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Civil Engineering

- The concept/ general of the project is to create an app that can detect, rate ,degreestore and transmit data obtained wirelessly and access the data via the web with some include features to a board of directors. The app name is Medicare
- Specifications:
  Software modules – GUI ;dialogue box, text view, information box, library, about us, contact us, result function, timer, virtual AI, medical user interactive chat box/ call box, text boxes, question box, feedback.
  Hardware modules -camera/ webcam, speaker, microphone, finger print based thermometer, keyboard, phone, infrared scan.

HARDWARE COMPONENTS.
- CAMERA/ WEBCAM: this will be used for the user interactive chats from when a user wants to talk to a personal or certified doctor while using the app for more confirmation and a clearer understanding
- SPEAKER :this is also used for the interactive chat between a user and personal to enable audibility for the user to hear and understand the personal from the other side of the screen.
- MICROPHONE : this is used in the interactive chat between a user and personal so the user may have a way of communicating via the web.
- FINGER PRINT BASED THERMOMETER : this is used in taking the temperature of the user through its fingerprint function in order to generate an accurate temperature reading for resultants factors.

- KEYBOARD : this is an inputting function used during the questioning session which asks do you say various questions based on his or her health status.
- PHONE: this is the overall hardware that holds the app in its memory and ram space. It uses and contains all the hardware functions built in 1 device.
- FACIAL RECOGNITION INFRARED SCANNER :this is the facial recognition app of the phone in order to get a clear infrared scan of the persons facial features in order to recognize tiredness and some other symptoms.

SOFTWARE COMPONENTS.

- DIALOGUE BOX:
- TEXT VIEW: this is to enable the person who view the app via text
- INFORMATION BOX: this is to allow the user gain any further information based on what he or she is checking for based on the Corona virus pandemic.
- LIBRARY: this is to store all various results gotten from the checkup.
- CONTACT US: this is to enable the user some sort of information or direction to contact the head office via the app or some doctors.
- RESULT: this is to display the various results gotten by the check up via the app at the moment.
- TIMER: this is used in the breathing check of the user during checkup
- VIRTUAL: this is used as an alternative interactive personal when helping the user go through the various checkup and educating them on what and how to do it during each turn.
- INTERACTIVE CHAT ROOM: this is a way for the user to contact a doctor or certified personnel via the web for certification and further information if none of the apps are clear enough for them.
- TEXT BOXES & LABELS :   this is used to display and create a pathway to answer questions during the question session during checkup.

QUESTION CHECK LIST/BOX: this is used to perform various questions via a checkbox before the check up to know the current state of the person/ users this enables the user to give a comprehensive recommendation for the app in case of any faults or problems.

DESIGN.

This is total Outlook of the system allowing it to receive information based on health status and give accurate feedback after the corresponding set of check ups has been achieved. And its information is sent back to the system and servers via the web to a board of directors for further confirmation and contacting of the user for further observations, enquiries or checkups at a nearby hospital. The app should be simple to use with a friendly outlook yet accurately reliable in giving information. It should be able to send information directly to the website in order for other hospitals to be able to access such information directly and create a file for a user who was directed to their nearby hospital instead of going through more procedures allowing the staff to save more time and treat the patient accordingly instead the hospitals should have a more free time to attend to other patients if one is coming from home via the app.

IT'S ALGORITHM.

Step 1- Start

Step 2- Name, age, temperature, cough, fever, CB

Step 3- Read name

Step 4- Print "welcome" + name + "input temperature value"

Step 5- Read temp

Step 6- If temp <= 37 degree Celsius

Print "temperature is OK but might be too low go for a check up"

Else

Print "temperature is to high carry on for further confirmation"

End If

Step 7- If cough = yes

Print "go to the clinic please"

Else

Print "you are stable"

End If

Step 8- If fever = yes

Print "you might be positive. Visit the hospital immediately"

Else

Print "you seam stable"

