

Ideation Phase

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID53476 |
| Project Name | Visualizing and Predicting Heart Disease with an Interactive Dashboard |
| Maximum Marks | 2 marks |

Problem Statement

Heart disease (HD) is a major cause of mortality in modern society. Medical diagnosis is an extremely important but complicated task that should be performed accurately and efficiently. Cardiovascular disease is difficult to detect due to several risk factors, including high blood pressure, cholesterol, and an abnormal pulse rate. Based on the analytics we can analyze which patients are most likely to suffer from heart disease in the near future and based on the patient details we will take decisions to cure them. We analyzing the various machine learning algorithms and finding the best to predict the presence or absence of heart disease. The target we will be exploring is binary classification which is 0 to show the absence of heart disease and 1 to show the presence of heart disease.

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| Who would face this kind of problem? | People who are physically challenged and who have time constraints |
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| What are the boundaries of the problem? | The parameters used in the prediction like blood pressure, cholesterol, heart beat are not static . If the prediction is not done using the current data of the patient, then the prediction may not be accurate. |
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| What is this issue? | The parameters which are considered for prediction are highly sensitive.. Blood pressure of a person varies hour to hour and on a daily basis, so does heart beat. |
| When does this issue occur? | When the dataset is prepared, we need to assure that the data is error free and highly accurate as small changes in the data may change the result. |
| Where is this issue manifesting? | The inaccuracy in data or using the old data will manifest the result of prediction |

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| Why is it necessary to fix the problem? | Since it is health related problem and it is the basic step is predicting heart disease further treatment , medications and consultation rely upon the results of the prediction. |
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