

# CAPSTONE PROJECT 2

# INITIAL PROJECT PROPOSAL

## SPRINGBOARD DATA SCIENCE TRACK

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### **Problem Background and Data:**

A manager at a ABC bank is disturbed because of more and more customers are leaving their credit card services. The manager would really appreciate it if someone could predict for them who is going to get churned so they can proactively go to the customer to provide them better services and turn customer's decisions in the opposite direction.

I would like to help the manager by solving the problem. I talked with the manager and he sent me a data set which consists of 10,000 customers at the bank mentioning their age, salary, marital status, credit card limit, credit card category, etc. There are nearly 18 features. One can get the dataset and description of the data from the link:

[https://leaps.analyttica.com/sample\\_cases/11](https://leaps.analyttica.com/sample_cases/11)

### **Models assumed to use:**

This problem is a classification problem. So to solve this problem in a better way, I would like to create a classification model based on the algorithms like Logistic Regression, Decision Tree, Random Forest, KNN, or SVM. I hope a model based on one of these algorithms will solve the problem with high performance and I can predict which customer is going to get churned.

### **How I will solve the problem:**

- Download the data
- Clean and organize the data
- Perform Exploratory Data Analysis (EDA), understand the data and identify important features.
- Create suitable model and train the model
- Use some suitable metric to check the performance of the model
- Deploy the model
- Get the result and document the result.