Eng 224 assignment

ETOK NSIBIET-ABASI EDEM

18/ENG02/039

COMPUTER ENGINEERING

The company requires a web based application that can interact with people helping them to detect the early symptoms of the ongoing COVID-19 leading to the reduction of the curve and curb the spread of the virus.

<u>Software development curve procedure.</u>

1. Conceptualization of the software
    The software is to help in reducing the impact of corona virus, by giving the user an interactive platform where they can interact and input values which would give them an insight to whether or whether not they have the corona virus.
    The software aims to
    - Detect the virus: by asking the users if they display any of the obvious symptoms like fever, coughing, constant fatigue and loss of breath.
    - Display: display their chances of having the virus and also give them the rate of infection.
    - Give feedback to the user.
    - Transmit data wirelessly to the servers.
    - Remotely access the data stored in the servers.
    - Store the data.
2. Problem analysis: the problem set is to both inform the users and also give them an insight to the probability of them having the virus.
3. Solution design

Algorithm

Start

Input Name, age

Display "Do you have recent travel to any infected country?"

Read travel_status

If (travel_statsus=="yes")

Read Number_of_days

End If

Read current_temperature

Display "Do you have any flu like symptoms?"

Read health_status

If(health_status=="yes")

Display "Do you have difficulty breathing?"

Read breathing_status

If(breathing_status=="yes")

Read answer

End If

If((travel_status=="yes") &&(Number_of_days>0&& Number_of_days<=14)
||(current_temperature>38.0) && (health_status=="yes") &&(answer==yes)

 Display name, age "your status is high risk please call the healthcare line in your area for further guidance"

 Else if (travel_status=="no" || current_temperature<38.0) && (health_status==no)

 Display name, age "your status is low risk please stay at home and practice social distancing"

<u>Flow chart</u>

Testing and debugging

Did we get what we want?" In this stage, we test for defects and deficiencies. We fix those issues until the product meets the original specifications. In short, we want to verify if the code meets the defined requirements

Software Deployment

"Let's start using what we got."

At this stage, the goal is to deploy the software to the production environment so users can start using the product. However, many organizations choose to move the product through different deployment environments such as a testing or staging environment.

This allows any stakeholders to safely play with the product before releasing it to the market. Besides, this allows any final mistakes to be caught before releasing the product.

Software specifications

1. Geolocation
2. Real time chat
3. Push notification (constant reminder for social distancing)
4. Chat bots
5. Cloud storage
6. Data transfer
7. Web display

Hardware Specification

1. Servers
2. Transmitters
3. Hard disk

4. Windows 10, Windows 8, or Windows 7

5. 1 GHz processor (recommended)

6. 1 GB of RAM (recommended)

7. OpenGL 2.1 or higher (available in most modern Windows systems)

8.