

Team ID: PNT2022TMID14357

## Project name: Early Detection of Chronic Kidney Disease Using Machine Learning

### TESTING

#### Test Cases

Test case ID	Feature Type	Component	Test Scenario	Pre-Requirement	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments
InitialScreen_TC_O01	Functional	Home Page	Verify user able to see the Prediction page		1.Enter URL 2.Click on Prediction button 3.Verify going to next page	<a href="https://localhost:5000">https://localhost:5000</a>	Entering into data input page	Working as expected	Pass	Normal test case
Input_data_TC_OO2	Functional	Prediction value input page UI	Verify user able to enter input value		1.Check entering into prediction page 2.Check if user can enter value	<a href="https://localhost:5000">https://localhost:5000</a>	Application should show below UI elements to enter numeric values: a.Blood Urea b.Blood Glucose Random Software should accept only numeric values	Should allow entering numeric values	Pass	Normal test case
Input_data_TC_OO3	Functional	Prediction value input page UI	Verify user able to enter input value		1.Check entering into prediction page 2.Check if user can select option from drop down box	<a href="https://localhost:5000">https://localhost:5000</a>	Application should show below UI elements to select from drop down menu: a.Select Anemia b.Select Coronary Artery Disease c.Select Pus Cell d.Select Red Blood Cell e.Select Diabetes Mellitus f.Select Pedal Edema	should allow selection from pull down menu	Pass	Normal test case
Input_data_TC_OO4	Functional	Prediction value input page UI	Verify user able to enter input value		1.Check entering into prediction page 2.Check if user can select option from drop down box	<a href="https://localhost:5000">https://localhost:5000</a>	Application should show below UI elements to enter alphabetic characters: a.Blood Urea b.Blood Glucose Random Software should accept only numeric values	Should not allow entering alphabetic values	Pass	Robustness test case
Test case ID	Feature Type	Component	Test Scenario	Pre-Requirement	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments
Result_data_TC_O05	Functional	Prediction Result Page	Verify Chronic Kidney Disease (CKD) test values		1.Enter submit button after entering values 2.Redirect to result page and display correct result	a.Blood Urea : 90 b.Blood Glucose Random : 157 c.Select Anemia : No d.Select Coronary Artery Disease : Yes e.Select Pus Cell :Yes f.Select Red Blood Cell :No g.Select Diabetes Mellitus : Yes h.Select Pedal Edema: Yes	Application should show Chronic Kidney Disease	Showed CKD	Pass	Normal test case
Result_data_TC_O06	Functional	Prediction Result Page	Verify No Chronic Kidney Disease (No CKD) test values		1.Enter submit button after entering values 2.Redirect to result page and display correct result	a.Blood Urea : 46 b.Blood Glucose Random : 117 c.Select Anemia : No d.Select Coronary Artery Disease : No e.Select Pus Cell :No f.Select Red Blood Cell :No g.Select Diabetes Mellitus : No h.Select Pedal Edema: No	Application should show No Chronic Kidney Disease	Showed No CKD	Pass	Normal test case
Test case ID	Feature Type	Component	Test Scenario	Pre-Requirement	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments
Result_data_TC_O07	Functional	Prediction Result Page	Verify Chronic Kidney Disease (CKD) test values		1.Enter submit button after entering values 2.Redirect to result page and display correct result	a.Blood Urea : 149 b.Blood Glucose Random : 173 c.Select Anemia : Yes d.Select Coronary Artery Disease : Yes e.Select Pus Cell :No f.Select Red Blood Cell :No g.Select Diabetes Mellitus : Yes	Application should show Chronic Kidney Disease	Showed CKD	Pass	Normal test case

## 8.2 USER ACCEPTANCE TESTING:

### 1. Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the [Early Detection of Chronic Kidney Disease] project at the time of the release to User Acceptance Testing (UAT).

### 2. Defect Analysis

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	3	2	1	1	7
Duplicate	3	0	2	0	5
External	2	2	0	1	5
Fixed	1	1	1	1	4
Not Reproduced	0	0	0	0	0
Skipped	0	1	0	0	1
Won't Fix	0	0	0	0	0
Totals	9	6	4	3	22

### 3. Test Case Analysis

This report shows the number of test cases that have passed, failed, and untested

Section	Total Cases	Not Tested	Fail	Pass
Home page	2	0	0	2
Predict page	5	0	0	5
User Input	4	0	0	4
CKD testing	3	0	0	3
Not CKD testing	3	0	0	3
Scoring Endpoint testing	2	0	0	2
Final Report Output	4	0	0	4
Version Control	2	0	0	2

# RESULTS

## *Performance Metrics*

### Confusion Matrix of our model

```
In [62]: conf_mat = confusion_matrix(y_test,y_pred)
          conf_mat
```

```
In [64]: pickle.dump(lgr, open('CKD.pkl','wb'))
```

```
In [ ]:
```