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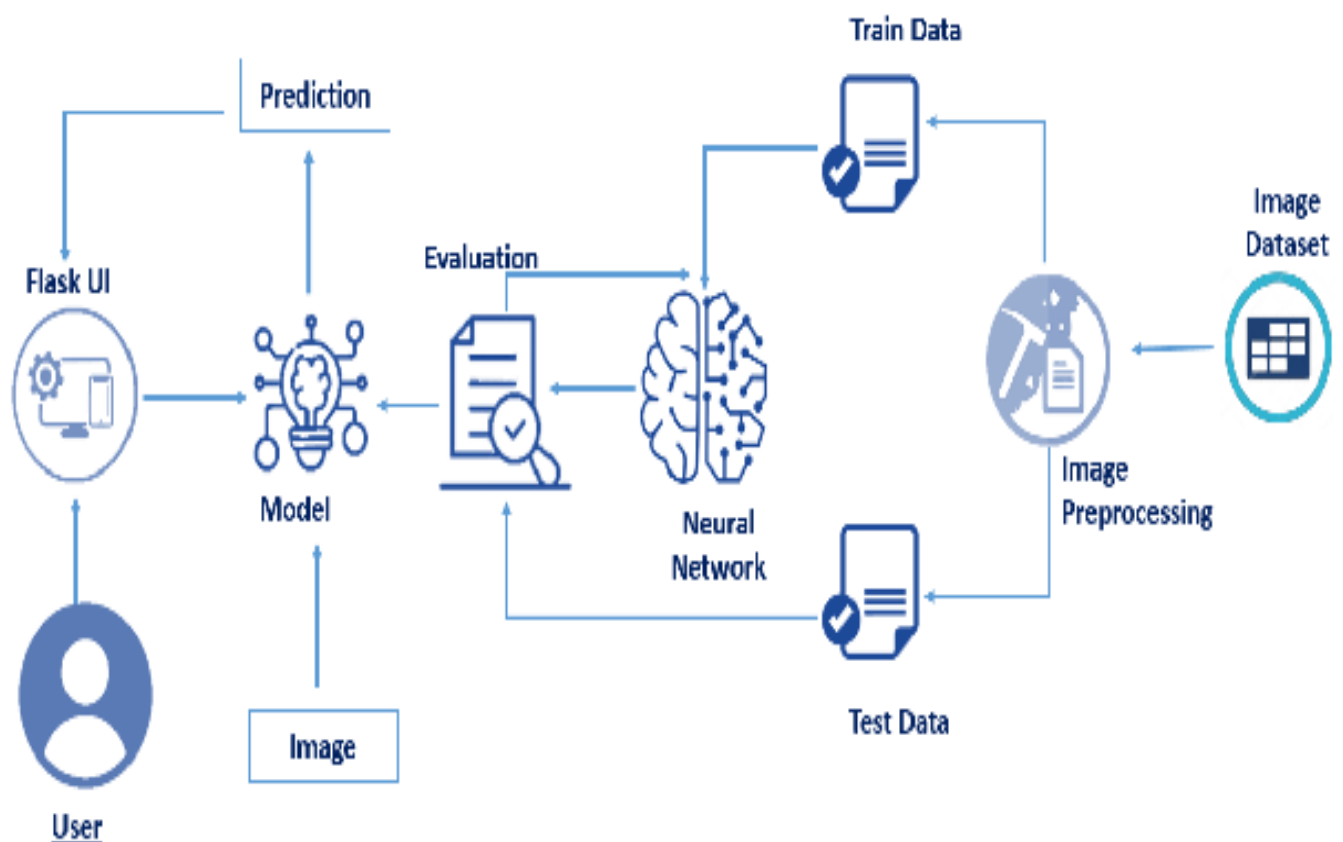# Data Flow Diagram &User Stories

