

Introduction

- Healthcare is one of the most crucial sectors needing digital transformation.
- Early disease prediction helps in quick diagnosis and treatment.
- This project aims to develop a web application that predicts diseases based on input symptoms using AI/ML techniques.





Objectives

- Accept user-reported symptoms via a web interface.
- Predict the most probable disease.
- Display relevant disease details and suggested precautions.
- Ensure user-friendly and responsive interface.

Tech Stack

- Frontend: HTML, CSS, JavaScript
- Backend: Python (Flask or Django)
- Machine Learning: Scikit-learn / Pandas
- Tools: Jupyter Notebook, VS Code



MACHINE LEARNING ALGORITHMS



Algorithms Used:

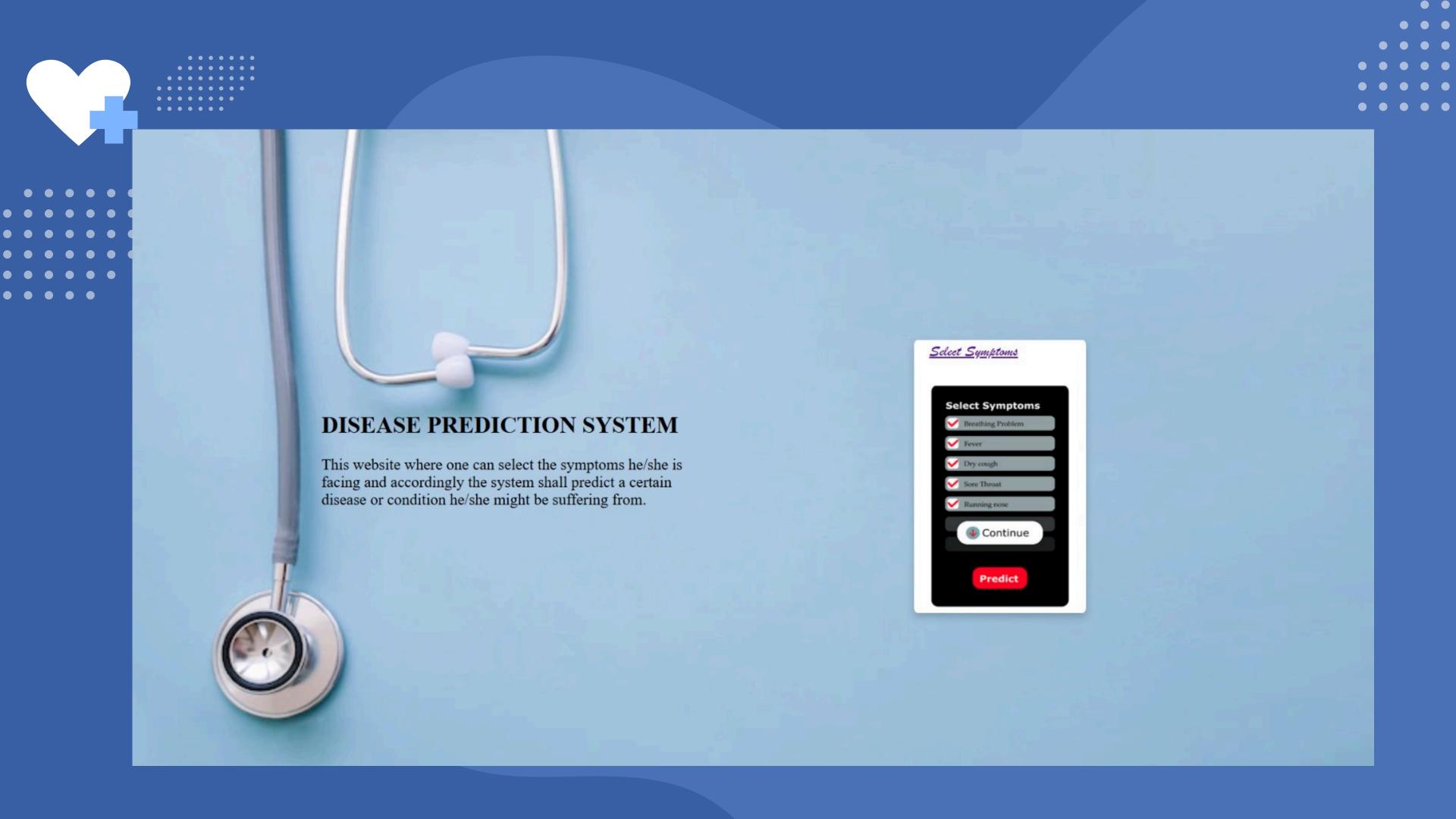
- Decision Tree
- Random Forest
- Naive Bayes (optional)



ALGORITHM EXPLAINATION

- 1. DECISION TREE: A <u>decision tree</u> splits data into branches based on feature values, creating a tree-like structure.
- 2.RANDOM FOREST: Random forest is an ensemble method that combines multiple decision trees.
- 3. NAIVE BAYES: Based on <u>Bayes' theorem</u> and assumes all features are independent of each other.









Select Symptoms

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Predict

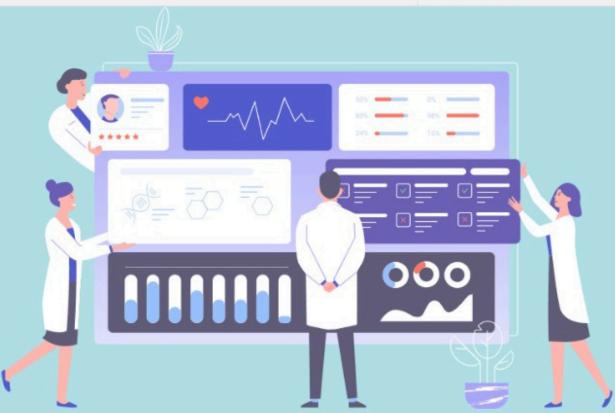


Disease Predictor

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Final Predictions

Alogrithm	Prediction
DECISION TREE	Common Cold
RANDOM FOREST	Common Cold
NAVIE BAYES	hepatitis A



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