

Define problem/ problem understanding

Team ID	NM2023TMID00768
Project name	Identifying perinatal health risks using machine learning

Specify The Business Problem:

Perinatal health refers to the health of both the mother and the baby during pregnancy, childbirth, and the postpartum period. It is crucial to identify potential health risks during this period to ensure the well-being of both the mother and the newborn. Machine learning techniques can play a significant role in analyzing vast amounts of data to predict and identify perinatal health risks accurately.

The business problem is to develop a machine learning solution that can effectively identify perinatal health risks based on various factors and indicators. This solution aims to assist healthcare professionals in making informed decisions and taking appropriate actions to mitigate risks and provide timely interventions.

Business requirements:

Problem statements: clearly define the problem aim to solve with-machine learning in the context of perinatal health risks. For example , it could be predicting the likelihood of preterm birth or Identifying high-Risk pregnancies based on medical records and patient data.

Data collection: Determine the sources and type of data required for training the machine learning model. This may include medical records, vital signs,. Laboratory results, ultrasound images and genetic information. Collaborate with health care providers, hospital, and relevant organization to obtain access to the necessary data

Data preprocessing: develop a data preprocess pipeline to clean transfer and integrate the collected data.

Literature survey:

Perinatal health risks are a critical area of research, and machine learning techniques have been employed to investigate various aspects of this field. While I don't have direct access to the latest research beyond my September 2021 knowledge cut off, I can provide you with an overview of how machine learning has been utilized in the study of perinatal health risks based on the literature available until that time

Social or business impact:

The application of machine learning in perinatal health can have significant social and business impacts. Perinatal health and wellbeing of mother and the baby during pregnancy , childbirth, and the postpartum period . By utilizing machine learning techniques , various aspects of perinatal health can be improved , leading to positive outcomes .let's explore the social and business impact in more detail: