Diagnosis System for COVID-19

Diagnosis System for COVID-19 (with Chest x-rays and medical tests)

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Introduction

Most people nowadays want their lives to go faster and get results by paying less money and less waiting time. When creating any medical system we need to know some patient information and ML algorithms to make the system automatic control, this is easier in the system as a whole but if We wanted to create a platform, there are many problems that we face, in real life we need to go to laboratories and hospitals to perform analyzes and make sure of our health, but after using medical programs we will save effort and money and the results will be in a good and satisfactory manner for the patient and also protect him from any disease.

Objectives

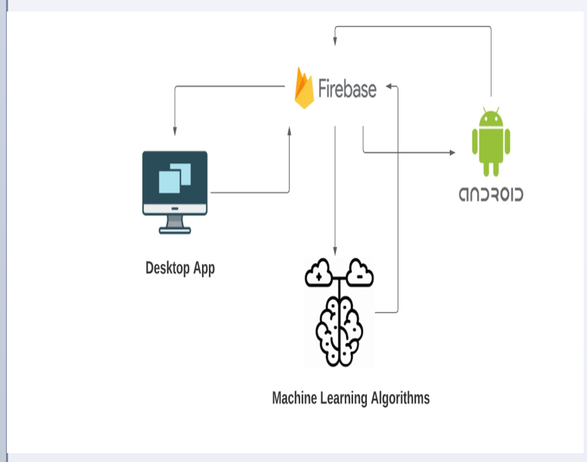
Based on the consequences of recent events in the world due to the spread of the new Corona virus epidemic, and the instructions of the governments of countries to limit gatherings and maintain sufficient space between people to prevent infection with the virus, we believe that our system helps to reduce gatherings at the doctor and preserve the health of the doctor and the rest of the members of society.

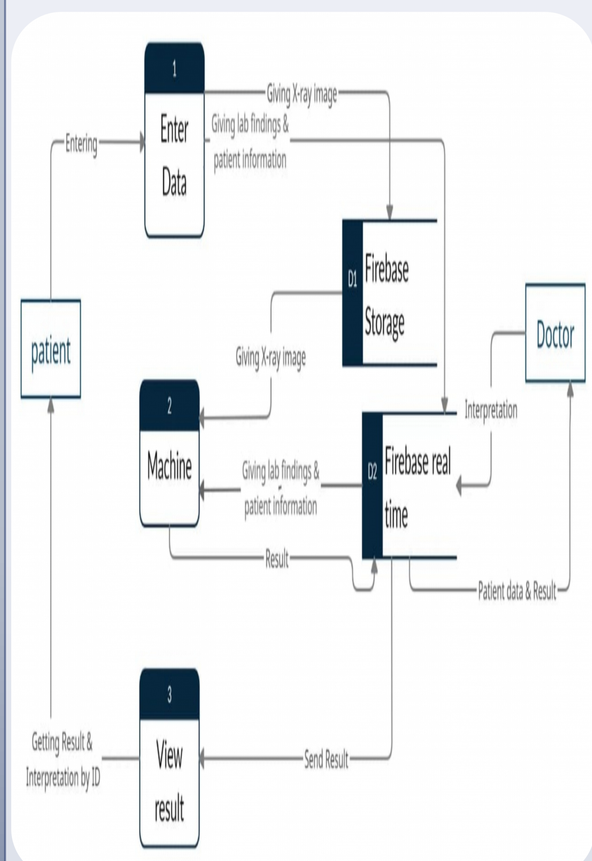
Methods

HIGH LEVEL SYSTEM ARCHITECTURE

Process

This high level system architecture depicts the general system interactions between different components and sources of the platform.





Data Flow Diagram (Level 0)

Result

Our project helps patient to discover their probability hit by the corona virus throught andriod program help in faciliating the process of communication between patient and doctor by providing some tests and x-rays and provide the effort,time and money for the patient to help reduce the number of people infected with the Corona virus and reduce mixing between people.

Team Members

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2-Youssef Ashraf Salah

3- Sara Habib Samir

4-Omnia Alwi Abbas

5-Islam Elsayed Abdelwahab

6-Ahmed Nabil Mahmoud

Conclusion

-our project To reduce Covid 19, mixing between people and others must be reduced, and the project is carried out in addition to knowing the patient whether he was infected or not. The machine learning is determined whether he was infected or not, and communication between him and the doctor is done in the event that he was infected, thus reducing the mixing, time, cost and effort.

-Use some machine learning and deep learning algorithms to analyze and process data and know the patient's condition.

-In the image model, the x-rays are analyzed and the patient's condition is found if he is sick with the corona virus or not.

References

- https://zenodo.org/record/3886927#.YOTl7ejXJPY
- https://scikitlearn.org/stable/modules/svm.html
- https://firebase.google.com/docs/android/setup
- https://www.youtube.com/watch?v=8IWalfRUk1M
- https://www.tensorflow.org/tutorials/images/cnn

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