**DATS 6101 Project Proposal**

**Team No:** 3

**Team Member Names:**

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**Description and SMART Questions**

Climate change is one of the most widely researched and heavily debated topics of the 21st century. In the past decade, CO2 concentrations have risen to above 400 ppm for the first time in recorded climate history. Global temperatures are reflective of these changes in greenhouse gases that have increased natural disasters such as drought, hurricanes, and wildfires. To add to our understanding of climate change over the past few centuries, this project will explore regional and global records of temperature to answer the following questions using open source earth surface temperature data from Kaggle from 1750 to present.

1. What are the global temperature trends from 1750-present?
2. How do temperature trends vary across regions during this time period?
3. What are the decadal and centurial trends in temperature? Are temperature differences in these time periods statistically significant?

**Data Source**

The dataset used for this project has more than 50,000 observations spanning from 1750-present and is sourced from <https://www.kaggle.com/berkeleyearth/climate-change-earth-surface-temperature-data>

**Git Usage**

All work progress will be committed to GitHub at <https://github.com/BABAYEGAR/DATS6101-TEAM3-CLIMATE.git>