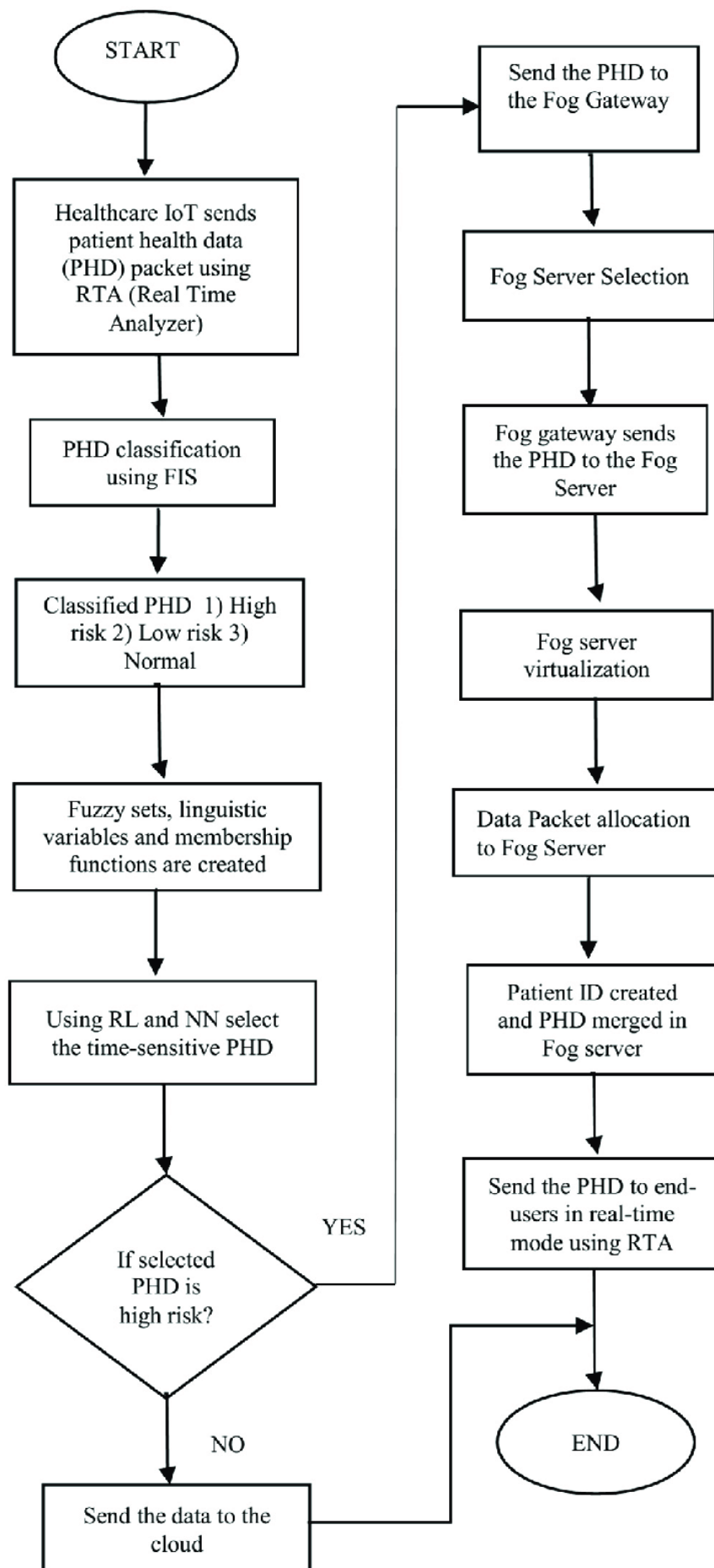| DATE	16-10-2022
TEAM ID	PNT2022TMID40612
PROJECT NAME	Real time communication system powered by AI for specially abled
MARKS	4-marks

DATA FLOW DIAGRAM :

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 enter and leaves the system, what changes the information, and where data is stored.

Example :

DATAFLOW DIAGRAM:

```
                                          ┌─────────────────────┐
                                          │  Send the PHD to    │
        ┌──────────┐                      │  the Fog Gateway    │
        │  START   │                      └─────────┬───────────┘
        └────┬─────┘                                │
             │                                      ▼
             ▼                            ┌─────────────────────┐
  ┌─────────────────────┐                 │ Fog Server Selection│
  │  Healthcare IoT sends │               └─────────┬───────────┘
  │  patient health data  │                         │
  │  (PHD) packet using   │                         ▼
  │  RTA (Real Time       │               ┌─────────────────────┐
  │  Analyzer)            │               │  Fog gateway sends  │
  └─────────┬───────────┘                 │  the PHD to the Fog │
            │                             │  Server             │
            ▼                             └─────────┬───────────┘
  ┌─────────────────────┐                           │
  │  PHD classification  │                           ▼
  │  using FIS          │                ┌─────────────────────┐
  └─────────┬───────────┘                │  Fog server         │
            │                            │  virtualization     │
            ▼                            └─────────┬───────────┘
  ┌─────────────────────┐                          │
  │ Classified PHD 1) High│                         ▼
  │ risk 2) Low risk 3)   │              ┌─────────────────────┐
  │ Normal                │              │  Data Packet allocation│
  └─────────┬───────────┘                │  to Fog Server      │
            │                            └─────────┬───────────┘
            ▼                                      │
  ┌─────────────────────┐                          ▼
  │ Fuzzy sets, linguistic│             ┌─────────────────────┐
  │ variables and membership│           │  Patient ID created │
  │ functions are created │             │  and PHD merged in  │
  └─────────┬───────────┘               │  Fog server         │
            │                           └─────────┬───────────┘
            ▼                                     │
  ┌─────────────────────┐                         ▼
  │ Using RL and NN select│            ┌─────────────────────┐
  │ the time-sensitive PHD│            │  Send the PHD to end-│
  └─────────┬───────────┘              │  users in real-time  │
            │                          │  mode using RTA      │
            ▼                          └─────────┬───────────┘
         ╱────────╲                              │
        ╱ If selected╲   YES                     │
       ╱  PHD is     ╲───────────────┐           │
       ╲  high risk? ╱               │           ▼
        ╲           ╱                │       ┌────────┐
         ╲─────────╱                 │       │  END   │
            │ NO                     │       └────────┘
            ▼                        │
  ┌─────────────────────┐            │
  │  Send the data to the│───────────┘
  │  cloud              │
  └─────────────────────┘
```

User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story/ Task	Acceptance criteria	Priority	Release
Normal people and Deaf-mute people	Registration	USN-1	As a user, I can register for the application by entering my email, and password, and confirming my password	I can access my account/dashboard	High	Sprint-1
		USN-2	As a user, I will receive a confirmation email once I have registered for the application	I can receive a confirmation email & click confirm	High	Sprint-1
Normal people		USN-3	Give access tocamera to recognize the gestures Give access tomicrophone to give our message through voice	I can access messages given by the Deaf-mute people	High	Sprint-1
Deaf-mute people			Give access to display to view the message sent by normal people.	I can access messages given by the Normal people	High	Sprint-1
Administrator		USN-4	Admin side in the company should take care.	all the requirements are there	High	Sprint-1
Sign up		USN-5	Need to sign up to use it.	Need valid credentials	High	Sprint-1
Wish list		USN-6	Before availing the service can be kept aside.	As a user can review and use the service.	Low	Sprint-2