**Team ID** : **PNT2022TMID13986**
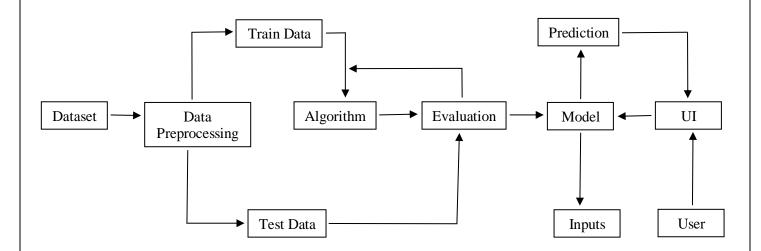
**Team Leader** : **Navaneethan R**
**Team member** : **Logesh G D**
**Team member** : **Sarun R**
**Team member** : **Mani Bharathi S**

# PROJECT DESIGN PHASE II

## Technology Architecture :



## Components and Technologies :

| S. No | Component | Description | Technology |
|-------|-----------|-------------|------------|
| **1.** | User Interface | The User Interacts with the application to depict the Human-Computer interaction and communication | HTML |
| **2.** | Application Logic - 1 | User Interacts with the UI to upload the input features | HTML, Python-Flask |
| **3.** | Application Logic - 2 | Uploaded Features/input is analyzed by the model which is integrated | Python |
| **4.** | Application Logic - 3 | Once a model analyses the uploaded inputs, the prediction is showcased on the UI | Python |
| **5.** | Database | Patients records collected from North East of Andhra Pradesh, India | Python |

| 6. | Cloud Database | Database that typically runs on a cloud computing platform and access to the database is provided as a service | IBM Cloud Database |
|---|---|---|---|
| 7. | File Storage | To store data in a Hierarchical Structure | Local File system |
| 8. | Machine Learning Model | We apply classification algorithms on our dataset | Support Vector Machine, Random Forest Regression, K-Nearest Neighbor Algorithm |

# **Application Characteristics :**

| S.No | Characteristics | Description | Technology |
|---|---|---|---|
| 1. | Open-Source Frameworks | Flask Micro Web Framework | Python |
| 2. | Security Implementations | With all aspects of the job including detecting malicious attacks, analyzing the network endpoint protection and vulnerability assessment, Sign in encryption | IBM Cloud, IBM Watson Studio |
| 3. | Availability | Available for all data size | - |
| 4. | Performance | Can extend the storage according to our needs | Python |