**Project Design Phase-II**

**Data Flow Diagram & User Stories**

| Date | 30-07-2025 |
| --- | --- |
| Team ID | PNT2025TMID14372 |
| Project Name | Predictive Pulse: Harnessing Machine Learning for Blood Pressure Analysis |
| Maximum Marks | 4 Marks |

**Data Flow Diagrams:**

A **Data Flow Diagram (DFD)** illustrates how data moves within the Harnessing Machine Learning for Blood Presure Analysis platform. It captures how users (freelancers and clients) interact with the system, how information flows between different components, and where the data is stored.

**[User] ───────┐**

**▼**

**[Predictive Pulse System]**

**▲**

**[Healthcare Provider / Doctor]**

**▲**

**[Medical Device / App]**

**User Stories**

**User Story Table**

| **User Story ID** | **As a...** | **I want to...** | **So that I can...** |
| --- | --- | --- | --- |
| US-01 | Patient/User | input my blood pressure data | track my health trends over time |
| US-02 | Patient/User | view graphical trends of my BP | understand fluctuations easily |
| US-03 | Patient/User | get alerts for abnormal BP | take preventive actions in time |
| US-04 | Doctor | view my patient's BP trends | assess their condition remotely |
| US-05 | Admin | manage user access and data | ensure system security and privacy |
| US-06 | ML Engineer | train and test ML models on BP data | improve prediction accuracy |
| US-07 | System | process and clean incoming data | ensure consistent data quality |
| US-08 | System | generate health reports weekly | provide regular updates to users |
| US-09 | User | set thresholds for alerts | customize the system to my condition |
| US-10 | Patient/User | sync data from wearable devices | automate BP data collection |