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(A)

APPLICATION THAT CAN HELP SOLVE COVID 19 PROBLEMS USING SOFTWARE DEVELOPMENT CYCLE

(1) PLANNING REQUIREMENTS:

- *DETECT THE VIRUS
- *DISPLAY THE RATE OF DEGREE OF INFECTION
- *STORE DATA
- *TRANSMIT DATA OBTAINED WIRELESSLY
- *USER REGISTRATION TO ACCESS DATA VIA WEB
- *LOGIN ACCES TO DATA
- *LOGOUT FROM WEB
- *DASH BOARD FOR DATA APPLICATION

(2) REQUIREMENT ANALYSIS

*DETECT THE VIRUS

- Temperature sensor
- PH Scale range detector
- *DISPLAY THE RATE OF DEGREE OF INFECTION
- LCD SCREEN DISPLAY
- SENSOR CALCULATOR
- TEMPERATURE SENSOR
- DATABASE SYSTEM FOR STORAGE OF RESULTS

*STORE DATA

- Memory design system
- Digital display system for stored data
- Database System

*TRANSMIT DATA OBTAINED WIRELESSLY

- Network Design System
- Account Based system

*USER REGISTRATION

- Username input field
- password field
- check box
- Submit button
- save user in data base

*LOGIN

- Username input field
- password field
- submit button
- Read user information from database
- login user into the system

*LOGOUT

- Logout Button
- clear session
- prevent account theft

*DASHBOARD

- Main home page
- users access show button

(3)DESIGN

- User interface layout
- *(command line interface)

- color skins
- *(blue, and orange)

- programming languages
- * (c-programming)

- mobile support
- *(android version 6+ higher,apple phones)

- supported browsers
- *(UC browser, firefox, operamini, chrome)

(4)IMPLEMENTATION

- Physical Hardware(Server, webcam, hard drive)
- Software(site builder, adobe photoshop, adobe dream weaver,gator builder)
- coding

(5) TESTING

This cycle is performed before launching the application by making sure the requirements has been met, all functionalities are working as expected, finding bugs, and putting this bugs in a tracking system to fix them

(6) DEPLOYMENT

This stage is performed by getting hardwares installed,setting up the links, setting up the data base,etc

(7) MAINTENANCE

This is accomplished after launching the app, by getting issues and bugs complaints from the customers fixed, and making large database to solve issues through deployment phase

(B)

HARDWARE FEATURES

The hardware features used for the design consists of the following:

- (1) Webcam: This is a video camera that feeds or streams an image or video in real time to or through a computer or to a computer network, such as internet. This webcam allows for the video of the customer in order to give an easy output when performing the test
- (2) Server: This contains one or more websites. The server store, process, and deliver webpages to the clients. The communication between client, and server takes place using hypertext transfer protocol.
- (3) Hard Drive: The hard drive is used to backup data after the data has been manipulated, entered or stored.

SOFTWARE FEATURES

The software features used for the design consists of the following:

- (1) Site Builder: This software allows users to build their sites. They fall into 2 categories, which are online, and offline software that runs on a computer
- (2) Adobe Photoshop: it used to create logos, banners to be exported to web pages. it is used for ui elements, webgraphics, wireframes, etc
- (3) Gator Builder: This helps in the web design as it serves with building, and hosting tool with an easy to understand, drag and drop page builder.

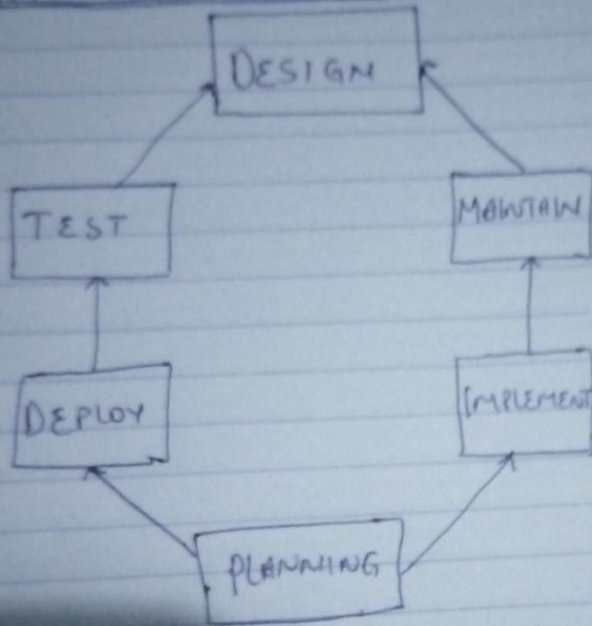
(C)

Top DOWN APPROACH

18/ENG04/066

SELECT / SELECT

(D) TOP DOWN APPROACH



Algorithm

Step1: Start

Step2: Design the application with c programming

Step3: Ensure the application can detect virus with the aid of a sensor(temperature)

Step4: Ensure all codes are functioning well with the aid of debug to correct errors

Step5: Test the web based app to ensure it is functioning well

Step6: Deploy the app

Step7: Produce the app and put it on internet

Step8: Stop

Flowchart

