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# *INSOFE Mid-Term Hackathon: July 2018*

## **Efficient project management by Employee Over-Time prediction**

A manufacturing unit is consistently facing project over-time to finish. This is usually a sign for poor project planning or resource allocation. Now the company has decided smartly allocate the resource based on ML models. One indicator they have about project going out-of-budget is number of employees working overtime. If a good predictive model can help them predict which employees are expected to do overtime, then they can balance the resource allocation accordingly.

Your job is to build a Machine Learning model which will predict whether an employee will bill overtime on a project or not.

***Evaluation Metric: If Accuracy>65 then give the score for Recall***

### **Datasets:**

You have been provided **MiTHDataset.csv** which contains both train and test samples. A sample can be treated as train sample If istrain=1 otherwise it is treated as test sample. Train samples has Target value , whereas test samples does not have Target value. It was kept as NA.

You need to predict Target for the test samples and upload your predictions in the **samplesubmission.csv** format.

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## Attributes:

S.NO	Attribute	S.NO	Attribute
1	Age	20	NumberofCompaniesChanged
2	Frequencyof_Travel	21	Over18
3	DailyRate	22	Working Extratime(Target)
4	Division	23	PercentSalaryHike
5	DistancetoOffice	24	PerformanceRating
6	Education	25	RelationshipSatisfaction
7	Specialization	26	StandardHours
8	No.of Employees	27	ESOPs(stackoptions)
9	EmployeeID	28	DateOnwhich_datacollected
10	OfficeAmbianceRating	29	NoofTrainings_Attended
11	Gender	30	WorkLifeBalance
12	HourlyRate	31	DateOfjoininginthe_CurrentCompany
13	SelfMotivated	32	No of years with current designation
14	JobLevel	33	YearsSinceLastPromotion
15	Designation	34	YearsWithCurrManager
16	Happynesslevel in job	35	Istrain- (1 train sample,0 test sample)
17	MaritalStatus	36	NoofTrainings_Attended
18	SalaryperMonth	37	WorkLifeBalance
19	MonthlyRate		