**System Test Plan**

**Diabetes classifier  
Test Plan Identifier:** TP0029-diabetes classifier

1. **References:** *SRS* document is used for references
2. **Introduction**: This test plan aims to verify the performance and accuracy of the diabetes classifier. The objective is to ensure that the classifier correctly predicts diabetes based on the input features.
3. **Test Items:** The test items for this plan include all the functionalities of the diabetes classifier, including data loading, preprocessing, model training and prediction.
4. **Software Risk Issues:** Not Applicable.
5. **Features to be Tested:** Data loading, data preprocessing, model training and model prediction.
6. **Features not to be Tested:** Visual design or UI components are not applicable for this test plan.
7. **Approach:** Manual testing will be performed by executing the code and verifying the results.
8. **Item Pass/Fail Criteria:** Each test case will have a specific set of pass/fail criteria that must be met. For example, the accuracy of the model’s predictions should meet the specified threshold.
9. **Suspension Criteria and Resumption**: If critical defects are identified during testing, the testing process maybe suspended until the issues are resolved.
10. **Test Deliverables:** The test deliverables include a test plan, test cases, test scripts, test automation, test execution and a final test summary report.
11. **Remaining Test Tasks:** Not applicable
12. **Environmental Needs:** Python environment with necessary dependencies(NumPy, Pandas, scikit-learn) installed.
13. **Staffing and Training Needs:** One tester with knowledge of Python, scikit-learn and machine learning concepts.
14. **Responsibilities:** The testing team is responsible for executing the test case, recording defects and reporting them according to the defined process.
15. **Schedule:** The test plan execution should be scheduled based on the project timeline and availability of resources.
16. **Planning Risks and Contingencies:** Possible risks, such as model underfitting, inaccurate predictions or issues with data preprocessing, should be considered. Mitigation strategies and contingency plans should be developed to address these risks
17. **Approvals:** CVSN Reddy Sir
18. **Glossary:**
    1. **SRS** - System Requirements Specification