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Project Name:

## **DETECTING PARKINSON'S DISEASE USING MACHINE LEARNING**

### **DISEASE APPLICATION FOR DISEASE PREDICTION**

<b>For whom does the disease affect?</b>	The risk of developing Parkinson's disease naturally increases with age, and the average age at which it starts is 60 years old. It is slightly more common in men or people designated male at birth (DMAB) than in women or people designated female at birth (DFAB).
<b>What are the boundaries of the problem?</b>	People who are men with weak nerve cells and age over 50.
<b>What is the issue?</b>	Thinking difficulties, depression, and emotional changes, swallowing problems, chewing, and eating problems, sleep problems and sleep disorders, bladder problems, constipation. As the age gets progresses, it causes the people to face major problem with the nerve cells in the brain.
<b>When does the issue occur?</b>	During the age excess of over 60 as they will affect the people with loss of nerve cells in the brain.

<b>Where is the issue coming?</b>	It majorly occurs due to the age getting over 60 and as maximum in village areas.
<b>Why is it important that we fix the problem?</b>	Parkinson's disease cannot be cured, but medications can help control the symptoms, often dramatically. In some more advanced cases, surgery may be advised. Your health care provider may also recommend lifestyle changes, especially ongoing aerobic exercise.
<b>Which solution can be used to address this issue?</b>	A machine learning powered web application model with the strong building of algorithm that helps to identify and predicts the disease with the identification of symptoms. It processes the breathing signals using a neural network that infers whether the person has Parkinson's disease, and if they are identified then it assesses the severity of their disease in accordance with the Movement Disorder Society Unified Parkinson's Disease using ML algorithms.
<b>What methodology used to solve the issue?</b>	Supervised and Un-supervised machine learning, Data mining, Computer vision with OpenCV, Python web application interface – Flask, IBM Cloud.