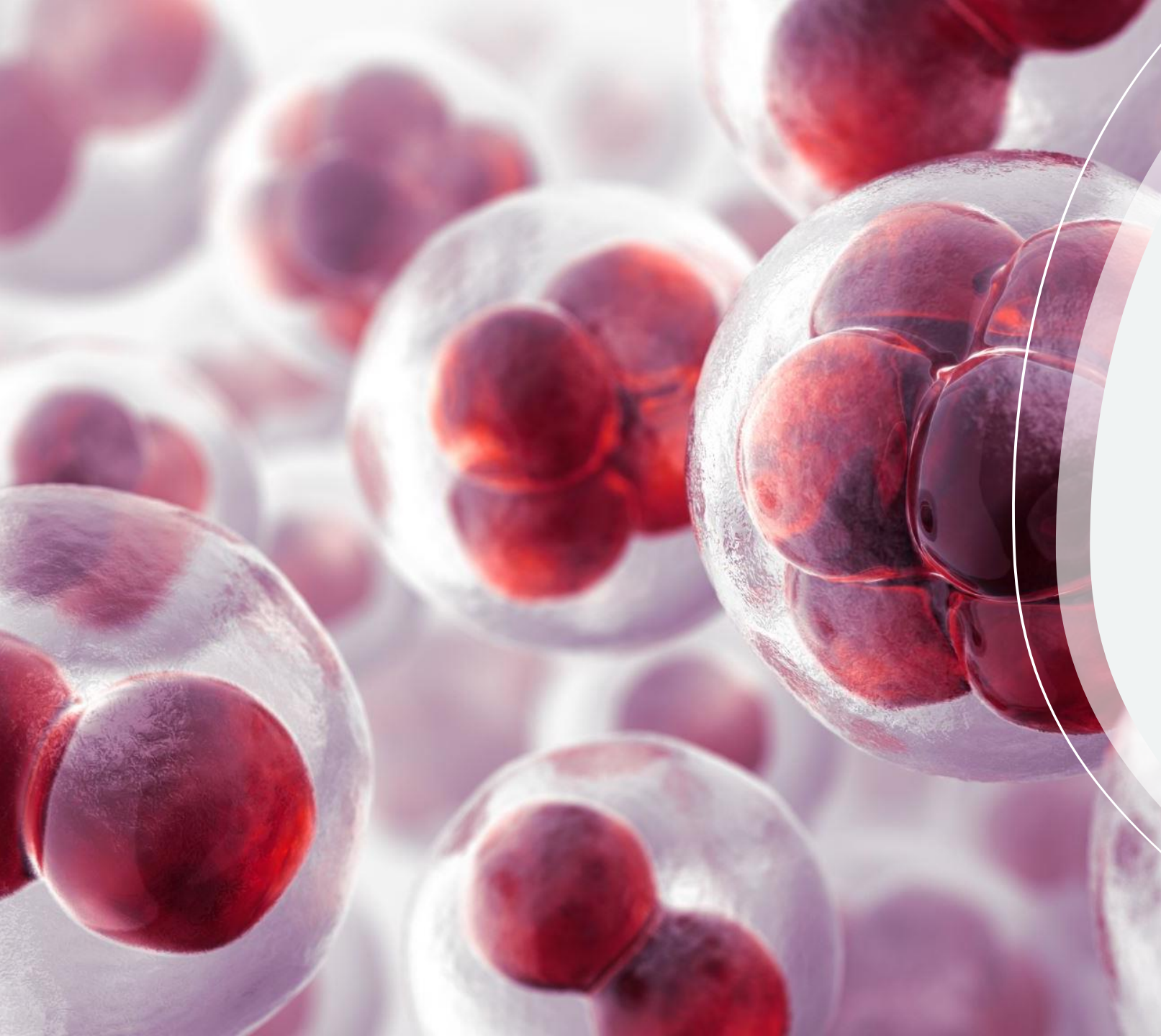


WHAT IS CANCER?

Cancer is a disease in which some of the body's cells grow uncontrollably and spread to other parts of the body.

Cancer can start almost anywhere in the human body, which is made up of trillions of cells. Normally, human cells grow and multiply (through a process called cell division) to form new cells as the body needs them. When cells grow old or become damaged, they die, and new cells take their place.

CANCER PREDICTION

Predicting cancer is a complex and critical task that involves the analysis of medical data to determine the likelihood of an individual having cancer.

This process is typically done through machine learning models.

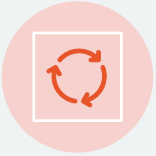
STEPS INVOLVED

DATA COLLECTION

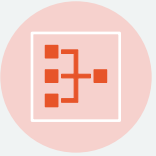
DATA PREPROCESSING-
MISSING DATA

DATA CLEANING-
ERRORS REMOVAL

DATA NORMALISATION-
FEATURES HAVE SAME
MAGNITUTE



MODEL SELECTION-
L.R,DECISION
TREE,SVM,RANDOM
FOREST



MODEL TRAINING-
Model learns patterns
and relationships in the
data

MODEL EVALUATION-
ACCURACY AND
PRECISION

LIBRARY AND IT'S WORK

1.NUMPY-(ndarrays)

Example:

```
import numpy as np
arr=np.array([1,2,3,4,5])
```

2.**PANDAS-importing,analysis and manipulation of data**

Example:

```
import pandas as pd
df=pd.readcsv("data.csv")
```

3.Matplotlib-: Data visualization library for creating static, interactive, or animated plots

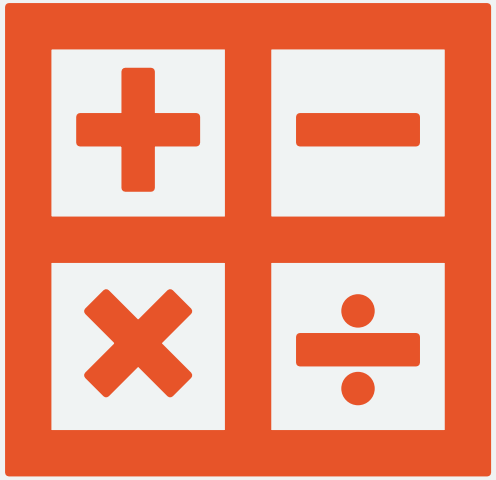
Example:

```
import matplotlib.pyplot as plt
plt.plot([1, 2, 3, 4], [1, 4, 9, 16])
plt.show()
```

4. **Cufflinks (for Plotly in Pandas)-**A library that connects Plotly with Pandas to create interactive visualizations easily.

Example:

```
import cufflinks as cf
cf.go_offline()
df.iplot(kind='scatter', x='x', y='y', mode='markers')
```



DEMO OF THE PROJECT

APPLICATION OF CANCER PREDICTION SYSTEM

1. Early Detection
2. Risk Assessment-**risk of developing cancer based on various factors like age, lifestyle, family history, and environmental exposures.**
3. **Personalised Medicine**
4. **Patient Outcome Prediction-**survival rates and response to different treatment regimens.
5. **Public Health Planning**

THANKYOU!