**EMPLOYEE ATTRITION PREDICTION USING ML**

**Description of the project:-**

* Attrition is the decrease in the number of employees over time as they leave due to personal reasons or retire. A low attrition rate is desired by many companies because it implies that employees are satisﬁed with their workplace and the company does not have to train new recruits.
* The organizations One of the major issues facing business leaders within companies is the loss of talented employees.
* The main aim of this project is to predict the employee attrition rate.
* Employee attrition is the loss of an employee due to the following any reason personal reasons, low job satisfaction, low salary, and a bad business environment.
* The prediction is to help the company to take the appropriate decision and identify the problem that is causing employee attrition and find a solution to it.
* So it reduces the issue of hiring replacements, and imposes high costs on the company, including the cost of interviewing, hiring, and training.

**Algorithm:-**

In this project used algorithm is Random forest. I try to train my dataset in different datasets now am get the maximum accuracy in the random forest the accuracy is 86% . now am trying to get a more accurate model.

**Hardware and Software:-**

This project uses Spyder to develop the data science code and flask server as the framework to connect the model code and the UI. The backend is python and the server is a flask.Ui is created using the HTML,CSS.

**Dataset:-**

In this project used a publicly accessible dataset, The data set is **“WA\_Fn-UseC\_-HR-Employee-Attrition”**. The dataset contains the HR-related data of 1470 employees with 32 features. Moreover, a total of 1233 active employees were from “No” attrition category whereas the remaining 237 former employees were from “Yes” attrition category .The dataset is downloaded in Kaggle website.

**Project current status:-**

The backend code are almost complete. Right now am testing whether I can get a model that gets more accuracy than the current one. The UI design are started its completed within the few days.