**ACAM Digital Transformers Agents Inc.**

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**Project Team:**

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**Objective:**

With scarce resources and budget cuts in the City of Toronto, we need to pars available data to efficiently allocate the existing resources with no impact on taxpayers. Using our program, we are aiming to identify the areas in Toronto the City needs to focus its resources on and predict possible income generated from parking fines.

**Step One:**

Gather the parking data for the City of Toronto (2015 to 2018) over six million records.

**Step Two:**

Data Cleanup via Panda and convert it to SQL database (10.000 records)

**Step Three:**

Demonstrate the ticket category and location based on address and time. User interaction required at this point, by providing the time and address web app creates a visual map output.

**Step Four:**

Load the actual data set. (Switech to unstructured format over twelve million records)

**Step Five:**

Using Machine Learning algorithms to forecast the income generated for the City of Toronto.

We use 2015 to 2017 data to train the model, and we use 2018 to test our prediction.

1. Predict monthly income
2. Predict locations with most tickets
3. Predict most frequent ticket types

**Step Six:**

Redesign the web portal and include predictions based on the historical data (drop down).