Project Design Phase-II
Data Flow Diagram & User Stories

Team members:

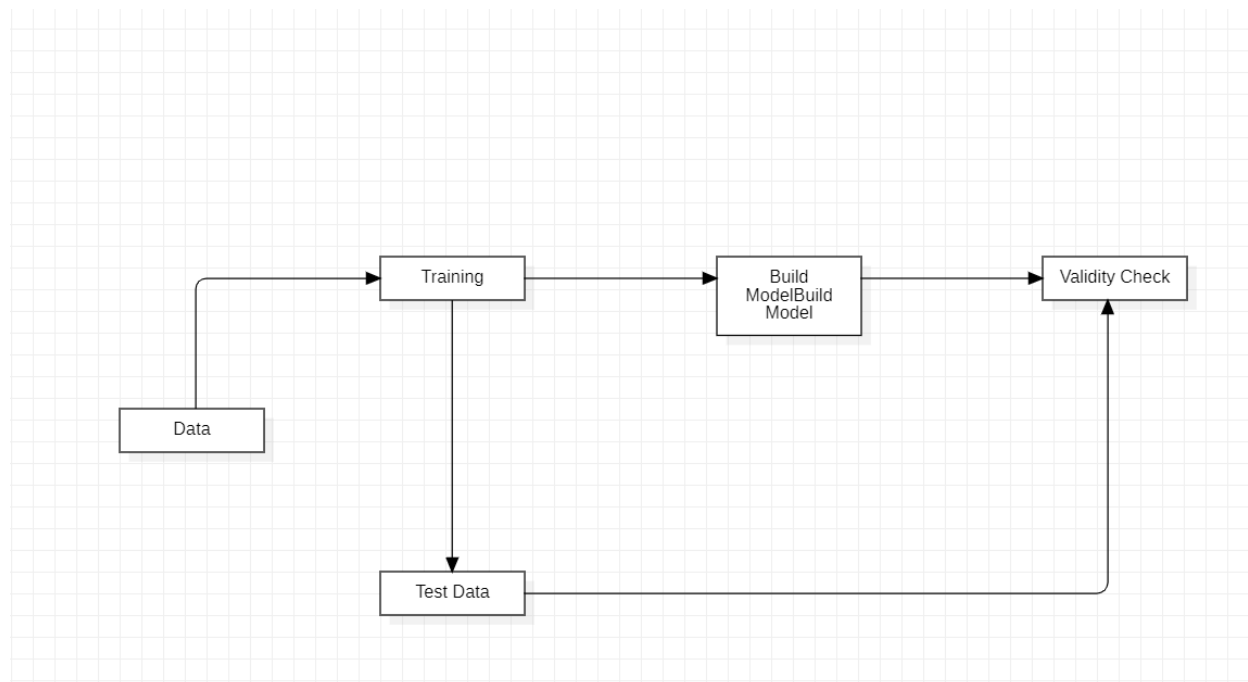**Challa Sai Phanindra**   **Pentapati Meher Baba**
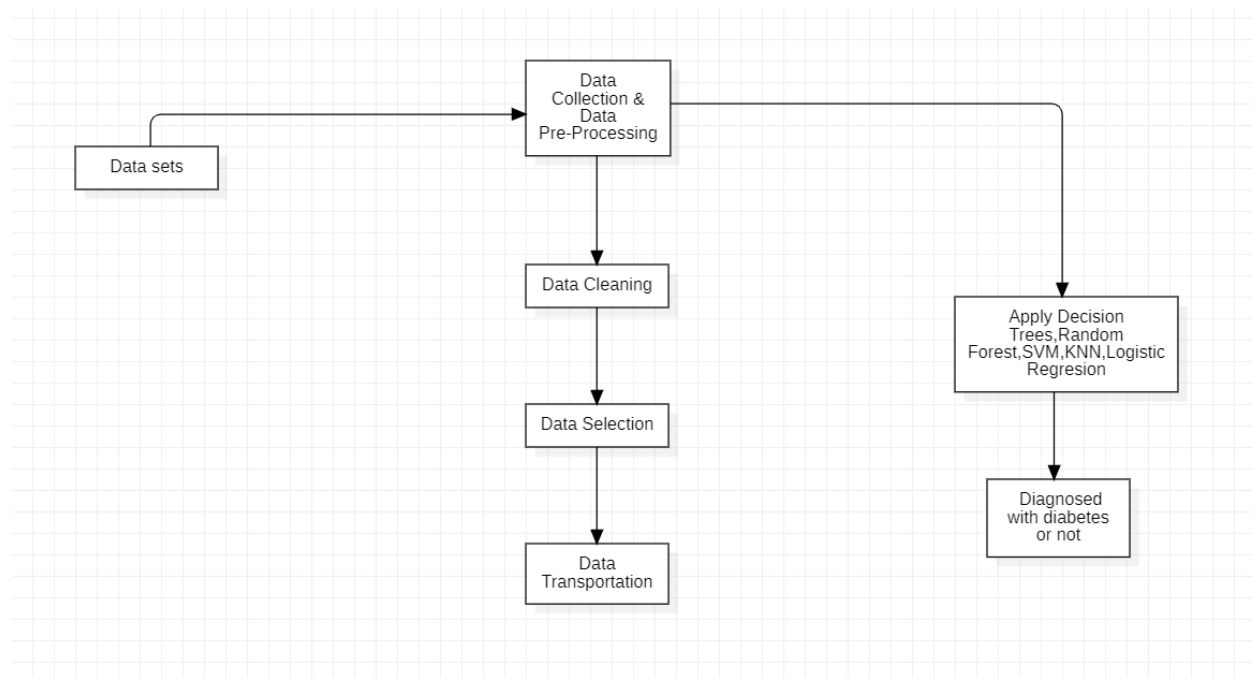**Harsha Vardhan Varma Mudunuri**   **Konjerla Likhith**

