

IFIDI JOSHUA TENADOU

**MATRIC NO:
18/ENG02/044**

**DEPARTMENT:
COMPUTER ENGINEERING**

**COLLEGE:
ENGINEERING**

Design using the software development cycle

Planning

This software or webApp is going to collect information from the general public in the form of a survey. It is going to collect data and sort out people who may be in the need of medical help. And help with the testing process.

- First a web app will be created that collects visitors details
- A series of questions will be asked to ascertain the individual's risk levels
 - E.G
 - 1. If individual has traveled to a region dealing with a corona outbreak.
 - 2. If individual has had contact with an individual who traveled recently.
 - 3. The series of questions related to corona virus symptoms.
 - etc.
- The individual's risk level is determined and analyzed, and an appointment date is set for the individual or not depending on it. Also, the individual may be advised to report back after a specified number of days of isolation.
- The individuals are able to set appointments from the site and are provided the chance to get consultation from qualified medical personnel.
- Testing facilities should be set up in different areas. The online platform sorts out individuals based on their location and risk levels and sets up a time and date to be tested to promote social distancing and reduce the risk of spread.

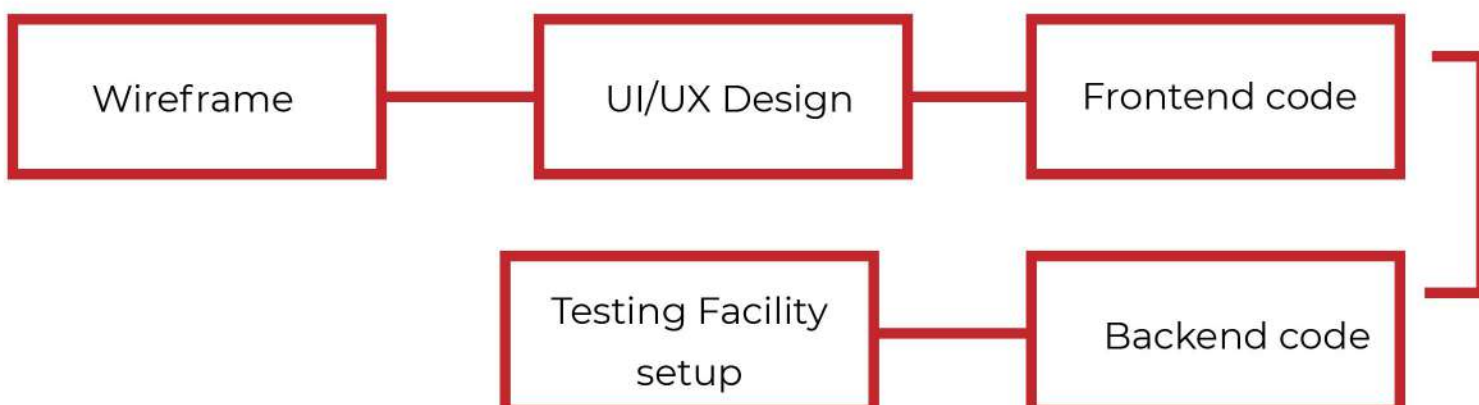
Requirements

Requirements to make this project succeed are:

- A dynamic web app with a nice welcoming User interface
- Individual details and correct answers to assessment
- Data types include strings, float and integers.
- Medical Personnels available for consulting.
- Video chat enabled to facilitate online consulting
- Already setup testing facilities and treatment facilities.

Designing/Implementation

This is the design stage where the Web app will be develop, First and foremost the wireframe and User interface(UI) will be design when it is accepted The development team will start coding. The front-end developers implements the UI, then the backend developers responsible for writing algorithms / Codes to sort out individuals risk levels.



Testing

This is the testing stage , the software is put out for a selected few to testing, ranging from sick to healthy or people who recently traveled. Adjustements are made to the survey questions and the algorithm for analysing individual risk levels are also analysed .

Deployment

At this stage the software is ready and then released to the general public to use and alot of promotion is carried out to sensitize people and also educate people on corona virus. It also helps to curbs panic. since people can go online and get an estimate of their risk levels. And can book appointments online without the need of coming out to have theirselves tested and meeting a crowd without succeed.

Maintainance

The web app is check regualrly for bugs that pay occur during use or suggestions pointed out by users to improve services. Bandwidth may be increase if traffic becomes much.

