Ideation Phase
Define the Problem
Statements

Date	19 September 2022
Team ID	PNT2022TMID35429
Project Name	Project - Detecting Parkinson's Disease using Machine Learning.
Maximum Marks	2 Marks

Customer Problem Statement:
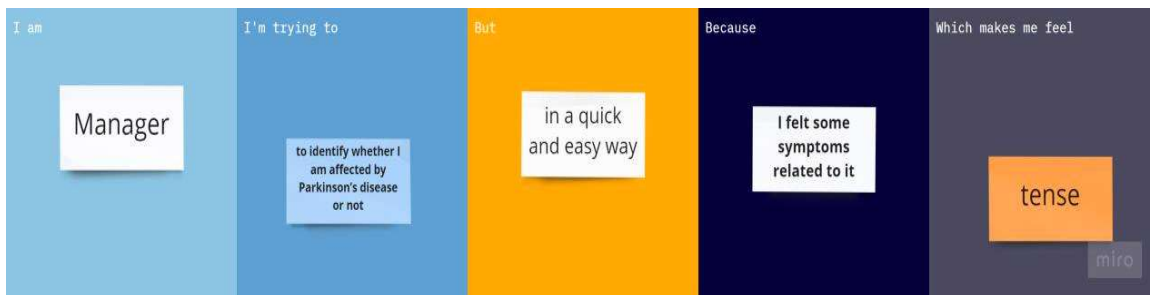
PROBLEM STATEMENTS:

- **Radha** is a **busy manager** and she needs **to identify whether she is affected by Parkinson's disease or not** as she felt some symptoms related to it. Supposing if it is identified earlier, then she can **get treatment at the earliest**.

- **Krishna** is an **old man** who is around 60 feeling dizziness, tremor, restless sleep, amnesia, anxiety, jaw stiffness. He wants **a checkup to know if he is affected by Parkinson's disease** before he reaches to any conclusions so that appropriate medications can be taken to **improve his life span**.

- **Shiva** is a **carpenter** who **assumes to have a Parkinson's disease** and wants to get rid of his unwanted worry in his mind to **reduce stress and other factors that is affecting him**.

- **Shankar** is a **retired person** having similar symptoms with respect to Parkinson's disease and he is searching for a way **to know whether he is affected by Parkinson's disease or not at the earliest** so that he can get treated accordingly to **ease the effects of that disease and to improve quality of life**.

- **Caroline** is a **working woman** who cautiously wants **know whether she is affected by Parkinson's disease** so that she **can consult for early medications**.

INSIGHTS FROM PROBLEM STATEMENTS:

Who is mostly affected by the disease?	Men are more vulnerable to get affected by Parkinson's disease compared to women.
What are the age boundaries of the problem?	People usually develop this disease around age 60 or older.
What is the impact of the issue?	Parkinson's disease is caused by a loss of nerve cells in part of the brain called the substantia nigra. This leads to a reduction in a chemical called dopamine in the brain and leads to stress.
What physiological impacts are caused by this issue?	Motor symptoms: slow movement, tremor, rigidity, walking and imbalance. Non-motor complications: cognitive impairment, mental health disorders, sleep disorders and pain and other sensory disturbances.
When does it need to be treated?	It must be treated at the earliest when the suspected symptoms like soft or low voice, tremors, lack of facial expression et are present.
What will happen if the problem is not solved?	It doesn't make people to die immediately and directly but the condition can cause great strain on the body and can make some people more vulnerable to serious and life-threatening infections.
Where does this issue occur?	The most prominent signs and symptoms occur when nerve cells in the basal ganglia that control movement become impaired or die.

Why is it important that we fix this problem earlier?	**By early detection of the disease, people can take proper diagnosis on time to improve the quality of life of patients.**