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Course: ENG224 Assignment

Department: MECHATRONICS Engineering

1. Design the application following the software development cycle.

Answer

For the application to be function in a proper state, the developer would enable so data are being processed though such as (the number of people infected, Number of newly infected victims, Number of individual that has died from the virus and the number of individual that has recovered from the virus at different part of the world, with the WHO (World health Organization) database.

The first stage that will be taken to enable the application function will be.

- **Coding**

This is one of the essential part to enable the application to run; the developer will start writing their codes. The web developer will include the frontend and the backend developers, the front end design the application based on the backend developers, that will sleeve the important information from the database of WHO (World Health Organization).

Example

The front end developer would use: HTML 5

The back end developer would use: PHYTON

The software developer would use: Java, C# code

The second stage that will ensure the application run will be

- **Testing** This stage is usually referred as the Debugging stage. The application has been designed to perform a specific function, the database has been designed to store data and allow collecting information from the data base from WHO, and also to access data written into web base application i.e. the data stored in .The database of the web base application is rewritten whenever there is a change in number of cases, number of death and number of individuals recovered for every country, the code is been debugged until the application performs its function.

The third stage will enable the application to be deployed.

- **Installation**
The application is web based so it doesn't require any installation. Web based application act as regular website with more function that can be performed.

1. Critically discuss the hardware and software features.

Answer

Hardware Features

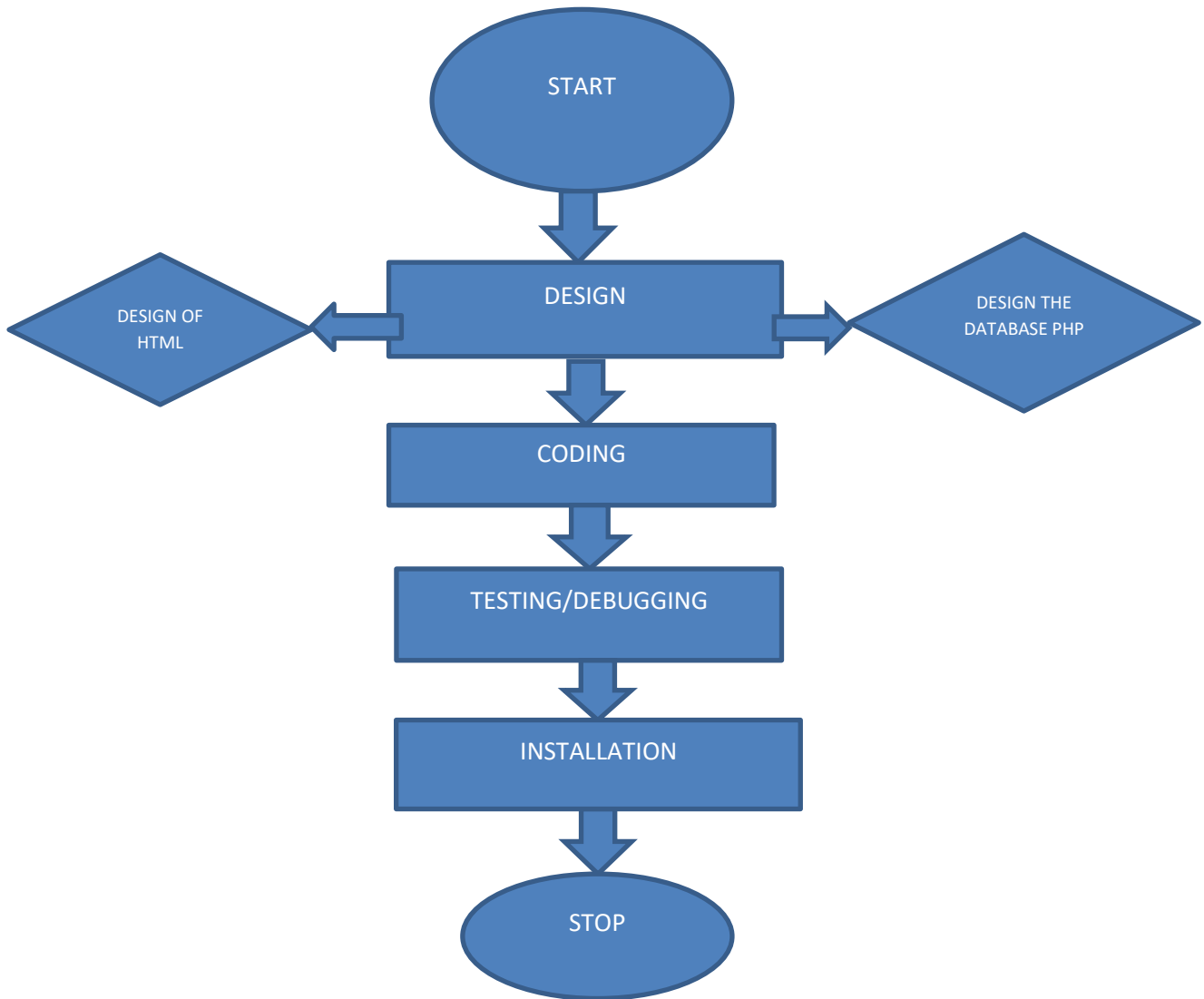
- The application those don't require much hardware device just a Computer that will produce the result you need.

Software Features

- This application uses different programming language to produce your result:
- **PHP**: Used to design the structure of the database of the web based application.
- **JAVA**: Used to create the application that scraped data from the database.
- **HTML**: Used to design the front end of the web based application.

2. Support your answer with a flowchart and an algorithm.

FLOWCHART



ALGORITHM

- Start
- Design
- Design the web based application utilizing HTML
- Design the database using PHP
- Coding
- Testing/Debugging
- Installation

- Stop
3. Draw the top-down or bottom-up design approach of the application.

Answer

