Annexure-

Selected Problem:

Early detection of Parkinson's disease using machine learning Design Thinking – Empathy

By field Survey, asking questions, and interviews with users/clients, the team will discuss and do Empathy mapping. The team has to prepare a questionnaire for the above activity and keep records. Attach all proofs to this document.

What User Says

- •User expresses concerns about their motor skills: "I've noticed some changes in my movements lately. My voice sounds different, and my walking doesn't feel as steady."
- •User seeks information: "I wonder if these symptoms could be related to Parkinson's disease. I need to find out more about it."

What User Thinks

- ●User considers possible causes:
 "Maybe it's just stress or aging,
 but it's better to be sure.
 Parkinson's disease crossed my
 mind, and I want to explore that
 possibility."
- •User contemplates seeking medical help: "I should consult a doctor. Early detection could make a big difference in managing the condition, if that's indeed what's happening."

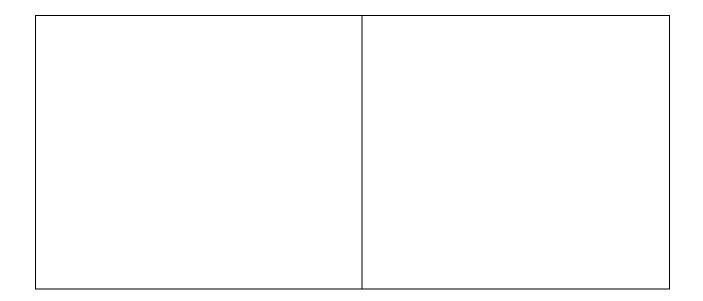
User

What User Does

- •User researches: Searches online for information about Parkinson's disease, its symptoms, and available diagnostic methods.
- •User schedules a medical appointment: Makes an appointment with a healthcare professional to discuss their concerns and undergo potential tests.

What User Feels

- User feels anxious: Experiences anxiety about the uncertainty of their symptoms and the potential implications for their health.
- User hopes for a positive outcome: Holds onto hope that their symptoms are not indicative of a serious condition like Parkinson's disease.



Problem Statement:

The user **is a** human being, **who needs** technical assistance to overcome traditional methods of living and adapt to an urban way of life **because** the latest technology has made it much easier to go about life with less human effort and stress. Yet this change is not made readily available to individuals who have yet to embrace this new shift of lifestyle.

Annexure-

Ideation

Sr. No.	Requirement	Proposed Solution
1.	Data Collection And Preprocessing :-	
	Available Solutions Existing Research Models	Proposed Solution Develop an ensemble model that combines multiple algorithms' outputs.
2.	Wearable Devices :-	
	Available Solutions Some wearable devices are already used to monitor movement and collect data. They can provide valuable inputs for early detection models.	comprehensive d dataset from wearable devices,

Solution-

Our System will help users to manage and provide assistance in their day-to-day tasks as well as do basic functions autonomously like information gathering, making calls, surfing the web, setting alarm and reminder as well as answer queries of the users. Apart from this, our system will provide the user with a smooth transition into the urban lifestyle by guiding them through initial phases of changes and helping them throughout their lifetime.

Scope-

This solution has five modules to integrate. By considering the logic and technology engagements and its mapping with time limit and available skill sets, we are dividing this application in one year (i.e., two semesters).

- 1. Request, Query Processing and basic task execution
- 2. Al Voice Generation
- 3. Facial/Voice Authentication
- 4. Smart Home Integration
- 5. Integration of all modules