End if

Step 9 – chest blockage (CB) = yes

Print " you might be positive, call a health personnel or rush to the hospital avoid contact please "
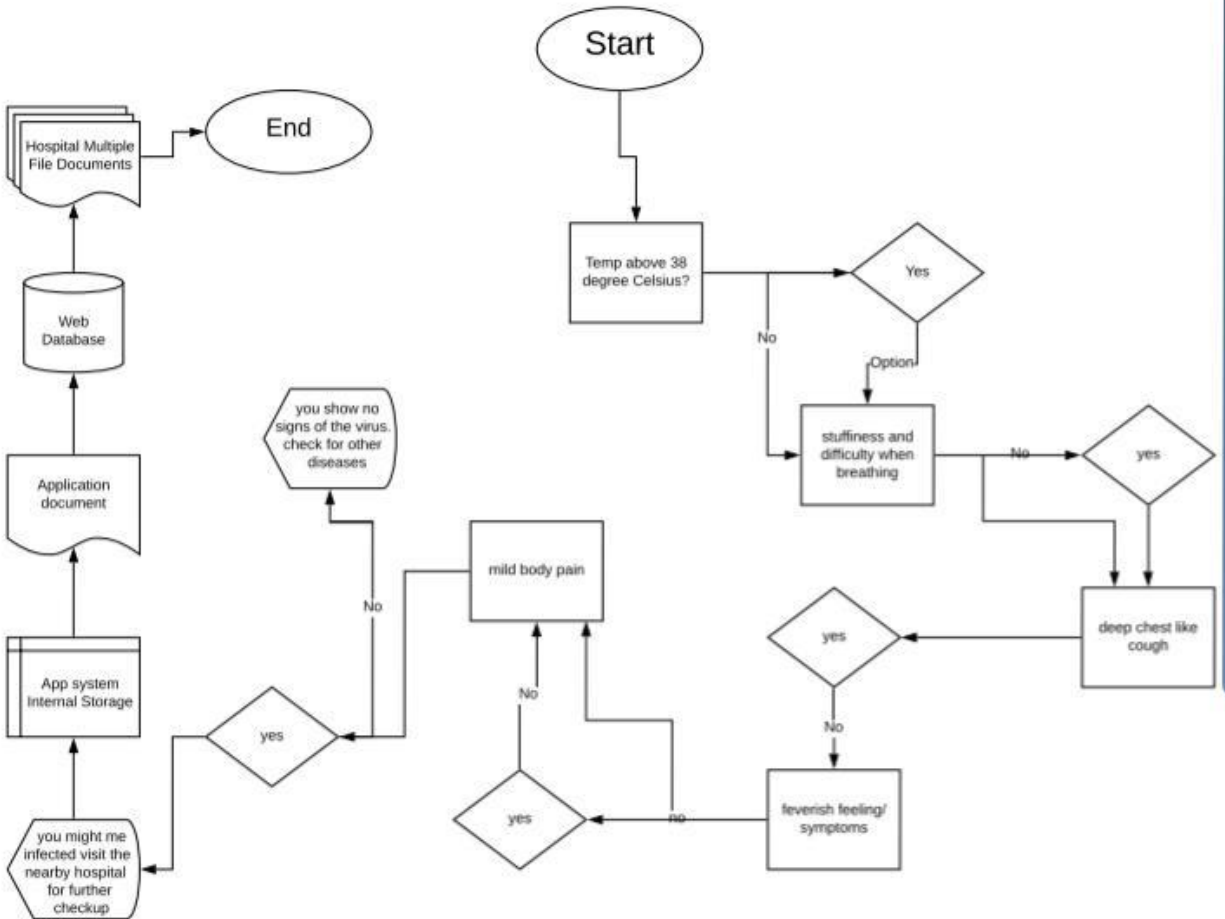
Else

Print "remain calm you show no signs of infection. But visit the doctor for a checkup"

End if

Step10 – print " thank you for taking the home test. Please visit the clinic for a full checkup and show the result to them in the library folder"

Step 11- End

FLOWCHART OF ITS WORKING.

Start

Temp above 38 degree Celsius?

Yes

No

Option

stuffiness and difficulty when breathing

No

yes

deep chest like cough

yes

No

feverish feeling/ symptoms

No

yes

mild body pain

No

you show no signs of the virus. check for other diseases

No

yes

you might me infected visit the nearby hospital for further checkup

App system Internal Storage

Application document

Web Database

Hospital Multiple File Documents

End

TOP- DOWN DESIGN APPROACH