Introduction:

Overview

In the time of a pandemic we can take some load off the heallth facilities by helping them figure out who needs immediate attention by incorporating a machine learning model that predicts if a person is fine or not by giving it parameters such as blood pressure,pulse and temperature.

Purpose

With the help of these parameters and the right type of algorithm the model will be able to categorize the patients on a scale of 0-2, 0 being perfectly alright to 2 being needs immediate attention.

Literature Survey:

Existing problem

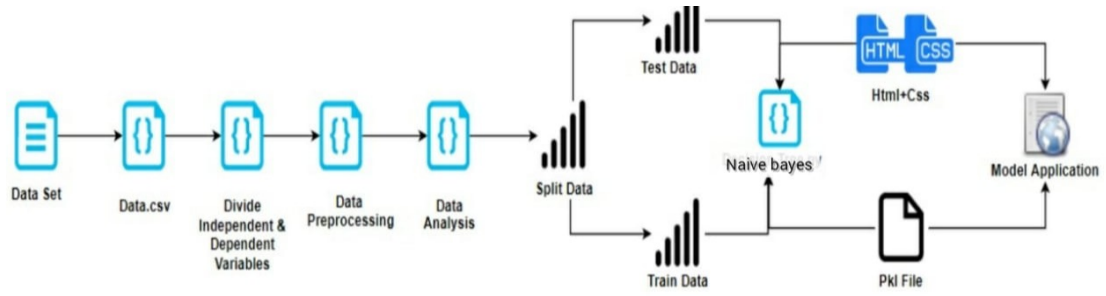
During rush hours, the ER in the hospitals can be filled with patients needing attention and it takes a lot of time for the officials to analyze the parameters and attend to the severity of the patient according to the symptoms and people can die because of that.

Proposed solution

This model can save time in such situations. The model can predict immediately if the patient is in severe condition and needs help.

Theoritical Analysis:

Block diagram



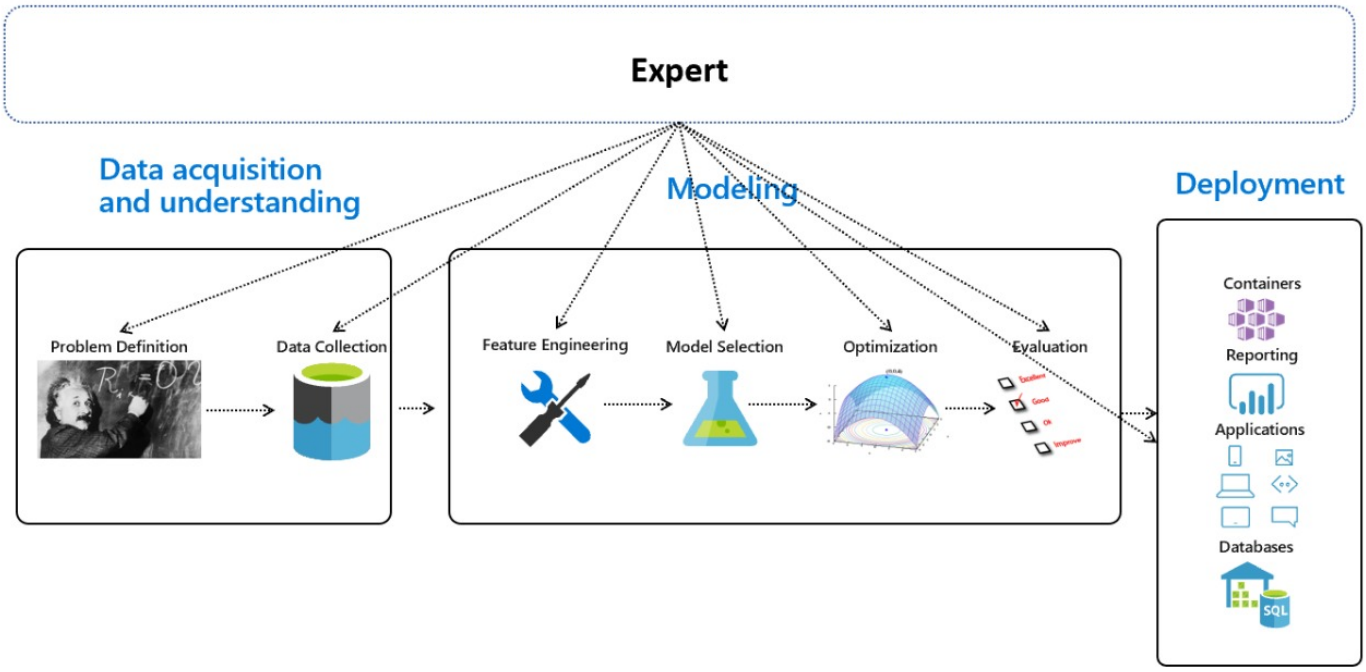
Design

- Dataset collection, preparation and preprocessing. Data visualization, labeling and transformation.
- Dataset spliting into train data and test data.
- Model training, evaluation and testing. Improving predictions with using different algorithms to find the most accurate predictions.
- Model deployement.

Experimental Investigations:

We got to know that in many instances these parameters are sufficient to decide if a person is not well.

Flowchart:



Result:

Based on the parameters given by the user the model can categorize the patients condition on a scale of 0-2.

Advantages and Disadvantages:

Advantages

- It saves time in identifying the person requiring immediate care.
- The user interface is easy to interact with.
- The classification is not complicated.

Disadvantages:

- Sometimes the patients can have underlying conditions and might not show any symptoms.

Applications:

This system which is specifically developed to predict health status of the application users. It provides digital information of the patients which is centrally stored. This data can be used for designing an improved healthcare delivery system.

Conclusion:

The Health monitoring systems is to predict whether a person is healthy or not, using parameters such as Temperature, Blood pressure and pulse.

Future Scope:

In rush hours, the healthcare facilities can save a great deal of time with this model.

Bibilography index:

Model building:

- health monitoring dataset
- Jupyter notebook

Application building:

- HTML5 and CSS 3 files
- Flask
- Joblift