py program to run the program

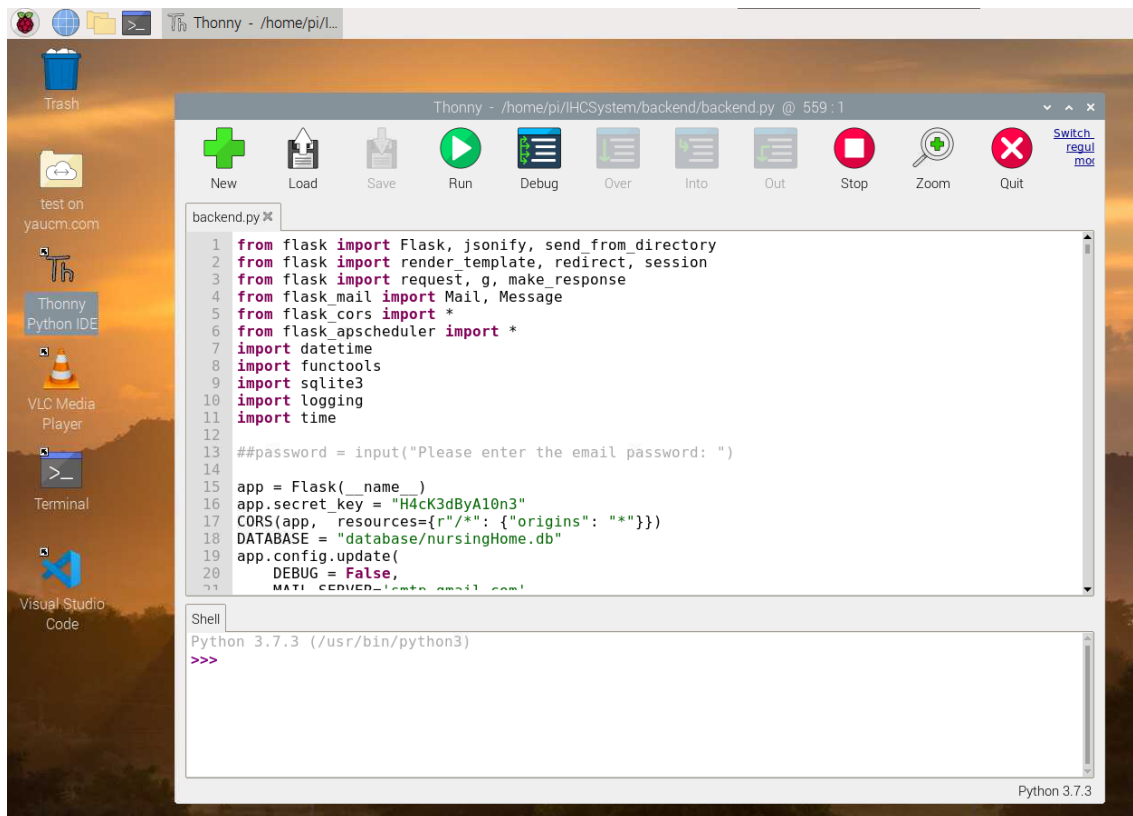


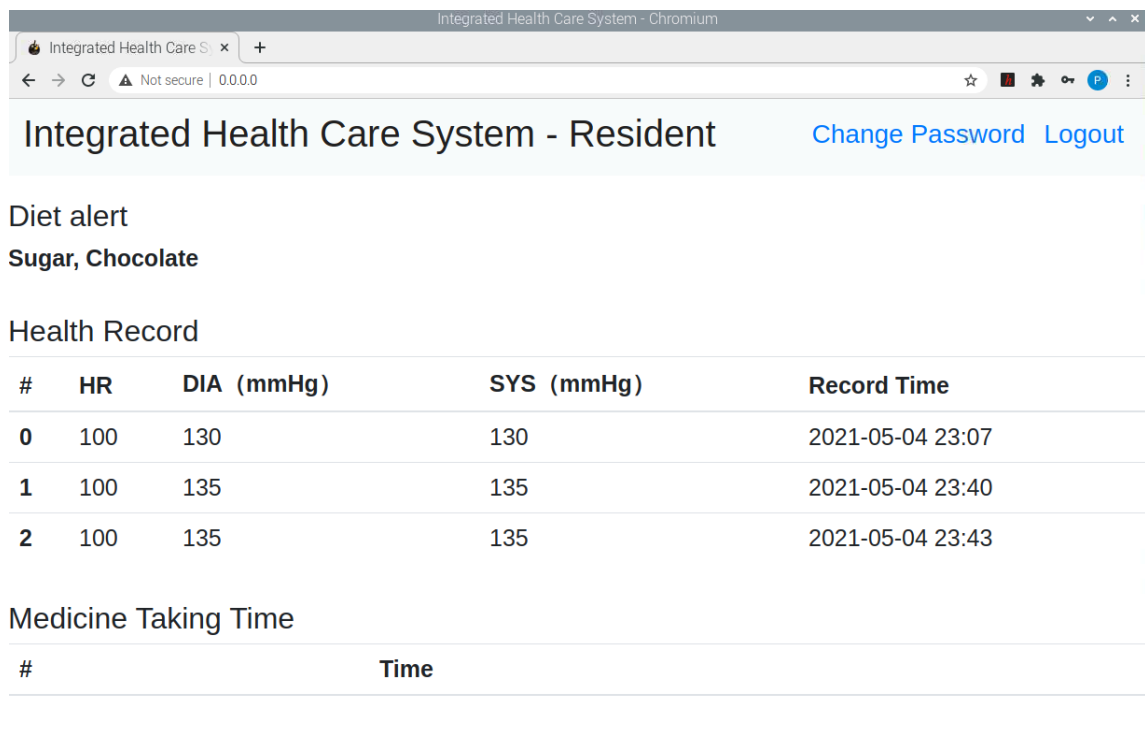
Figure 4. Press the Run button and execute the program

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Thonny - /home/pi/IHCSys/Backend/backend.py @ 559 :1
New Load Save Run Debug Over Into Out Stop Zoom Quit Switch regul mor

backend.py
1 from flask import Flask, jsonify, send_from_directory
2 from flask import render_template, redirect, session
3 from flask import request, g, make_response
4 from flask_mail import Mail, Message
5 from flask_cors import *
6 from flask_apscheduler import *
7 import datetime
8 import functools
9 import sqlite3
