Project Design Phase-I
Proposed Solution Template

Date	15 May 2023
Team ID	NM2023TMID09316
Project Name	Perinatal health risk predictors using machine learning

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The problem statement is to develop a machine learning model that can predict perinatal health risks during pregnancy. Perinatal health risks are conditions that can arise during pregnancy or childbirth, such as pre-eclampsia, gestational diabetes, preterm labor, and fetal distress. These conditions can lead to complications for both the mother and the baby, including maternal mortality, neonatal death, and long-term health problems for the child.
2.	Idea / Solution description	Developing a perinatal health risk prediction model using machine learning can be highly beneficial in identifying high-risk pregnancies early and enabling timely interventions to improve maternal and fetal outcomes.
3.	Novelty / Uniqueness	Perinatal health risk prediction requires the integration of various data sources, including demographic, medical, and laboratory data. One of the challenges of this project is to handle and integrate this diverse data to develop a comprehensive predictive model.
4.	Social Impact / Customer Satisfaction	Machine learning algorithms have the potential to improve perinatal health outcomes by identifying risk factors and guiding interventions that can mitigate potential complications. This can lead to improved patient satisfaction and better long-term health outcomes for mothers and babies.
5.	Business Model (Revenue Model)	A potential revenue model for a perinatal health risk predictor using machine learning could be through the sale of the software as a service (SaaS). In this model, healthcare providers or insurance companies would pay a subscription fee to access the risk predictor tool and utilize its predictions for their patients.
6.	Scalability of the Solution	Perinatal health risk predictors using machine learning is a promising area of research that has the potential to improve the health outcomes of mothers and newborns. Machine learning

		algorithms can be trained on large datasets to identify patterns and predict outcomes based on a wide range of variables.