Week 1 : Edunet internship

Lung Cancer Detection

By :Panchami Prakash Hegde

Introduction

01 Lung cancer is one of the most life-threatening diseases globally, with a high mortality rate due to late diagnosis and lack of early detection methods.

02 Machine Learning (ML) provides a powerful approach to analyze medical data and predict the likelihood of diseases like lung cancer based on health and lifestyle indicators.

03 By using ML algorithms, healthcare systems can assist doctors in early identification of high-risk patients, potentially improving survival rates.

04 This project focuses on developing a Lung Cancer Prediction Model using a Kaggle dataset that includes patient details such as age, gender, smoking habits, and symptoms to predict lung cancer risk accurately.

Problem Statement

01 Lung cancer often goes undiagnosed in its early stages due to subtle or non-specific symptoms, making timely detection difficult.

02 Manual diagnosis methods are time-consuming and prone to human error, especially when analyzing large amounts of medical data.

03 There is a growing need for automated, data-driven systems that can predict the likelihood of lung cancer based on patient health and lifestyle factors.

04 The project aims to build a machine learning model that predicts lung cancer risk using patient data, enabling early intervention and improved treatment planning.

Need of the Project

01 Early detection of lung cancer can significantly increase survival rates and reduce treatment costs.

02 An AI-powered predictive model can support healthcare professionals by providing quick and reliable risk assessments.

03 The system promotes awareness among individuals by allowing them to assess their health risks based on lifestyle patterns.

04 It demonstrates how machine learning can be effectively applied to real-world medical problems, bridging the gap between technology and healthcare.

Dataset Source

📂 Dataset Name: Lung Cancer Data (Symptoms and Demographics)

🌐 Source (Kaggle Link):

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Thank You

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