## Project Design Phase-II Data Flow Diagram & User Stories

Date	07 November 2022		
Team ID	PNT2022TMID48809		
Project Name	Detecting Parkinsons disease using machine		
	learning		
Maximum Marks	4 Marks		

## **Data Flow Diagrams:**

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Performance measures

Prediction results

Training Data

User Interface to upload images

ML Model Evaluation Learning Algorithm

Image Augmentation

Image Augmentation

Image Annotation

Image Pre-processing

## **User Stories**

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Upload Images	USN-1	As a user, I can upload the images in the website in order to obtain the prediction result of parkinson's disease	I can upload hand drawn spiral or wave images. The file type of image can be any	High	Sprint-1
	Test Vital Page	USN-2	As a user, I will get the prediction result and accuracy on the test vital page.	I can get instant result either positive or negative one click away	High	Sprint-1
	Dashboard	USN-3	Dashboard displays the symptoms, causes and medications for the Parkinson disease	I can register & access the dashboard with Facebook Login	Low	Sprint-2
Administrator	Data Collection	USN-4	As an Administrator, I need to collect data (images of spirals and waves drawn by healthy people and Parkinson's patients).	I have sizable amount of data that is splitted into training dataset and testing dataset.	Medium	Sprint-1
	Data Pre- Processing	USN-5	As an Administrator, I should clean my data and prepare it for model building by doing pre-processing activities such as resizing, visualizing the dataset and converting from RGB to grayscale	Cleaned dataset is ready for doing further process	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
	Model Building	USN-6	As an Administrator, I need to build the model using Random Forest Classifier for spiral images and Convolutional Neural Networks (CNN) for wave images	ML Model is ready for deployment on the testing data.	High	Sprint-2
Customer (Web user)	Deployment of Model	USN-7	As an Administrator, I need to deploy the Machine Learning model that was built.	Model has been deployed successfully.	Medium	Sprint-3
Customer Care Executive	Building the frontend of the application	USN-8	As an Administrator, I need to build the website for the application using HTML, CSS etc.	The website is static and it is designed in order to achieve the user interface	High	Sprint-3
Administrator	Connecting the ML model, Frontend and Backend	USN-9	As an Administrator, I can integrate the deployed model and web application using python flask server.	The web application is dynamic and can be used by the users now.	High	Sprint-4