

SKITECH INNOTHON 2024

Early Disease Prediction

Code Wizard aims to develop a machine learning model for early disease prediction. We believe early detection is crucial to improving patient outcomes and reducing healthcare costs.

Team Name:Code Wizard

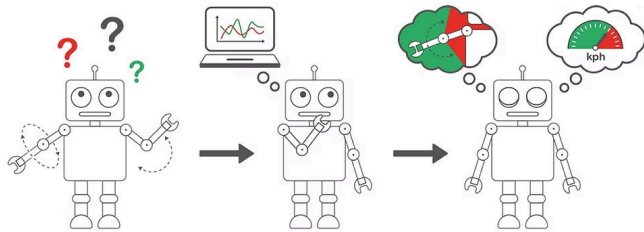
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ML ALGORITHMS

TECHGRABYTE

Problem Statement

Early Detection

Early disease detection is vital for timely treatment and intervention. It can lead to better treatment outcomes and potentially reduce the severity of the disease.

Challenges

Challenges in early diagnosis include limited access to healthcare, lack of awareness, and difficulties in identifying subtle symptoms. These can lead to delayed treatment, higher costs, and poor patient outcomes.

Target Diseases

Our team aims to target diseases like diabetes, cardiovascular disease, and certain types of cancer. These diseases are prevalent and early detection can have a significant impact on management.

Solution Approach

1 Machine Learning Model

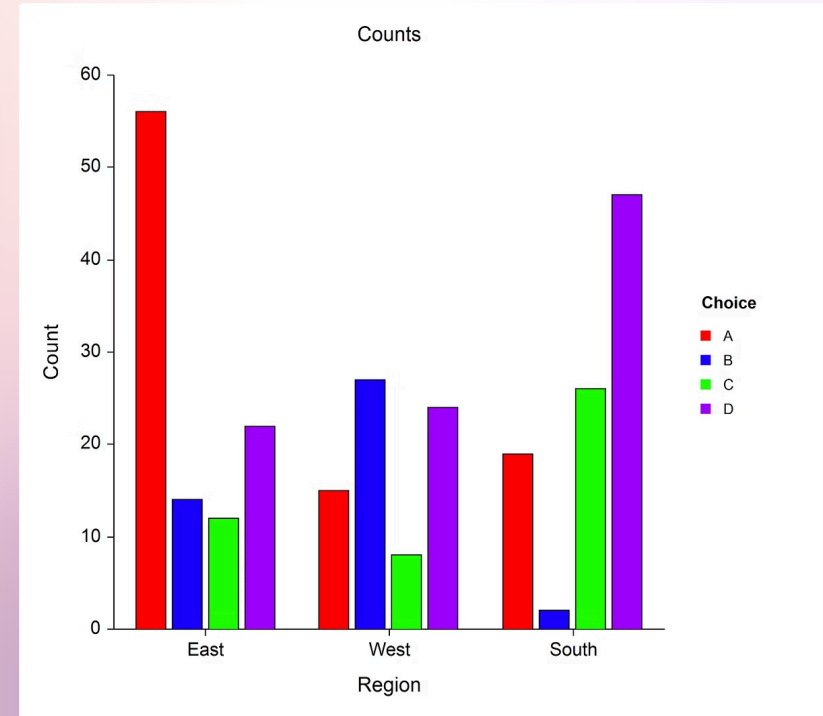
Our solution uses a machine learning model trained on various datasets to predict the likelihood of disease development.

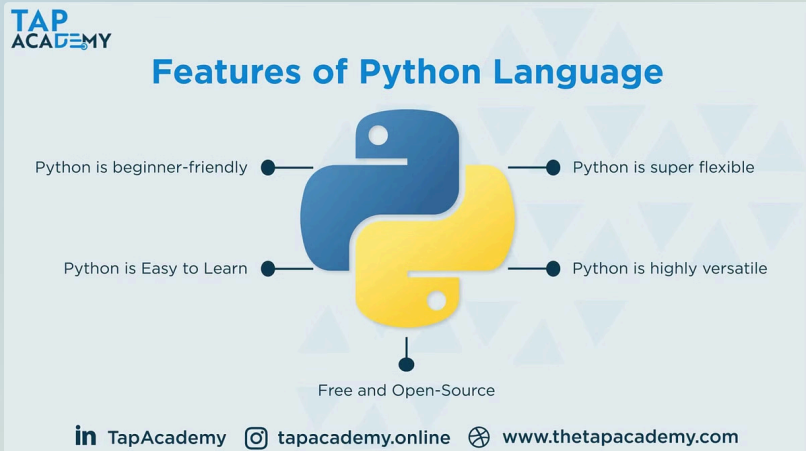
2 Methodology

The methodology involves data collection from diverse sources, data preprocessing, feature selection, and model training and evaluation.

3 Algorithms

We are exploring various algorithms such as Random Forest, Support Vector Machines, and Neural Networks. The optimal algorithm will be determined based on performance evaluation.





Technology Stack

Programming Languages	Python,HTML,CSS,javascript
Libraries/Frameworks	Scikit-learn, TensorFlow/Keras, Pandas, NumPy
Data Sources	Public health datasets, Electronic Health Records (EHRs), Medical Imaging
Development Environment	VS Code, Jupyter Notebooks



Expected Impact

Improve Early Diagnosis

This model can potentially improve early diagnosis rates, leading to more timely intervention and potentially reducing mortality and morbidity.

Lower Healthcare Costs

Early detection and intervention can lead to reduced healthcare costs by preventing complications and costly treatments later.

Enhance Patient Outcomes

By enabling personalized treatment plans, we aim to enhance patient outcomes and improve their quality of life.

Conclusion & Future Work



1

Summary

Our project aims to develop a machine learning model for early disease prediction using a comprehensive approach.

2

Future Enhancements

We plan to integrate the model with wearable devices to collect real-time data and potentially improve accuracy and accessibility.

3

Call to Action

We welcome questions and feedback from the judges and the audience.



Work on Future

Our team is dedicated to further refining and improving the model. We envision incorporating advanced algorithms, exploring new data sources, and continuously adapting to the evolving healthcare landscape.

Thank you !

We appreciate your time and attention.