**Project Design Phase-I**
**Solution Architecture**

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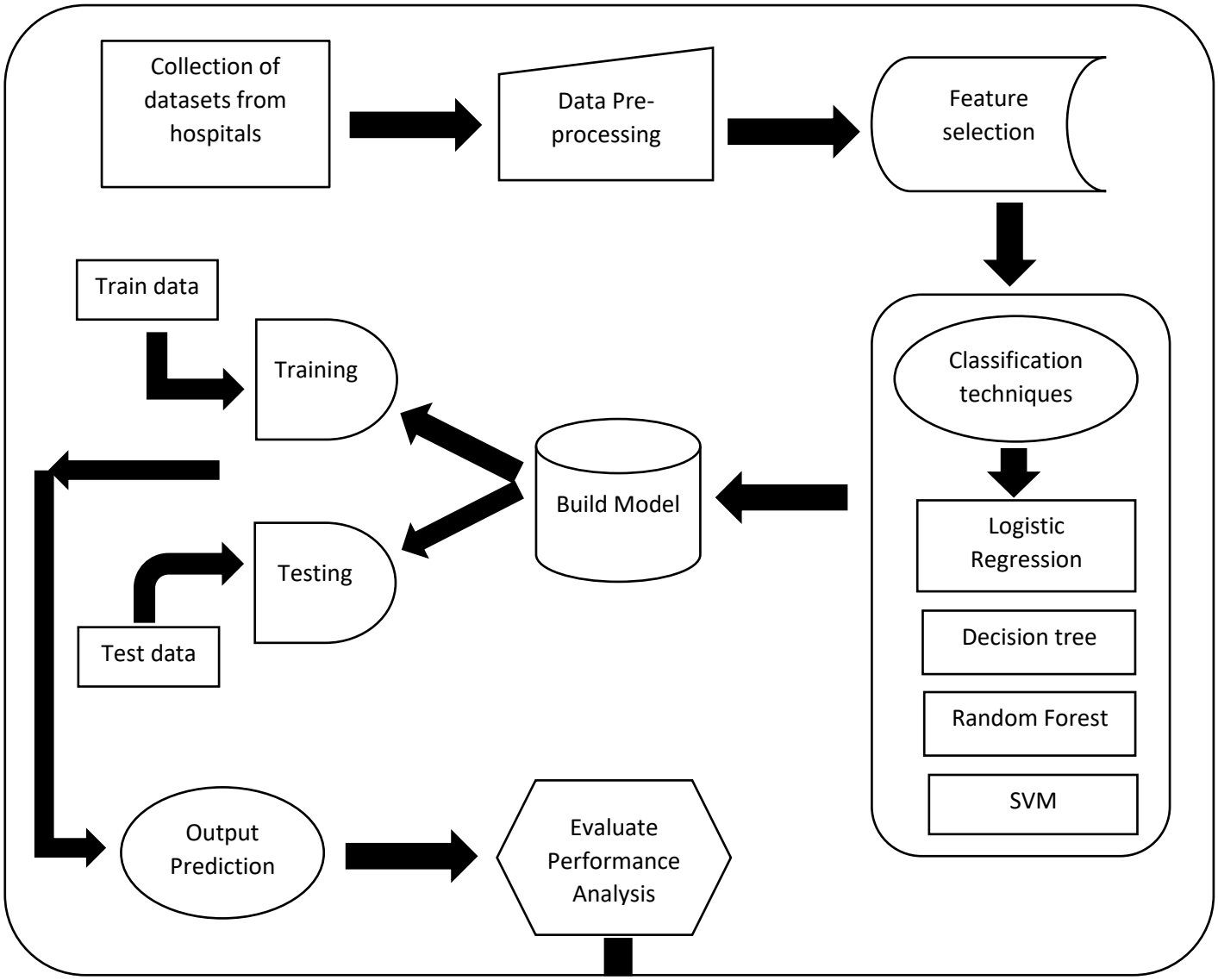
| Date | 19 September 2022 |
| Team ID | PNT2022TMID04324 |
| Project Name | Project - Early Detection of Chronic Kidney Disease using Machine Learning |
| Maximum Marks | 4 Marks |

