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1. This application is a web smart health system that would allow the detection, display, storage, transmission of data and also allow access of the database via the web. This system would help to minimise human interaction that is involved with monitoring and tracking the health status of infected patients, which in turn would help to reduce the possible spread of COVID-19 amongst more medical personnel.

The framework of the web based health tracking and monitoring system is as follows. A number of medical sensors would be connected to the patient in order to obtain vital signs which would be converted to biomedical signals that would be transmitted via Wi-Fi/cellular. The data received is then analysed. In the case of abnormality found a medical expert would be alarmed in order to help contain the situation, while in the case of no abnormality the system would keep on monitoring the patient’s vital signs. A webpage would be used to access patient information from the hospital database, if the need arises.

1. Hardware Features:
2. Sensors: these are medical sensors that will check for the patient’s vital signs (temperature, pulse rate, respiration rate, heart rate, blood pressure).
3. Server: this is a device that would allow the maintenance and sharing of the medical database of the patients.
4. Computers: this could be a Smartphone, laptop or desktop that can be used to access the web based health tracking and monitoring system in order to retrieve patient information.

Software Features:

1. The biomedical computer package (BMD): This was the first package developed and provides a standard set of advanced statistical programs.
2. Genstat: This is a powerful package with the special emphasis on analysis of variance.
3. Statistical package for the social sciences (SPSS): It is used for wide range of medical problems. Many statistical options are available in SPSS varying from simple statistics to multivariant analysis.
4. **Flowchart:**

Start

Patient is attached with sensors

Send data retrieved from the patient

Data is analysed by professional

NO

Is the data above normal?

YES

Print an emergency message

End

**Algorithm:**

Step 1: Start

Step 2: Data is collected from the sensors attached to the patient.

Step 3: Data received is analysed by a professional

Step 4: If data exceeds normal values

-Mark patient

Else

-Go back to Step 2

Step 5: Print an emergency message

Step 6: End

1. Top Down Approach