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**RV UNIVERSITY**

**Diabetes detection using Machine Learning algorithms**

**TEST PLAN**

**Version 1.0**

**07-06-2023**

**Prepared by**

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**Document Identification**

|  |  |
| --- | --- |
| Project Name | Diabetes detection using Machine Learning algorithms |
| Document Home | <> |
| Version No | 1.0 |
| Status | Revised |

**Document Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Description** | **Document  owner / Modified by** |
| 1.0 | 07-06-2023 | Document created | Sumedha Vijayaram Kumar |

Test Plan For Diabetes

1. Test Plan Identifier

* To check the percentage of Diabetes, blood pressure glucose level in blood is required

1. References

* SRS (software requirement specification) document

1. Introduction

* A machine learning model is created to check if a person has Diabetes using a data where glucose and bp are features and diabetes as label. Using this data, a model is created for further uses.

1. Test Items

* Download data in CSV format
* Using pandas extract features and label from CSV file
* Build ML Model using ML Algorithm
* Predict and analyze

1. Software Risk Issues

-N/A

1. Features to be Tested

* Download data in CSV format
* Using pandas extract features and label from CSV file
* Build ML Model using ML Algorithm
* Predict and analyze

1. Features not to be Tested

-N/A

1. Approach

* To check the functionality/requirements by entering the bloop pressure and glucose level to get the required output

1. Item Pass/Fail Criteria

* To input and check if all the functionality/requirements is working and the desired output is given

1. Suspension Criteria and Resumption Requirements

* to suspend if any functionality/requirements method is not working up to the requirements

1. Test Deliverables

* System test plan, cases, scripts, automation, execution, summary report

1. Remaining Test Tasks

-N/A

1. Environmental Needs

-N/A

1. Staffing and Training Needs

* 1 people required to test the product

1. Responsibilities

* Report to be given about the process of the product

1. Schedule

* Start date of testing is 07-06-2023 to 12-06-2023

1. Planning Risks and Contingencies

* The machine used for testing is not working or not yet arrived

1. Approvals

-given by product manager if the product functionality is working without any error

1. Glossary

-SRS (software requirement specification)

Test cases

T\_diabetes\_1 = Take 45 as glucose and 63 as blood pressure as input and calculated output required is 1 else it is fail

T\_diabetes\_2 = Take 40 as glucose and 92 as blood pressure as input and calculated output required is 0 else it is fail

T\_diabetes\_3 = Take 40 as glucose and 50 as blood pressure as input and calculated output required is 0 else it is fail (Negative test case)

T\_diabetes\_4 = Take 40 as glucose and 200 as blood pressure as input and calculated output required is 0 else it is fail (Negative test case)

T\_diabetes\_5 = Take 20 as glucose and -10 as blood pressure as input and calculated output required is 0 else it is fail (Negative test case)