**Project Title:**

“Digging deep in past due patterns”

**Team Members:**

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**Project Description/Outline:**

We will analyze the accounts receivable from a company that offers leases of machinery in Latin America. We will focus on the accounts that are over a month past due. The idea is to deep into the data trying to discover correlation and patterns segmenting by countries and/or currency.

**Research Questions:**

* Is there a correlation between the past due and the Mexican peso exchange rate fluctuation?
* How does the change of president of the country of interest influences the past due of the debtors?
* Currency distribution (pie chart)

**Data to be Used:**

Company portfolio

Foreign exchange rates API

Google Places

**Tasks Breakdown:**

* Create a project repository
* Push dataset
* **Data cleaning (drop not relevant data)**
* **Data exploration**
  + **Understanding the data**
  + **Explore data with visuals.**
    - **Average of net investment by top 5 customer by country by year.**
    - **Pie chart of net investment by country in a given by year – average.**
    - **Bar graph of past due by country.**
    - **Frequency of aging by customer.- Laura.**
    - **Exchange Rate**
    - **Presidential changes on countries.**
* **Data preprocessing**
  + **Monthly past due net investment.**
  + **Monthly total portfolio.**
  + **Calculate monthly past due $ customer.**
  + **Calculate total past due by Aging.**
  + **Calculate total past due by Country.**
  + **Calculate average net investment per year per customer.**
  + **Min & Max of total past due by country, by customer, in a range period.**
* Retrieve data from APIs (get exchange rates)
* Get presidential data
* Data visualization with new info
* Prepare presentation