

Project Design Phase - 1

Proposed Solution Template

Team ID : Team-591879

Project Name: Diabetes prediction using machine learning
Maximum marks: 2 marks

Proposed Soluiton Template:

Serial Number	Parameter	Description
1	Problem Statement	<p>To create a web application to help diabetic patients to help themselves with the disease as there is no current single solution to the problem or cure, it can only be manged for the time being.</p> <p>Through reminding the patients about their responsibilities and when to take medicines, we can help them manage their problem like reminding them to take medicine, take water and bring awareness about the right things to do.</p>
2	Idea description	<p>We use Machine learning algorithms to asses the condition of the patient and treat him according to the magnitude of the problem. Changing the life style of the person is the first step to improve their condition which this app focuses on. The patient may be suffering from multiple disease already such as BP, lack of exercise etc. which needs to be addressed.</p>
3	The novelty of the project	<p>By introducing gamification elements to encourage users to stay engaged with the platform, such as setting and achieving health goals.We also include collaboration with Healthcare professionals. The app would be available in multiple languages. By Committing to regular updates to keep the model and advice up-to-date with the latest medical research and guidelines. We create a community</p>

		<p>aspect where users can share experiences, tips, and support each other. This could be in the form of forums, discussion boards, or even virtual support groups.</p>
4	Social Impact	<p>The social impact of the app is early detection and prevention of diabetes. This empowers the individuals especially commoners who don't get good care from the hospital due to busy lifestyle and various other reasons. This also reduces the Healthcare costs dramatically providing health care at the disposal of the user with good support from the health care professionals.</p> <p>There is community support for the users thereby increasing a chance of normalization of good health care among the citizens. This promotes a culture of good health</p>
5	Business model	<p>The business model for a webpage predicting diabetes using machine learning and offering personalized advice can be designed to balance social impact with revenue generation. The primary revenue streams can include freemium services, premium subscriptions, and partnerships with healthcare providers. The core predictive and advisory services can be offered for free to users, fostering a wide user base and maximizing social impact. Premium subscriptions can then provide enhanced features such as real-time health monitoring, more detailed advice, and personalized wellness plans.</p> <p>These premium services can be monetized through a subscription-based model, generating a steady and predictable income stream. Additionally, partnerships with healthcare providers, pharmaceutical companies, or insurance companies can be explored, where the platform could serve as a value-added service or data source for research, contributing to additional revenue. Striking a balance between accessibility, affordability, and premium offerings ensures that the business model remains sustainable while fulfilling the social mission of promoting preventive healthcare and improving public health outcomes.</p>
6	Scalability of the solution	<p>The scalability of the diabetes prediction webpage lies in its adaptable infrastructure and machine</p>

		<p>learning model. Leveraging cloud-based solutions allows seamless scaling to accommodate a growing user base and handle increased data volumes. The machine learning model can be continuously improved with additional diverse datasets, enhancing prediction accuracy. Automation in data processing and personalized advice delivery ensures efficiency even at scale. Collaborations with healthcare organizations can amplify reach and impact. By prioritizing modular design and efficient resource allocation, the platform can easily adapt to increasing demand, making it a scalable solution with the potential to positively impact a broad demographic in the realm of preventive healthcare.</p>
--	--	---