Mathematics for Intelligent Systems-5

Project Phase-1

Title of the Project : Disease Diagnosis using Bayesian Filter

Group Members:

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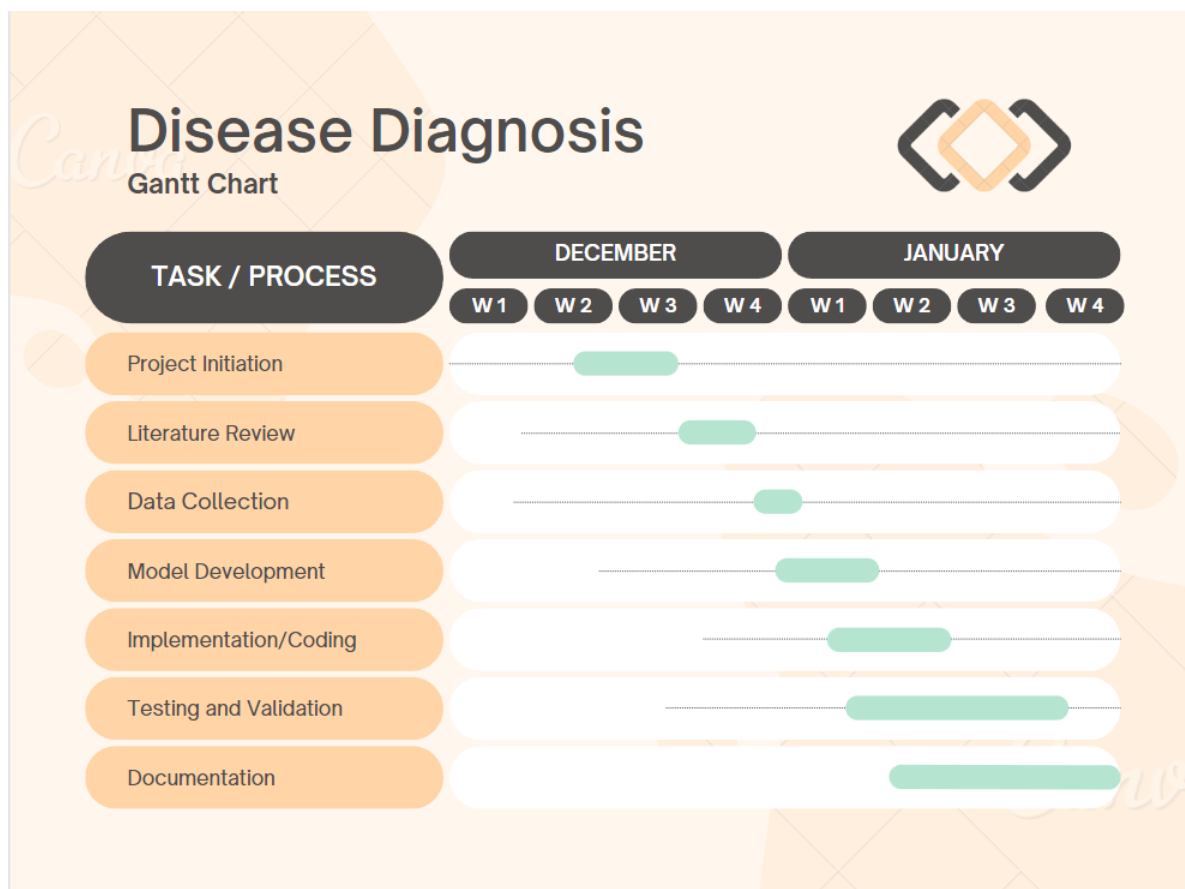
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Introduction:

Medical diagnosis is a complex process that often involves the interpretation of diverse symptoms and the identification of potential diseases. In this era of advanced technology, leveraging probabilistic modeling becomes pivotal in enhancing the accuracy and efficiency of disease diagnosis. This project introduces a Disease Diagnosis System utilizing Bayesian Filters, a powerful tool in probabilistic reasoning.

The primary objective of this system is to create an intelligent framework capable of modeling and analyzing the relationships between symptoms and diseases through a Bayesian network. Bayesian Filters aid in capturing uncertainties and refining diagnostic predictions based on observed evidence.

The use of Bayesian filters in this disease diagnosis system advances the continuous endeavor to develop intelligent and flexible medical technology. The system attempts to improve decision-making processes by combining probabilistic thinking with medical diagnostics, offering useful insights for medical practitioners in their search of precise and fast disease identification.

Timeline in Gantt Chart:

References:

1. *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1065734/pdf/hsresearch00586-0036.pdf*

2. *https://towardsdatascience.com/naive-bayes-and-disease-detection-ffefe2cc5c01*

3. *https://www.sciencedirect.com/science/article/pii/S0895435620312257?ref=pdf_download&fr=RR-2&rr=82e899a8086ba8f5*

4. *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5203736/*