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| Project Id: **26462**  Project Title: **Diagnosis of Diabetes Prediction using Machine Learning** | |
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| **Short description of the project:**   * Due to rapid growth of Diabetes in India , people were diagnosed with this disease. So improving the patient care and reducing the cost towards their treatment , we want to develop a model by using Soft computing techniques. | |
| **Aim/Objective of the project:**   * Collect the related Information in a Excel Sheet and save in .csv Format. * Transforming the Dataset (.csv format) into a Normal Form by Smoothing , Normalization , Outlier detection Technique * Using Min-Max Normalization for data Normalization. * After Data Transformation , then prepare the original dataset for further processing of the desired Model. * Using Statistical Measure & Technical Indication , we prepared the attribute Selection. | |
| **Methodology (the necessary software/tool or process s)**   * Using Prediction Technique for the Designing the model. * Logistic Regression, Support Vector Machine , Decision Tree are need to identify the different risk factors for Diagnosis of Diabetes . * Measures the Performance of different Techniques. | |
| **Possible outcome of the project:**   * Have to check the Accuracy. * Check the Performance. * Draw the Prediction graph with Actual & Predicted value. * Compare the different Sheets with their Performance. * Draw a conclusion with Confusion matrix. | |
| **Importance of the project in engineering aspect:**   * It is more beneficial to identify the early symptoms of diabetes than to cure it after being diagnosed. Therefore, in this study, a diabetes prediction system is proposed where the-art-of machine learning algorithms are exploited, and a comparative analysis is performed. The details of the proposed approaches are as follows. | |
| **Innovativeness if any (why the project is different from others):**   * After implementing Machine Learning, the model predicts whether the patient have diabetes or not with greater accuracy. | |
| **Reference :**   * [1]Aishwarya Mujumdara, Dr. Vaidehi Vb "Diabetes Prediction using Machine Learning Algorithms" INTERNATIONAL CONFERENCE ON RECENT TRENDS IN ADVANCED COMPUTING 2019,ICRTAC 2019. * [2]Arianna Dagliati, PhD1,2,3, Simone Marini, PhD1,2,3, Lucia Sacchi, PhD1,2, Giulia Cogni, MD3, Marsida Teliti, MD3, Valentina Tibollo, MS3, Pasquale De Cata, MD3, Luca Chiovato, PhD3, and Riccardo Bellazzi, PhD1,2,3"Machine Learning Methods to Predict" Diabetes Complication. * [3]Jobeda Jamal Khanam, Simon Y. Foo,"A comparison of machine learning algorithms for diabetes prediction". * [4]Deepti Sisodiaa, Dilip Singh Sisodia,"Prediction of Diabetes using Classification Algorithms",International Conference on Computational Intelligence and Data Science (ICCIDS 2018) | |