Early Detection of Chronic Kidney Disease using Machine Learning

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Team ID	PNT2022TMID31803
Project Name	Project - Early Prediction of Chronic Kidney Disease using Machine Learning
Maximum Marks	**4 marks**

SCENARIO

Detection and diagnosis of Chronic Kidney Disease using Machine Learning

Entice

How does someone initially become aware of this process?

- Detecting of Chronic Kidney Disease using machine learning model or websites.
- Enter the sugar values and blood pressure
- Study the accuracy and detect the spread of disease.
- The people who are suffering from chronic kidney disease may use this model of detection.
- The patient should enter the values of sugar level and blood pressure to detect the accuracy.
- The patient can detect if the disease spread is in the early stage so that the patients can take treatment according to the spread of the disease.

Enter

What do people experience as they begin the process?

- The blood pressure levels and sugar levels are detected.
- Accuracy of Chronic Kidney Disease is detected.
- The blood pressure and the sugar levels are detected for detection of chronic kidney disease.
- After the entry of blood pressure and sugar level values the outcomes the accuracy of disease.

Engage

In the core moments in the process, what happens?

- The patient Data may be wrong?
- Undergo Treatments
- Detect the accuracy and detect for side effects
- The patient blood and sugar level may be wrong due to this the accuracy may be wrong
- The patient should undergo for the treatment based on the accuracy.
- The patient should detect the presence of side effects.

Exit

What do people typically experience as the process finishes?

- The patient may feel happy
- The patient may satisfy with the model.
- The patient may feel happy because if the spread is low the patient may happy.
- This model may be used to early detection of chronic kidney disease.

Extend

What happens after the experience is over?

- Treatment can be based on the accuracy
- Doctor's suggestions
- Based on the detection the patient can take treatment based on the accuracy
- To take regular medications

Steps

What does the person (or group) typically experience?

Interactions

What interactions do they have at each step along the way?

- **People:** Who do they see or talk to?
- **Places:** Where are they?
- **Things:** What digital touchpoints or physical objects would they use?

- Upload the inputs in the developed machine learning model in Google Colab and jupitar note
- Web application for this detection of chronic kidney disease
- Websites available for detection of chronic kidney analysis using machine learning.
- The patients may take suggestion form doctors
- The patient's database in hospitals while taking tests
- Patients test reports
- The patients may suffer from Kidney pain
- High level of spreading of disease may lead to Kidney failure
- Treatment should be done according to the spread of disease.
- Feels satisfied with the accuracy and detection of result at the early stage.
- It may feel happy if the disease spreaders can be prevented.
- It may depress because if the spread is high the patient may die.
- The patient asks suggestion from people who suffered from this type of disease.
- Avoid all the bad habits

Goals & motivations

At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")

- To Detect Chronic Kidney Disease at the early stage.
- To save time.
- To find using simple Data like blood pressure and sugar level.
- To save the patient life who suffers from chronic kidney disease.
- Useful in medical field Especially in Hospitals
- To prevent Kidney failure of patients
- Feels satisfied because of saving some patients life.
- It can be used for business purpose also.
- To detect in simpler method.
- To make patient satisfaction.
- To reduce mortality rate and cost of health.
- It helps to see what we done.
- It shows how it will be useful.

Positive moments

What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?

- Early detection may help the patients to early treatment and save many lives.
- The patient may feel satisfied and happy by using this model.
- The patient feels productive and creative.
- The patients are satisfied with the work
- It makes patients free from frustration.

Negative moments

What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?

- If the detection does not satisfy the patients.
- If patients are affected with some side effect.
- whether the cost paid for the test is really worthy or not.
- Patients can suffer with pain of chronic kidney disease
- Need to check the review for the usage of the chronic kidney disease software.

Areas of opportunity

How might we make each step better? What ideas do we have? What have others suggested?

- It can be used in hospitals for detection of chronic kidney disease.
- It can be used as an online detector of chronic kidney disease.
- It can be used to develop an application for detection using this model.
- It can be used as a training model for detection.
- It can be used in testing model for chronic kidney disease detection.