10 import logging
11 import time
12
13 ##password = input("Please enter the email password: ")
14
15 app = Flask(__name__)
16 app.secret_key = "H4cK3dByA10n3"
17 CORS(app, resources={r"//*": {"origins": "*"}})
18 DATABASE = "database/nursingHome.db"
19 app.config.update(
20     DEBUG = False,
21     MAIL_SERVER = 'smtp.gmail.com'
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Integrated Health Care System - Resident [Change Password](#) [Logout](#)

Diet alert
Sugar, Chocolate

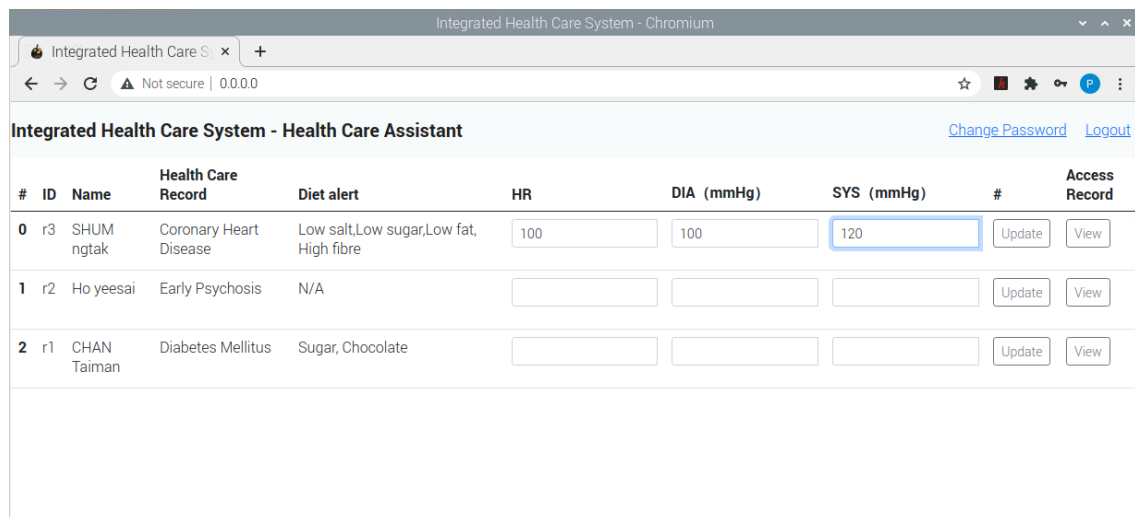
Health Record

#	HR	DIA (mmHg)	SYS (mmHg)	Record Time
0	100	130	130	2021-05-04 23:07
1	100	135	135	2021-05-04 23:40
2	100	135	135	2021-05-04 23:43

