

Project Design Phase-I Proposed Solution

Date	06 May 2023
Team ID	NM2023TMID09663
Project Name	PERINATAL HEALTH RISK PREDICTORS USING MACHINE LEARNING

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The early health risk of pregnant women must be identified by artificial intelligence systems for physicians caring for pregnant women and infants as well as perinatal researchers working to decipher the complex web of causes for maternal and child health outcomes.
2.	Idea / Solution description	The development of a machine learning-based predictive model that uses a mix of maternal health history and clinical data to precisely identify high-risk women is a solution to the problem of perinatal health risk prediction. To make sure that this model can generalise well to new patients and populations, it might be trained using a huge and varied dataset of perinatal health outcomes.
3.	Novelty / Uniqueness	The proposed solution combines multiple data sources, machine learning algorithms, real-time predictions, continuous learning, and accessibility

		and usability to create a unique and innovative approach to perinatal health risk prediction.	
4.	Social Impact / Customer Satisfaction	The implementation of a machine learning-based predictive model for perinatal health risk prediction has the potential to boost customer satisfaction, enhance health outcomes, and lower healthcare costs, all of which can have a big social impact.	
5.	Business Model (Revenue Model)	Partnerships with insurance companies or governmental health agencies could be a source of revenue. These collaborations could offer financial assistance for the solution's development and execution in exchange for access to the data and insights from the predictive model. The potential to lower healthcare expenses linked with perinatal problems makes this strategy very enticing to insurance companies.	
6.	Scalability of the Solution	The size and complexity of the dataset, the available computational resources, and the usage of automated tools and processes are some of the aspects that affect how scalable the perinatal health risk prediction solution is. It is conceivable to create a scalable and successful predictive model that may be applied to enhance perinatal health outcomes by carefully taking into account these aspects.	