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**MATRIC NO: 18/ENG04/008**

**COUSRE: STRUCTURED PROGRAMMING (ENG 224)**

## **ASSIGNMENT**

### **1.)**

This application is a web based application that is used by the Lab technicians to display, store and transmit data after the Covid 19 test has been carried out by different medical experts then the results will be analyzed and also reviewed by the Lab technician.

The design of the web based application has made the accessing of patients details and information easier and also the transmitting of information easy amongst the workers. Information can also be viewed by the patient who knows his/her log-in details. The top-down design approach was used in designing this web based application.

### **2.)**

## **HARDWARE FEATURES**

- **MOBILE WEB**

It promotes “One Web” that is available on any device. Mobile Web Initiative helps ensure the best user experience on mobile devices, taking into account device capabilities, location, and other context information.

- **VOICE BROWSING**

The Speech Interface Framework is a suite of specifications (e.g. VoiceXML) integrating Web technology and speech interaction. VoiceXML, PLS, SISR, SRGS, SCXML, and CCXML all contribute to the Speech Interface Framework.

- **DEVICE INDEPENDENT AND CONTENT ADAPTATION**

Devices come in many shapes, capabilities and sizes which define constraints on the content these devices can handle. Device descriptions, content transformation guidelines, device APIs and CC/PP help developers to optimize the user experience.

- **MULTIMODAL ACCESS**

Increasingly, interactions with devices doesn't only happen with a keyboard, but also through voice, touch and gestures. The Multimodal architecture and its components (EMMA, InkML) allow developers to adapt applications to new interaction modes.

- **WEB AND TV**

With the advent of IP-based devices, connected TVs are progressing at a fast pace and traditional TV broadcasting is quickly evolving into a more immersive experience where users can interact with rich applications that are at least partly based on Web technologies. There is strong growth in the deployment of devices that integrate regular Web technologies such as HTML, CSS, and SVG, coupled with various device APIs.

## **SOFTWARE FEATURES**

- **HTML& CSS**

HTML and CSS are the fundamental technologies for building Web pages: HTML (html and xhtml) for structure, CSS for style and layout, including WebFonts. Find resources for good Web page design as well as helpful tools.

- **JavaScript Web APIs**

Standard APIs for client-side Web Application development include those for Geolocation, XMLHttpRequest, and mobile widgets. The standards for document models (the "DOM") and technologies such as XBL allow content providers to create interactive documents through scripting.

- **Graphics**

This is the home of the widely deployed PNG raster format, SVG vector format, and the Canvas API. WebCGM is a more specialized format used, for example, in the fields of automotive engineering, aeronautics.

- **Audio and Video**

Some of the formats that enable authoring audio and video presentations include HTML, SVG, and SMIL (for synchronization). This also working on a timed text format for captioning and other applications.

- **Accessibility**

Web Accessibility Initiative (WAI) has published Web Content Accessibility Guidelines (WCAG) to help authors create content that is accessible to people with disabilities. WAI-ARIA gives authors more tools to create accessible Web Applications by providing additional semantics about widgets and behaviors.

- **Internationalization**

It has a mission to design technology that works across cultures and languages. Standards such as HTML and XML are built on Unicode, for instance. In addition, it has published guidance for authors related to language tags bi-directional text, and more.

