Ideation Phase
Brainstorm & Idea Prioritization Template

Date	26 September 2022
Team ID	PNT2022TMID19815
Project Name	Early Detection of Chronic Kidney Disease using Machine Learning
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:

Step-1: Team Gathering, Collaboration and Select the Problem Statement

Step-2: Brainstorm, Idea Listing and Grouping

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Brainstorm

Write down any ideas that come to mind that address your problem statement.

⏱ 10 minutes

GAYATHRI DEVI CJ

Using medical history of patients immediate family and ancestors to predict the kidney disease and the severity

A handy device to do a urine test to check for albumin from the comfort of home. Albumin is a protein that can pass into the urine when the kidneys are damaged

A handy device to do a blood test that checks how well your kidneys are filtering your blood, called GFR from the comfort of home. GFR stands for g glomerular filtration rate.

To collect day to day routine of the patient and predict the future chance any kidney disease

Using machine learning techniques to get a accurate results

KANISHKA R

We could use ph finder to predict how long the patient is affected by kidney disease

we could add steps needed to be taken by the users to prevent the further spread of kidney disease.

creating a website to provide awareness about diagnosis and prevention of kidney disease

We could prescribe specialized doctors to patients near him/her

We could use data interpretation techniques to find the success rate in curing the disease

HANISHA   KAVYA

Machine learning is a powerful tool for understanding and diagnosing chronic kidney disease

The prediction is necessary to combat with the disease and provide good treatment to the patient.

By given medical historical data and diagnostic data of a patient, Machine learning and Data Discovery approach can help identify risk of CKD at initial stage.

Chronic kidney disease can be detected with regular laboratory tests, and some treatment which can slow down the disease progression and risk of cardiovascular disease.

By using the machine learning techniques like Ant Colony Optimization algorithm in CKD used to find the optimal paths in chronic kidney disease.

MATHUMETHA

To develop a hardware which act as sensor to sense abnormalities in kidney.

By using machine learning to analyze data which provide large information of CKD.

Machine learning can help us understand which factors are associated with an increased risk of CKD.

Machine learning algorithms can be used to identify patterns for early detection of CKD and it better to understand the disease progression.

Advanced machine-learning algorithms and Deep Neural Networks were utilized in the process of feature selection and model building.

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Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

⏱ 20 minutes

Category 1: Creating website

We could add steps needed to be taken by the users to prevent the further spread of kidney disease.

Creating a website to provide awareness about diagnosis and prevention of kidney disease.

We could prescribe specialized doctors to patients near him/her.

Category 2: Developing Hardware

To develop a hardware which act as sensor to sense abnormalities in kidney

A handy device to do a urine test to check for how well your kidneys are filtering your blood, called GFR from the comfort of home. GFR stands for glomerular filtration rate.

A handy device to do a urine test to check for albumin from the comfort of home. Albumin is a protein that can pass into the urine when the kidneys are damaged.

Category 3: Laboratory Techniques

We could use ph finder to predict how long the patient is affected by kidney disease.

Chronic kidney disease can be detected with regular laboratory tests, and some treatment which can slow down the disease progression and risk of cardiovascular disease.

A handy device to do a blood test that checks how well your kidneys are filtering your blood, called GFR from the comfort of home. GFR stands for glomerular filtration rate.

Category 4: Using data

Using medical history of patients immediate family and ancestors to predict the kidney disease and the severity.

By given medical historical data and diagnostic data of a patient. Machine learning and Data Discovery approach can help identify risk of CKD at initial stage.

We could use data interpretation techniques to find the success rate in curing the disease.

A handy device to do a urine test to check for albumin from the comfort of home. Albumin is a protein that can pass into the urine when the kidneys are damaged

Category 5: Machine Learning

Using machine learning techniques to get a accurate results.

By using the machine learning techniques like Ant Colony Optimization algorithm in CKD used to find the optimal paths in chronic kidney disease.

Advanced machine learning algorithms and Deep Neural Networks were utilized in the process of feature selection and model building.

Machine learning is a powerful tool for understanding and diagnosing chronic kidney disease.

By using machine learning to analyze data which provide large information of CKD.

Machine learning can help us understand which factors are associated with an increased risk of CKD.

Machine learning algorithms can be used to identify patterns for early detection of CKD and it better to understand the disease progression

Step-3: Idea Prioritization

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Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

⏱ **20 minutes**

Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

Feasibility

Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

- Machine learning is a powerful tool for understanding and diagnosing chronic kidney disease.
- By using the machine learning techniques like Ant Colony Optimization algorithm in CKD used to find the optimal paths in chronic kidney disease.
- Using machine learning techniques to get a accurate results.
- A handy device to do a blood test that checks how well your kidneys are filtering your blood, called GFR from the comfort of home. GFR stands for glomerular filtration rate.
- A handy device to do a urine test to check for albumin from the comfort of home. Albumin is a protein that can pass into the urine when the kidneys are damaged.
- Machine learning algorithms can be used to identify patterns for early detection of CKD and it better to understand the disease progression.
- Advanced machine-learning algorithms and Deep Neural Networks were utilized in the process of feature selection and model building.
- Creating a website to provide awareness about diagnosis and prevention of kidney disease.
- We could use ph finder to predict how long the patient is affected by kidney disease.
- Chronic kidney disease can be detected with regular laboratory tests, and some treatment which can slow down the disease progression and risk of cardiovascular disease.
- By using machine learning to analyze data which provide large information of CKD.
- To develop a hardware which act as sensor to sense abnormalities in kidney.
- By given medical historical data and diagnostic data of a patient, Machine learning and Data Discovery approach can help identify risk of CKD at initial stage.
- We could use data interpretation techniques to find the success rate in curing the disease.
- Using medical history of patients immediate family and ancestors to predict the kidney disease and the severity.
- We could add steps needed to be taken by the users to prevent the further spread of kidney disease.
- We could prescribe specialized doctors to patients near him/her.