SOFTWARE FEATURES

- Collects Visitors details
- Take survey of Visitors movement and health status. Using Authentic symptoms characterised with coronavirus diseases.
- Able to give an estimate of individuals risk level.
- Able to book an appointment with Institutions with Test facilities.
- Enables the feature of getting an online video session with qualified medical personels.

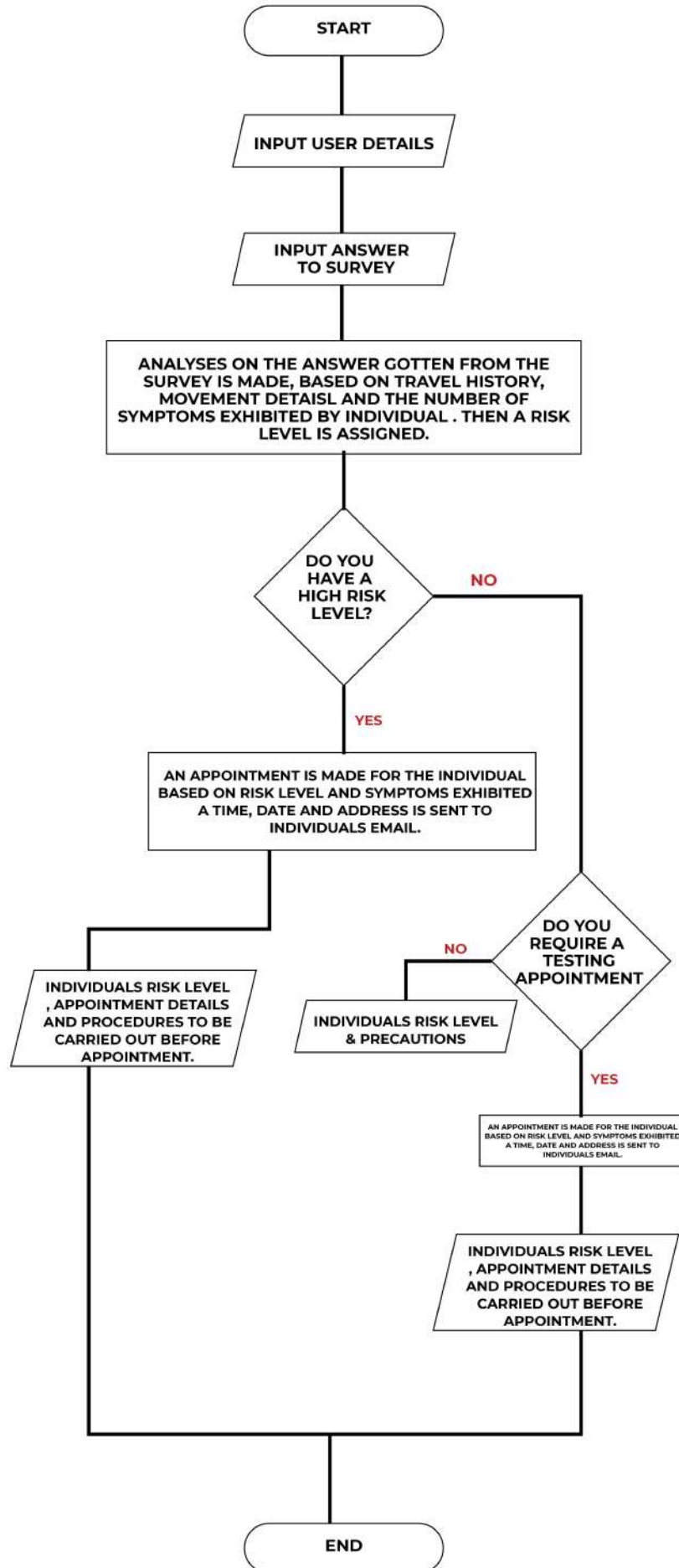
HARDWARE FEATURES

- Equipments required for testing Covid-19

ALGORITHM

1. Input user data (name, age, address, Contact info)
2. User provide answers to survey to ascertain risk level
3. Based on result , the individual is put into a category and given a risk level
4. If individual has a low risk level, Individual is asked to stay safe and periodic email is sent to check individuals status.
5. If individual has a high risk status, individual is set up for an appointment for testing in a Testing facilities close to individual based on location.
6. The individual is contacted and Access to Map on individuals device is required to find recent movements to check for possible people that has been in contact.
7. Individual goes to testing facility to get tested and treated.

FLOWCHART



TOP-DOWN DESIGN