Medicine Taking Time

#	Time
---	------

Figure 7. The GUI of user story 1 – resident of elderly home



Integrated Health Care System - Health Care Assistant [Change Password](#) [Logout](#)

#	ID	Name	Health Care Record	Diet alert	HR	DIA (mmHg)	SYS (mmHg)	#	Access Record
0	r3	SHUM ngtak	Coronary Heart Disease	Low salt,Low sugar,Low fat, High fibre	<input type="text" value="100"/>	<input type="text" value="100"/>	<input type="text" value="120"/>	<input type="button" value="Update"/>	<input type="button" value="View"/>
1	r2	Ho yeesai	Early Psychosis	N/A	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Update"/>	<input type="button" value="View"/>
2	r1	CHAN Taiman	Diabetes Mellitus	Sugar, Chocolate	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Update"/>	<input type="button" value="View"/>

Figure 8. The GUI of user story 2 – health care assistant of the elderly home

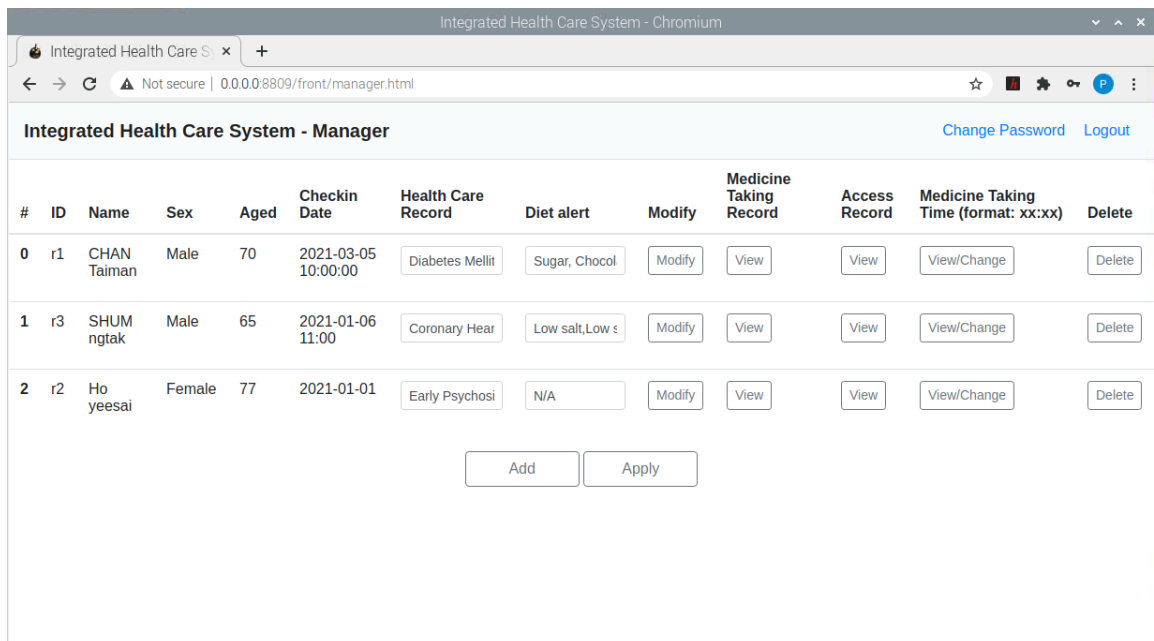


Figure 9. The GUI of the user story 3 – manager of the elderly home

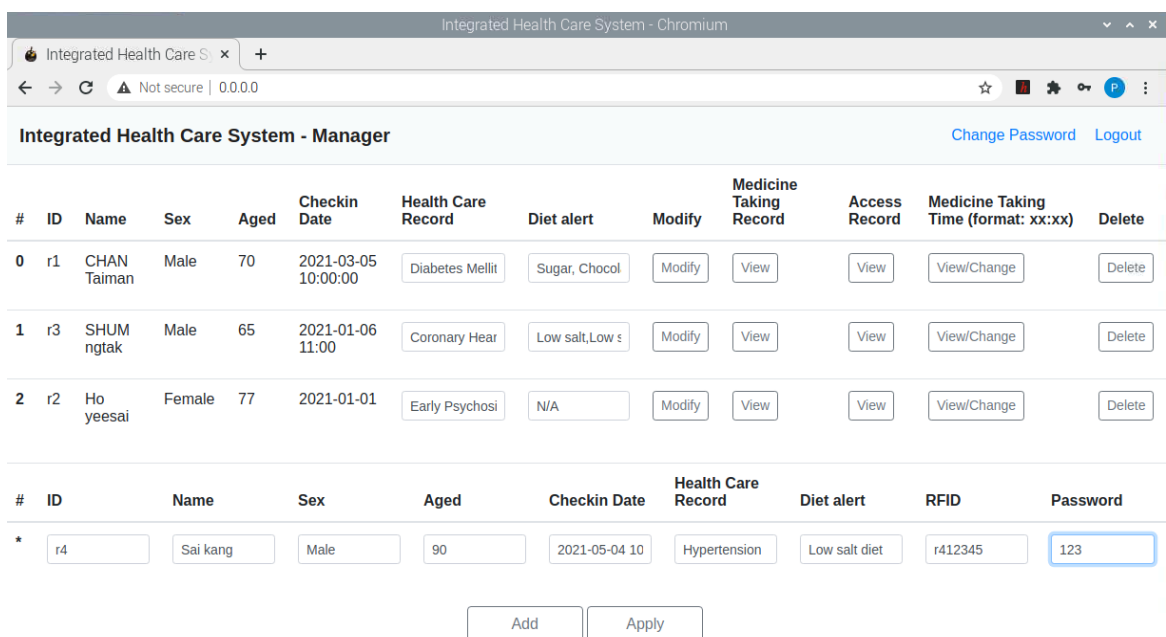


Figure 10. Create new resident record by manager

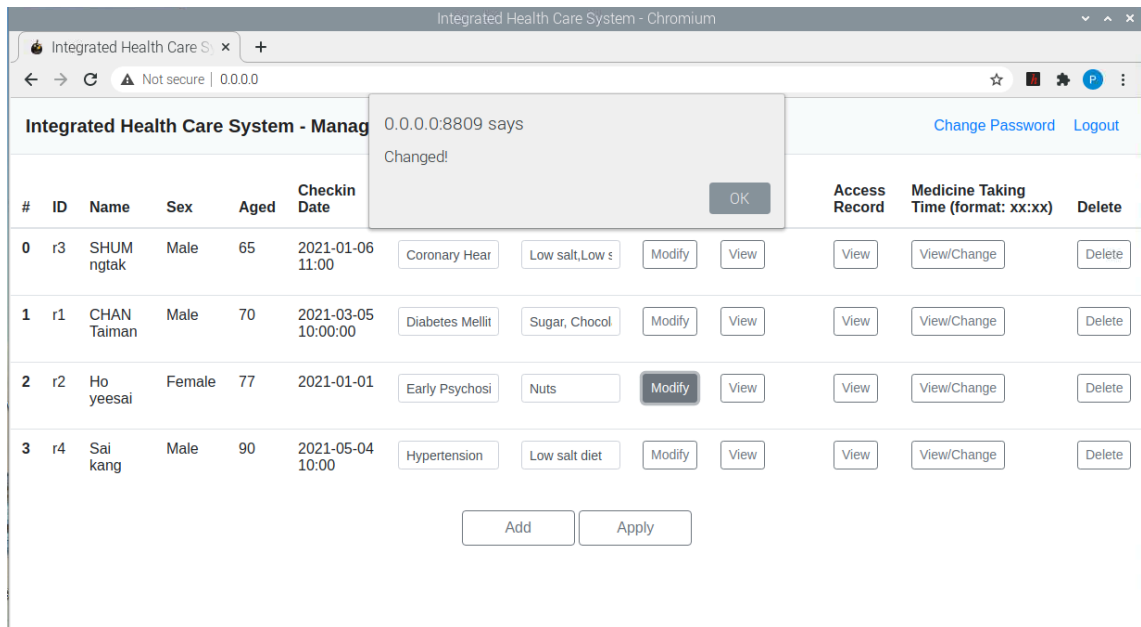


Figure 11. Modify the health care record and the diet alert of the resident by manager

