# Project:

**Business Objective:** Customer churn is a big problem for telecommunications companies. Indeed, their annual churn rates are usually higher than 10%. For that reason, they develop strategies to keep as many clients as possible. This is a classification project since the variable to be predicted is binary (churn or loyal customer). The goal here is to model churn probability, conditioned on the customer features.

**Data Set Details:** Each row corresponds to a client of a telecommunications company for whom it has collected information about the type of plan they have contracted, the minutes they have talked, or the charge they pay every month.

The data set includes the following variables:

* state: Categorical, for the 51 states and the District of Columbia.
* Area.code
* account.length: how long the account has been active.
* voice.plan: yes or no, voicemail plan.
* voice.messages: number of voicemail messages.
* intl.plan: yes or no, international plan.
* intl.mins: minutes customer used service to make international calls.
* intl.calls: total number of international calls.
* intl.charge: total international charge.
* day.mins: minutes customer used service during the day.
* day.calls: total number of calls during the day.
* day.charge: total charge during the day.
* eve.mins: minutes customer used service during the evening.
* eve.calls: total number of calls during the evening.
* eve.charge: total charge during the evening.
* night.mins: minutes customer used service during the night.
* night.calls: total number of calls during the night.
* night.charge: total charge during the night.
* customer.calls: number of calls to customer service.
* churn: Categorical, yes or no. Indicator of whether the customer has left the company (yes or no).

**Acceptance Criterion:** Need to deploy the end results using Flask / Stream Lit etc

**Milestones:** 30 days to complete the Project

| **Milestone** | **Duration** |
| --- | --- |
| Kick off and Business Objective discussion | 1 day |
| Data set Details/EDA | 1 Week |
| Feature Engineering |  |
| Model Building | 1 Week – 1 ½ week |
| Model Evaluation | 1 Week |
| Feedback |
| Deployment |
| Final presentation | 1 day |

Protocols:

1. All participants should adhere to agreed timelines and timelines will not be extended.
2. All the documentation – Final presentation and python code to be submitted before the final presentation day.
3. All the participants must attend review meetings.