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**Climate Change Capstone - Project Proposal**

This project will attempt to analyze patterns in Earth Surface Temperature data in order to make inferences about climate change. Climate change can be defined as long-term shifts in temperatures and weather patterns. The focus will be to determine the extent of climate change in the 21st century, and identify areas of the planet that have seen the most drastic changes in temperature. According to some scientists, fighting climate change is the biggest challenge for humankind this century.

The data set that has been selected for this project is a file containing global land temperature data from 1750 until the present. Success for this project will be determined by the ability to describe the extent and prevalence of climate change in the current day. This can be done by highlighting key areas of the planet that have seen extreme shifts in temperatures in recent times. Further analysis may also be able to show predictions of what temperatures may look like in the future. The solution space will revolve around global land temperatures and measuring changes in temperatures over time. Constraints to this include the limitation of years of data, missing values within the data, as well as the accuracy of the temperature data itself.

The conclusion of this project will result in a slide deck and project report that will summarize the findings. This project is aimed at explaining the state of climate change in the current day.