## Solution Architecture:

- Collecting the datasets of various medical tests done for patients from the hospitals
- Data Pre-processing - Handling the missing data, data cleaning etc.
- Feature selection – Using only the most important data and removing the unwanted features by performing dimensionality reduction
- Applying Classification techniques like random forest classifiers and decision tree algorithms
- Model building – Create the ML model and doing testing and training on the model by providing test and train data respectively.
- Predict the output and evaluating the performance of the model.
- Deploying the model with UI with all required features
- Providing the input data and it predicts the result

## Solution Architecture Diagram:



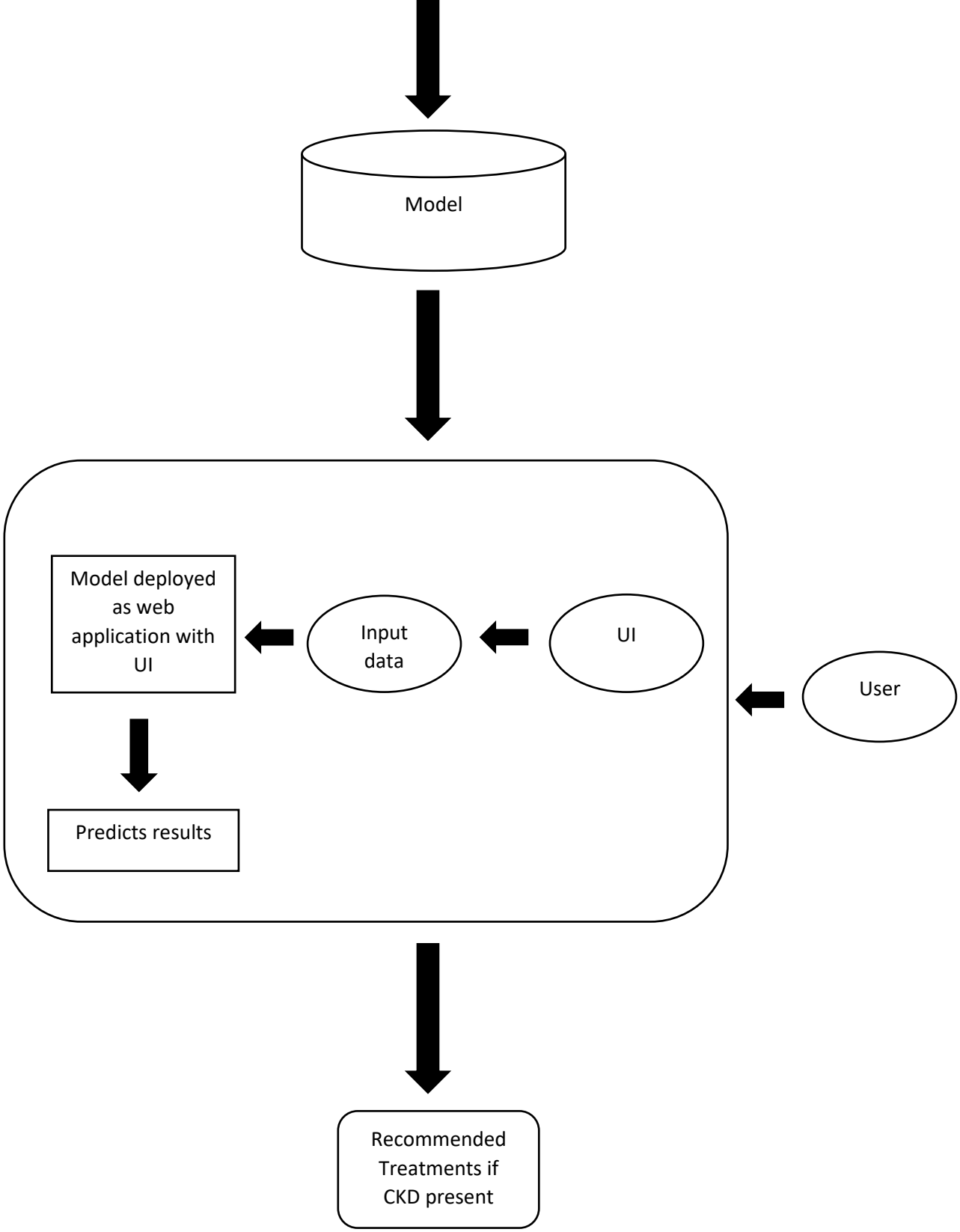



*Figure 1: Architecture and data flow of Early Detection of Chronic Kidney Disease (CKD)*