

Ideation Phase

Define the Problem Statements

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| Date | 15 May 2023 |
| Team ID | NM2023TMID09316 |
| Project Name | Perinatal health risk predictors using machine learning |
| Maximum Marks | 2 Marks |

Problem Statement :

Perinatal health refer to the health of the mother and baby during pregnancy, childbirth, and the postpartum period. perinatal health risk can include complications during pregnancy and maternal and neonatal mortality.

| Problem Statement (PS) | I am (Customer) | I'm trying to | But | Because | Which makes me feel |
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| PS-1 | I am a researcher working on a project to develop a machine learning based perinatal health risk predictors. perinatal health refer to the period before and after birth, including pregnancy, childbirth, and the postpartum period. | Develop a model that can predict perinatal health risk by analysing various factors such as maternal age, medical history, lifestyle habits, and fetal measurement. | Developing such a model requires a large amount of data from the diverse sources including electronic health records, medical imaging, and patient questionnaires. | The complexity of the data also requires sophisticated machine learning techniques, such as deep learning and natural language processing, to extract meaningful patterns and insights. | All these challenges can make me feel overwhelmed at times, but I am motivated by the potential impact of this project on improving perinatal health care outcomes. |
| PS-2 | Identifying and predicting perinatal health risk can help health care providers measure and provide | The model should be able to identify the potential risks such as preterm labor, preeclampsia, gestational | This makes data collection and cleaning a challenging task, as the data may be | This can be time consuming and computationally intensive process, which requires a high level of | |

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| | appropriate care to ensure the best possible outcomes for both mother and baby | diabetes, and the fetal growth restrictions. | incomplete, inconsistent, or contain errors. | expertise in both machine learning and perinatal health. | |
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