

# BioPhhecy – Early Prediction of Lifestyle Diseases

## INSTRUCTIONS

- 1) Download Anaconda Navigator (application) from the browser, and install jupyter Lab software inside the application. Make sure your system has a minimum RAM of 8GB and above.
- 2) Launch Jupyter Lab and create a new folder (name of your choice) and create a subfolder inside naming it **dataset**, inside the folder dataset load the training\_data dataset into it.
- 3) Upon doing so, run the first module of the code known as **PCA**. Run all the cells one by one to get the desired results. You will find that a new dataset named **pcalist2.csv** will be saved in your folder.
- 4) On completion, run the second module known as **visualization** on the new dataset created from the above pcalist2.csv
- 5) After which we are training our model on 6 different machine learning models for which the codes are being provided , for example **filename ->LR&DT**. You will find two more files of the same type, which has to be executed one after the other. The order of running the files is completely your choice.
- 6) If you face an error in the line , `joblib.dump(rfc, 'final_models/rf_final.pkl')`, then go back to the folder area and create a new folder named **final\_models** upon which all the files generated during the execution of the code will be saved in that particular folder.
- 7) You will notice that a new csv file will be created named **accuracy**, if you observe the csv file it shows us the accuracy of all the 6 models that have been trained.
- 8) The last module is the **GUI\_Prediction**, for which you will find the codes. Run each cell one after the other, and you will find a new window appearing at the bottom of ur screen(taskbar) when clicked you can view the user-interface that has been created.

### NOTE:

As per our requirements we have used only Naïve Bayesian for prediction , hence all the other models have been commented by the symbol ( # ) , hence depending on your requirements you can un-comment the lines and execute the codes you will get predictions based on which model you select.