Data Flow Diagram:

Data Flow Diagram (DFD) is a graphical representation that depicts the flow of data within a system or process. It is a visual modeling tool used in the fields of software engineering, business analysis, and system design to illustrate how data moves from input sources, through various processes, and to output destinations within a system. DFDs help understand, analyze, and document the flow of data, making them a valuable tool for system analysis and design. They consist of processes, data flows, data stores, and external entities, all interconnected by arrows to represent the movement of data within the system. DFDs clarify and visualize complex systems and communicate how data is processed and transformed within a system.
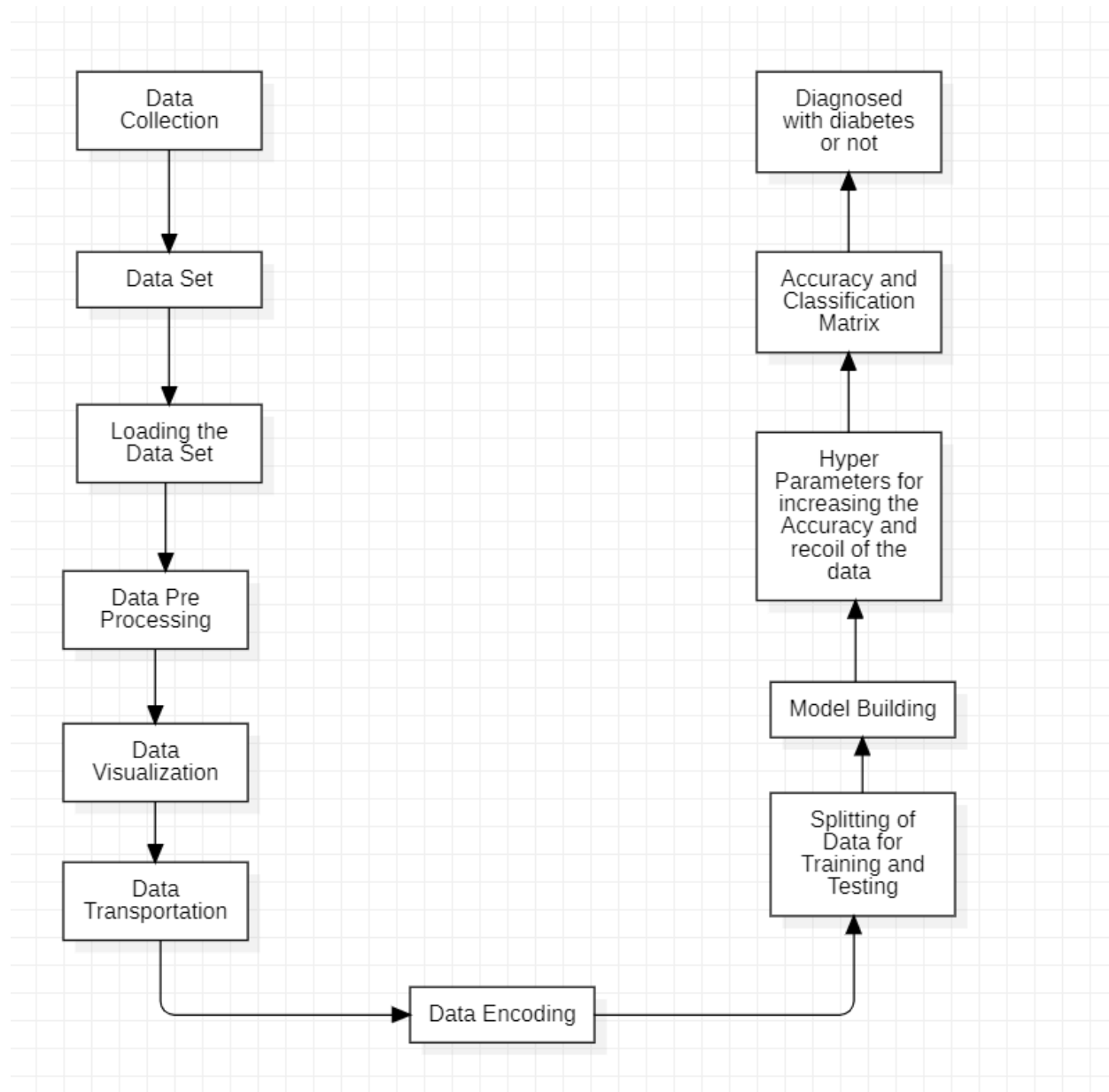
DFD Level 0 Diagram:

