Macdonald Alaye Samuel
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Mechanical Engineering

WEB APPLICATION DESIGN TO CONTROL COVID-19 OUTBREAK

WEB APPLICATION DEVELOPMENT PROCESS

The Planning

The spread of the Covid-19 has been a serious issue over the past months around the world. The (WHO) World Health Organisation has termed the virus a pandemic due to its ability to spread at a fast rate. A method for controlling this pandemic hasn't been discovered. However, developing a web application which will be able to gather Data concerning the symptoms and location around the world, in other reduce physical contact which will be able to reduce the spread of the Covid-19.The Data will be stored on a Cloud Database which will be access strictly by the health officials. The point of adding a location feature to alert the users using the web application of someone that has the symptoms and where the person is located.

The Hardware and Software Features

Hardware

Hardware requirements list is often accompanied by a hardware compatibility list (HCL), especially in case of operating systems. An HCL lists tested, compatibility and sometimes incompatible hardware devices for a particular operating system or application. The following sub-sections discuss the various aspects of hardware requirements

Software

The software will be able to gather data from users through surveys and it will also be able to get the location data of those that have participated in the surveys. The data will then be analysed by doctor through the cloud database.
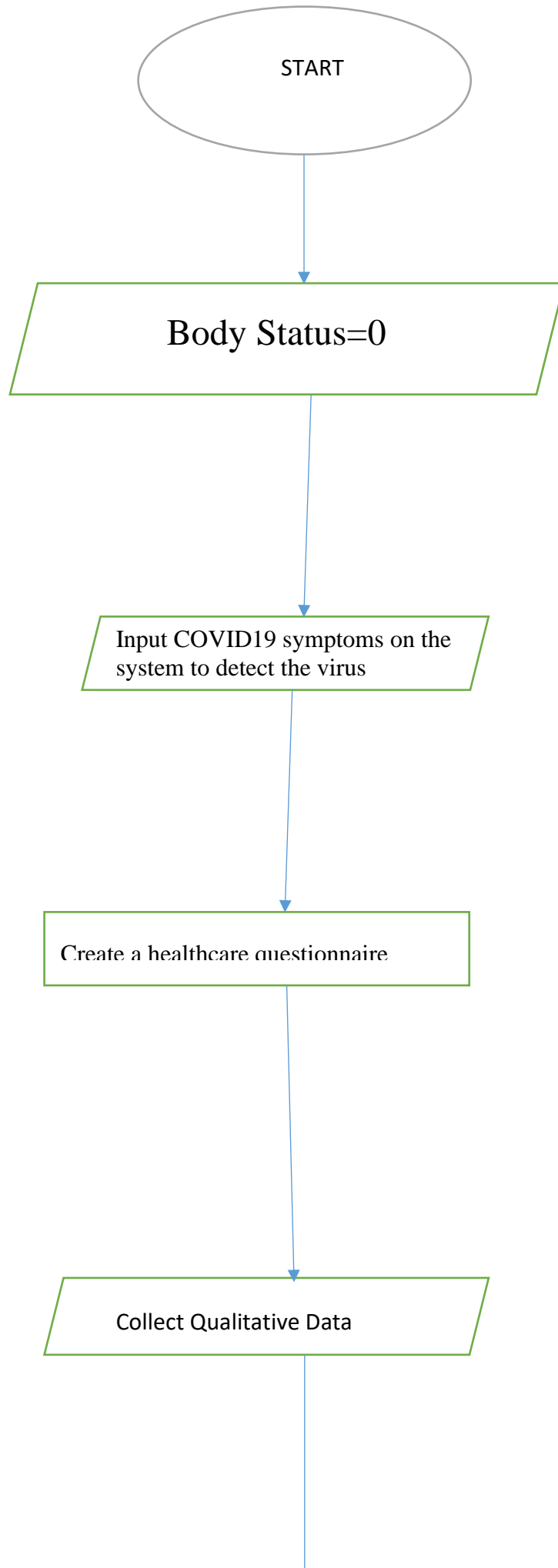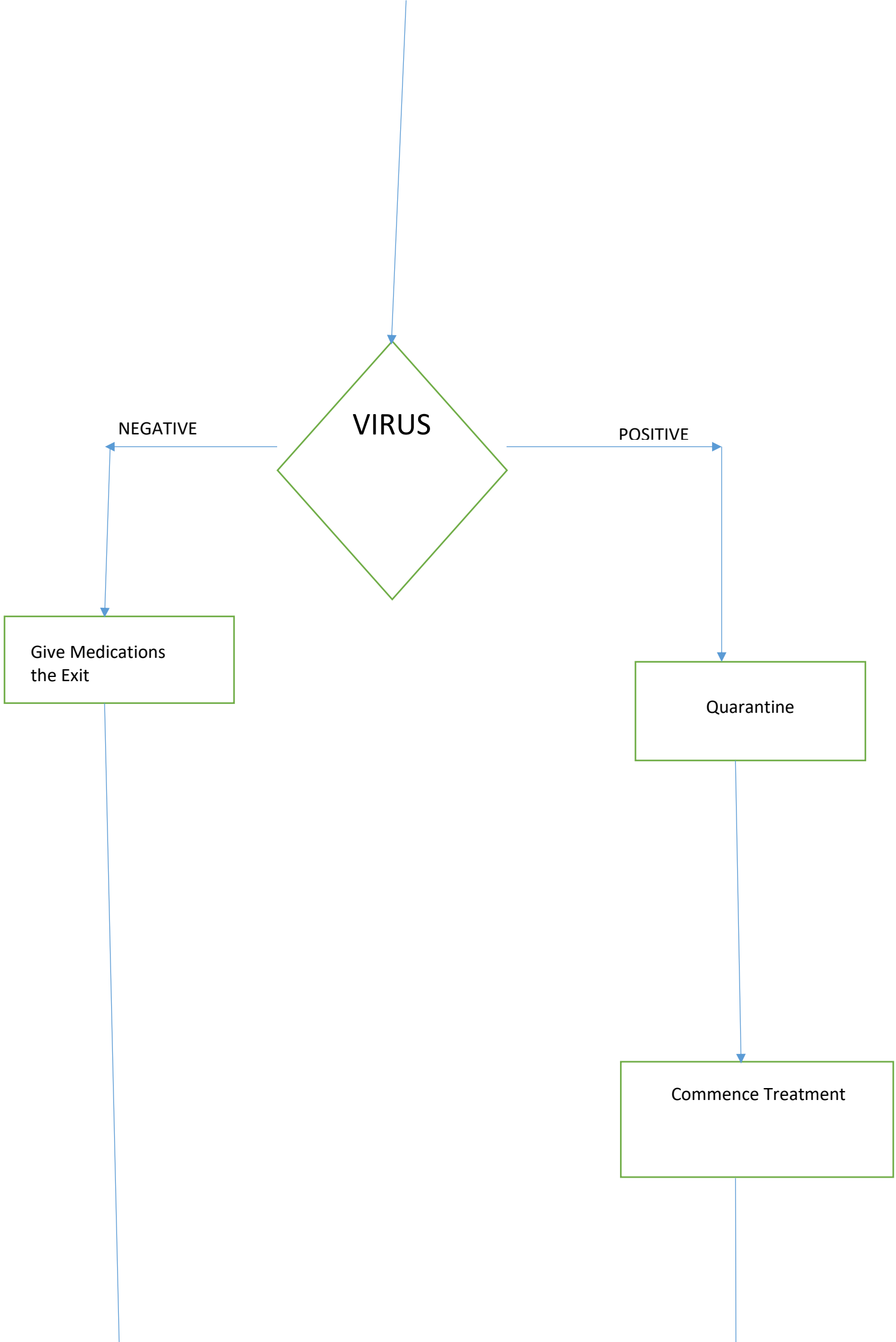
Design