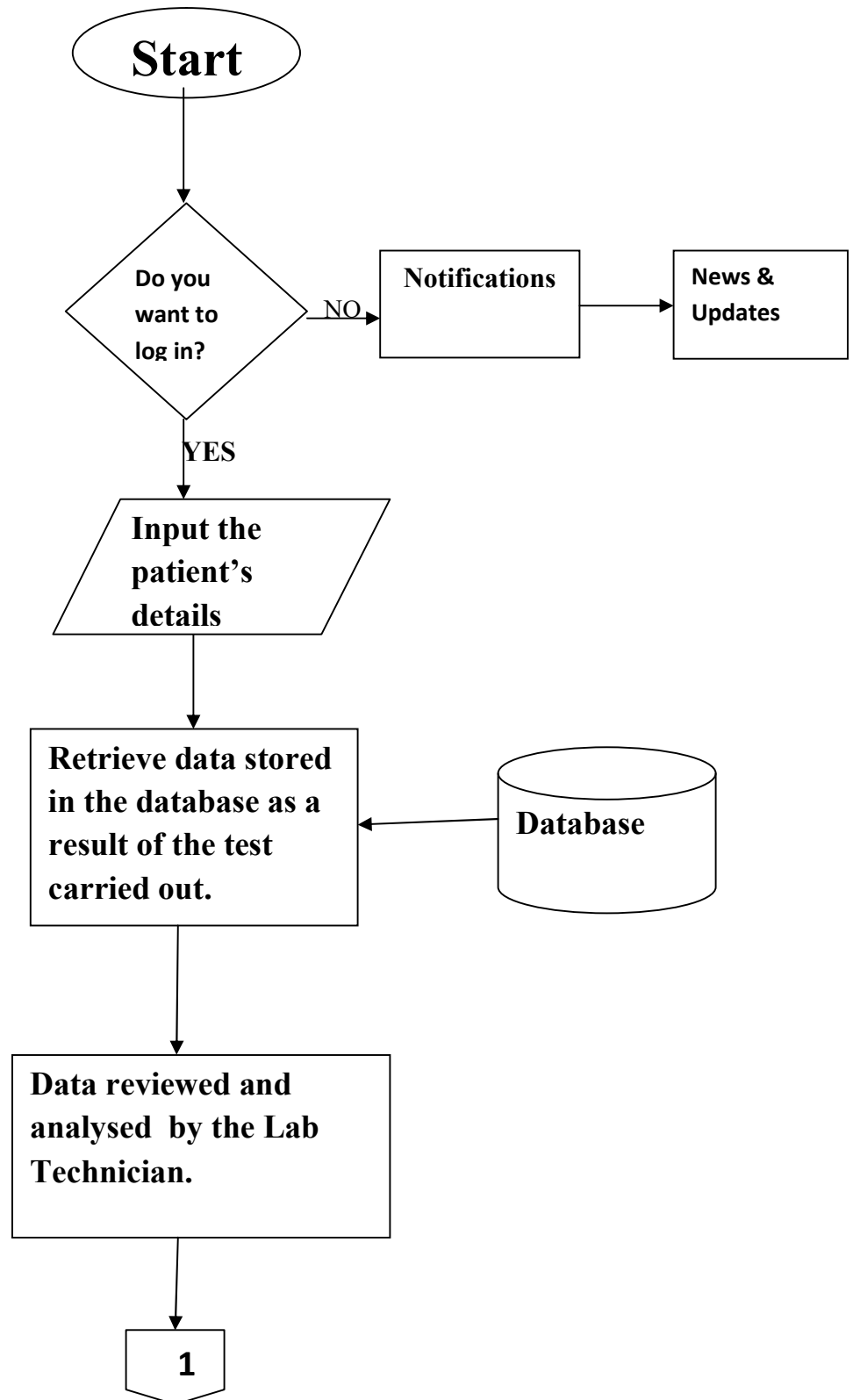
- **Mobile Web**

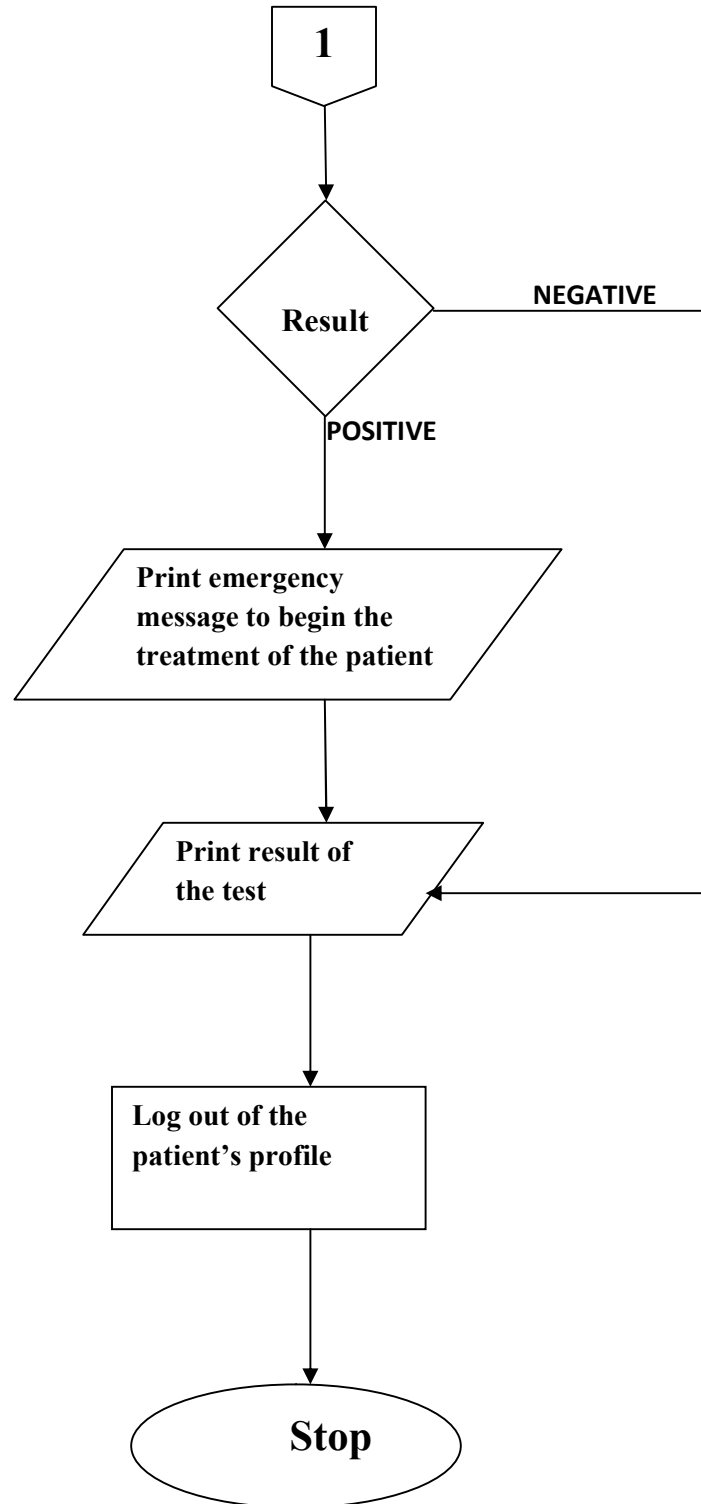
It promotes “One Web” that is available on any device. W3C’s Mobile Web Best Practices help authors understand how to create content that provides a reasonable experience on a wide variety of devices, contexts, and locations.

- **Privacy**

The Web is a powerful tool for communications and transactions of all sorts. It is important to consider privacy and security implications of the Web as part of technology design. Learn more about tracking and Web App security.

### 3.) FLOWCHART





### **3B.) ALGORITHM**

Step 1: Start

Step 2: If you want to check for news and updates click the notification button;

    Else;

    Login into the patient's profile.

Step 3: Data is retrieved from the data based.

Step 4: Data is reviewed and analyzed by the Lab Technician.

Step 5: If doctor declares negative;

    Print result

    Else;

    Print emergency message to begin treatment of the patient;

    Then;

    Print result.

Step 6: Log out of the patient's profile

Step 7: Stop.

#### 4.)TOP-DOWN DESIGN APPROACH