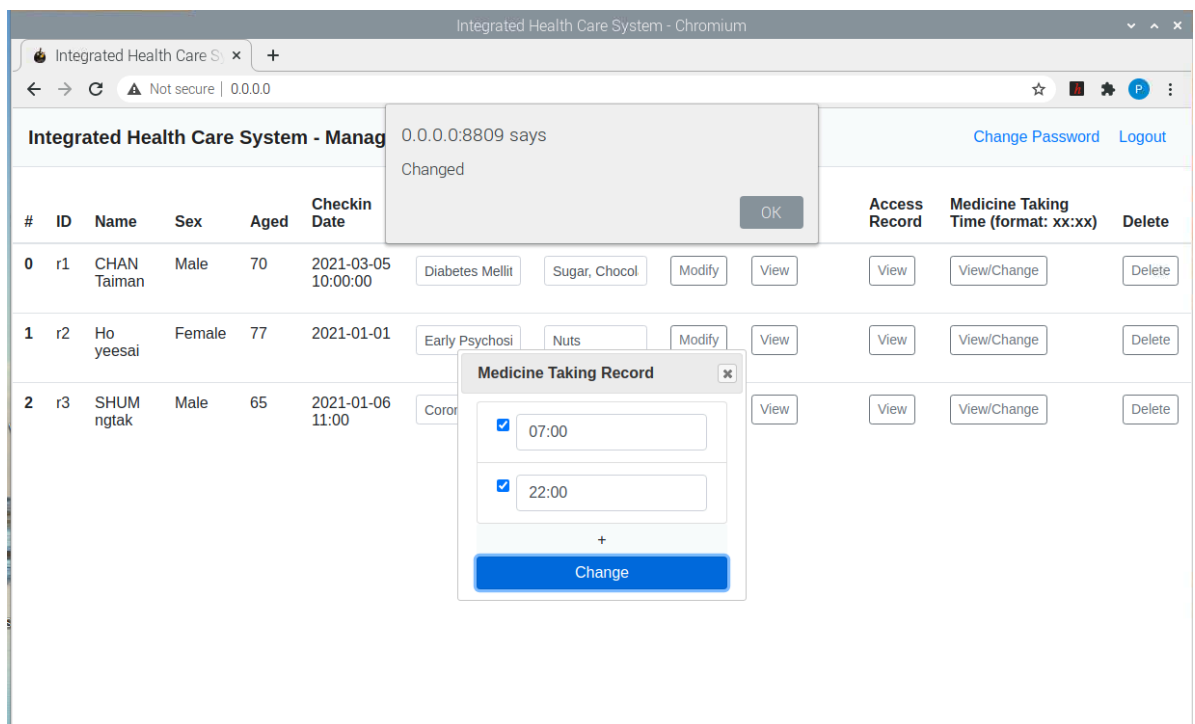


Figure 12. View/Change the medicine taking time by manager

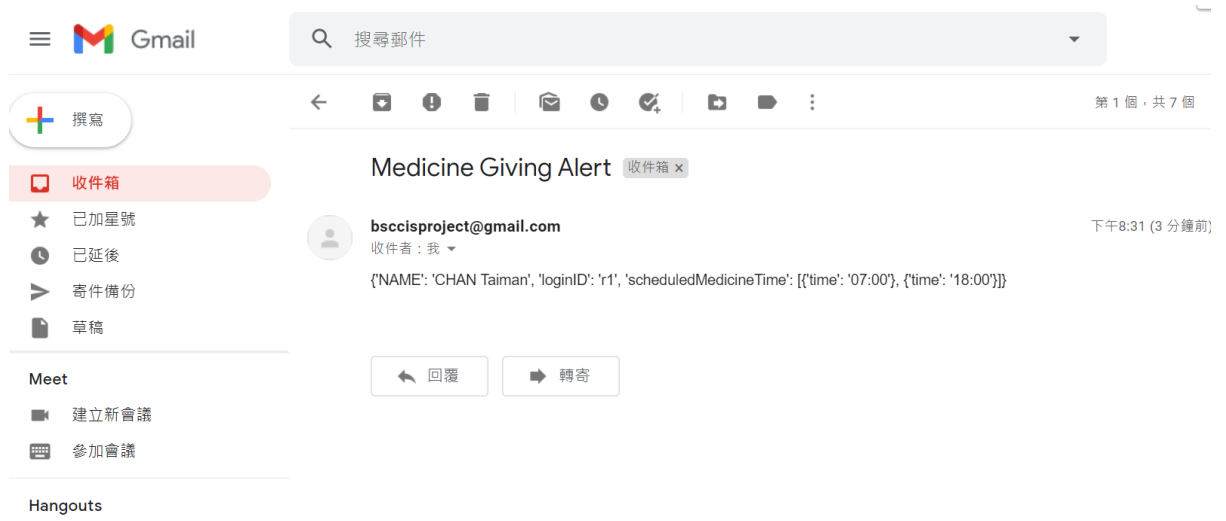


Figure 13. An email alert will automatically send to the health care assistant when any change of medicine giving time.