DFD Level 1 Diagram:

```
                                        ┌──────────────┐
                                        │    Data      │
                                        │ Collection & │──────────────────────┐
              ┌────────────────────────▶│    Data      │                      │
              │                         │ Pre-Processing│                     │
              │                         └──────────────┘                      │
   ┌──────────┴──┐                             │                              ▼
   │  Data sets  │                             ▼                    ┌──────────────────┐
   └─────────────┘                     ┌──────────────┐             │  Apply Decision  │
                                       │ Data Cleaning│             │  Trees,Random    │
                                       └──────────────┘             │ Forest,SVM,KNN,Logistic│
                                              │                     │    Regresion     │
                                              ▼                     └──────────────────┘
                                       ┌──────────────┐                      │
                                       │Data Selection│                      ▼
                                       └──────────────┘             ┌──────────────┐
                                              │                     │  Diagnosed   │
                                              ▼                     │ with diabetes│
                                       ┌──────────────┐             │    or not    │
                                       │    Data      │             └──────────────┘
                                       │Transportation│
                                       └──────────────┘
```

DFD Level 2 Diagram:

```
┌──────────────┐                              ┌──────────────┐
│     Data     │                              │  Diagnosed   │
│  Collection  │                              │ with diabetes│
└──────┬───────┘                              │   or not     │
       │                                      └──────▲───────┘
       ▼                                             │
┌──────────────┐                              ┌──────┴───────┐
│   Data Set   │                              │ Accuracy and │
└──────┬───────┘                              │Classification│
       │                                      │    Matrix    │
       ▼                                      └──────▲───────┘
┌──────────────┐                                     │
│ Loading the  │                              ┌──────┴───────┐
│   Data Set   │                              │    Hyper     │
└──────┬───────┘                              │  Parameters  │
       │                                      │for increasing│
       ▼                                      │ the Accuracy │
┌──────────────┐                              │  and recoil  │
│  Data Pre    │                              │ of the data  │
│  Processing  │                              └──────▲───────┘
└──────┬───────┘                                     │
       │                                      ┌──────┴───────┐
       ▼                                      │Model Building│
┌──────────────┐                              └──────▲───────┘
│    Data      │                                     │
│Visualization │                              ┌──────┴───────┐
└──────┬───────┘                              │ Splitting of │
       │                                      │  Data for    │
       ▼                                      │ Training and │
┌──────────────┐                              │   Testing    │
│    Data      │                              └──────▲───────┘
│Transportation│                                     │
└──────┬───────┘                                     │
       │            ┌──────────────┐                 │
       └───────────▶│ Data Encoding│─────────────────┘
                    └──────────────┘
```

User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration For Mobile	USN-1	Users can register for the application by providing their email, password, and confirming their password.	Users can log in to their account/dash board by entering their email and password.	High	Sprint-1
		USN-2	Upon successful registration, users will receive a confirmation email	Users can receive a confirmation email and click on the confirmation link to verify their account.	High	Sprint-1
		USN-3	Users can also register for the application using their Facebook account.	Users can register for the application using their Google account	High	Sprint-1
	Login	USN-4	Users can log into the application by entering their email and password.		High	Sprint-2

Customer (Web user)	Registration	USN-5	As a web user, I can create an account for the application by providing my email address, password, and confirming my password.	Users can input their email, password, and confirm the password in the corresponding input fields.	High	Sprint-1
Customer Care Executive	User Management	USN-6	In my role as a customer care executive, I have the ability to access and oversee user accounts.	The system offers a user management interface that can be accessed by the customer care executive.	Low	Sprint-2
Administrator	User Roles and Permissions	USN-7	In my capacity as an administrator, I possess the authority to control user roles and permissions.	The system offers an administrative interface designed for the management of user roles and permissions.	High	Sprint-2