HCL Internship

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Title:- Attrition analysis and prediction in an IT Organization.

Introduction:-

In order to start, I have used IT Organization Analytics Employee Attrition & performance dataset, which has downloaded from kaggle. The data-set includes like employee id, targets, job satisfaction etc. For this exercise, we will try to study the factors that lead to employee attrition.

Abstract:-

Employees are an Organization's most valuable resource. In any case, if they left their employement unexpectedly, it could result in a significant financial loss for any company. Because new hiring costs money and time, as well as requiring newly employed personnel to, put in some effort to make the company productive. Following that, we aim to construct a model that would predict employee attrition rate based on HR analytics dataset in this research. To determine the reasons for employee attrition and reasons for leaving the organisation, a study called Predicting Employee Attrition and Reasons for leaving the organization was conducted.

Technical Requirements:-

* Python
* HTML
* Boot strap

Features:-

* By using this prediction we can decide the company is in loss or profit.
* Working abilities of a worker.
* Prediction of reason, Employee attrition

Ideation Map:-

Welcome to Attrition analysis and prediction
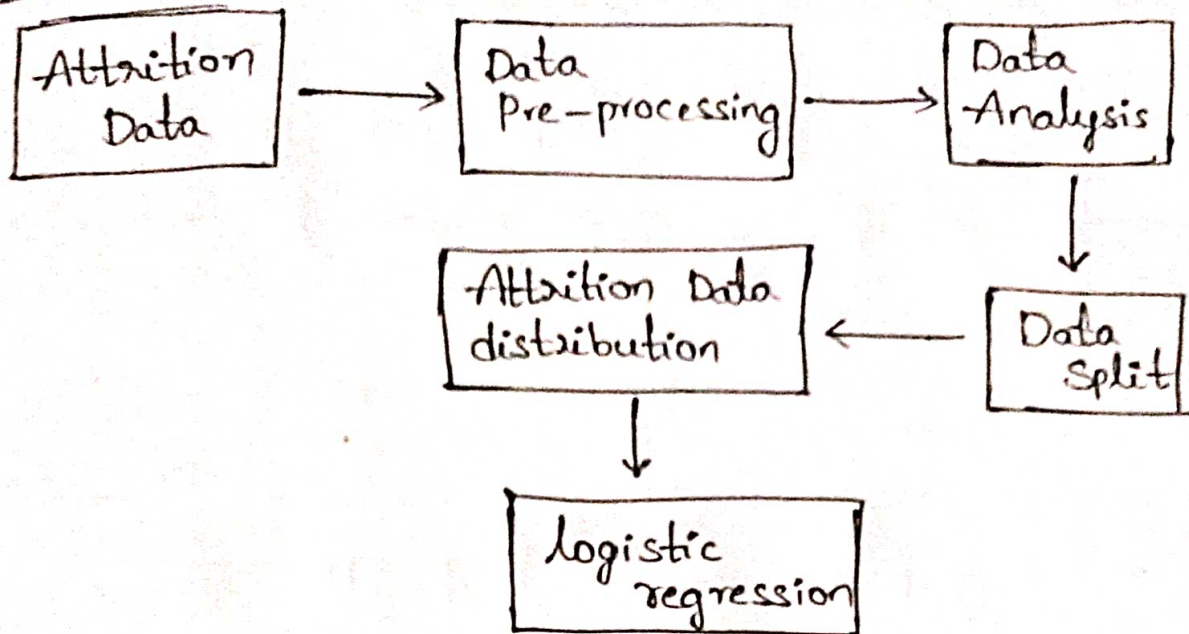
[Next]

Workers : [ ]

Attrition reason [ ]

Date [ ]

[Submit]

Prediction [ ]

Flow chart:-

```
┌──────────────┐      ┌──────────────────┐      ┌──────────────┐
│  Attrition   │ ───> │      Data        │ ───> │    Data      │
│    Data      │      │  Pre-processing  │      │   Analysis   │
└──────────────┘      └──────────────────┘      └──────────────┘
                                                        │
                                                        ▼
┌──────────────────┐         ┌──────────────┐
│  Attrition Data  │  <───── │     Data     │
│   distribution   │         │    Split     │
└──────────────────┘         └──────────────┘
        │
        ▼
┌──────────────────┐
│    logistic      │
│   regression     │
└──────────────────┘
```

Project Architecture:-

```
        ┌──────────────┐
        │  Front end   │
        └──────────────┘
           │      ▲
           ▼      │
        ┌──────────────┐
        │ Python Flask │
        │   Server     │
        └──────────────┘
               │
               ▼
        ┌──────────────┐
        │   Logistic   │
        │  Regression  │
        │    Model     │
        └──────────────┘
```