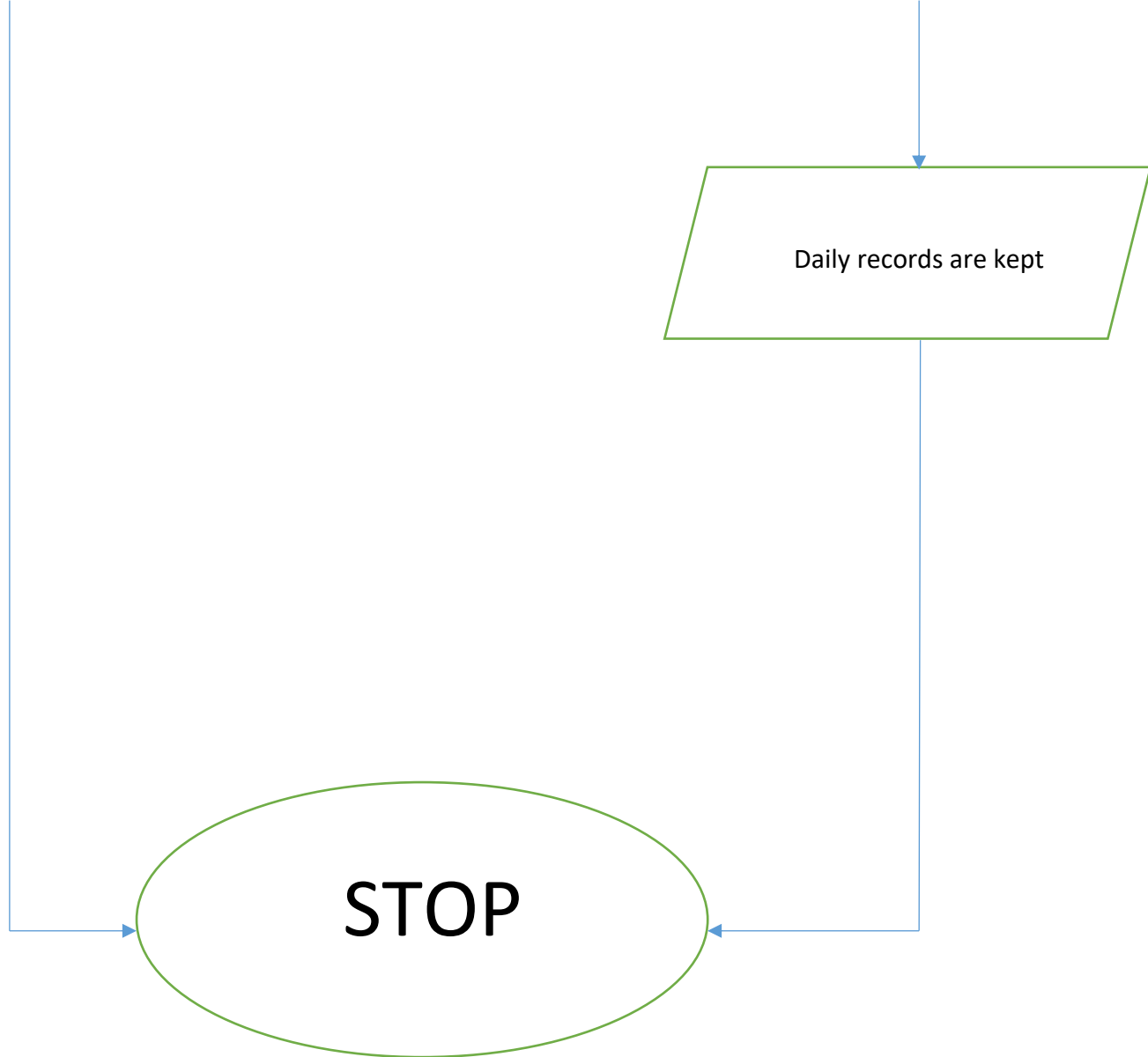A well- defined algorithm for a web-based COVID19 Healthcare Management System

Algorithm

1) Start
2) Body status to the virus=0
3) Add the COVID19 symptoms in the system
4) Put the software involved
5) Create a questionnaire
6) Collect qualitative data
7) Analyse Data
8) Body Status positive to the virus
9) Else
10) Body Status negative to the virus
11) Display feedback
12) Stop

Flowchart

START

Body Status=0

Input COVID19 symptoms on the system to detect the virus

Create a healthcare questionnaire

Collect Qualitative Data

VIRUS

NEGATIVE

POSITIVE

Give Medications
the Exit

Quarantine

Commence Treatment

Daily records are kept

STOP

Testing

This is the debugging stage of this project. The website has been designed to perform its desired functions, the database has also been designed to store its data and the application has been created to continuously read information from the WHO database and also to write the data read into the web base application's database, i.e the data stored in the database of the web base application is rewritten whenever there's a change in the numbers of cases , number of deaths and the number of recoveries for every country with cases in the WHO database. The code is been tested for bugs until it performs its duties efficiently.

Development

This application is being released to detect, display the rate of virus, store, transmit and access data through the web together and its updated when necessary based on the health centre feedback