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## **Dietetics Prediction System Using Machine Learning**

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Abstract: Diabetes is a severe disease that can strike at any time and affect a large number of people. Age, obesity, sedentary lifestyle, poor diet, and high blood pressure are just few of the factors that contribute to the development of type 2 diabetes. There are a number of health problems that are more common among diabetics than in the general population. Patients with diabetes are currently being diagnosed and treated using a variety of diagnostic methods, including blood testing, urine tests, and more. In the healthcare industry, big data analytics is essential. The healthcare industry has a colossal amount of data stored in databases. Using big data analytics, users can acquire insight and make predictions about the future by examining large datasets and uncovering hidden information and trends. The current method isn't very good at classifying and forecasting. To better classify diabetes, we present a diabetes prediction model in this article that incorporates a few extrinsic parameters that cause diabetes, as well as regular components such as glucose, creatinine ratio, urea, fasting lipid profile, body mass index, age, insulin, and so on. Both datasets, each with eight variables, were subjected to the identical tests. The accuracy of a dataset with 12 variables is higher, so the conclusion is that the more information we have, the more accuracy we can attain.

**Keywords:** Diabetes, Machine Learning, Prediction, Dataset

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