**Project1 Proposal: Unveiling Trends in Global Climate Change**

**Project Members**

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**Project Overview**

This project aims to visualize global climate change trends using a comprehensive dataset of historical climate data. By thoroughly examining and cleaning climate dataset, we will create interactive and informative visualizations that communicate complex climate patterns and insights. We will create a series of charts that will track temperature and sea level rises over time and use geographical maps to visualize regional variations in climate change impacts.

**Data Sources**

* **NASA's Global Climate Change:** Historical temperature and sea level data
* **NOAA's National Centers for Environmental Information:** Additional climate metrics and regional data
* **Kaggle:** Global Temperature csv

**Timeline**

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| **Phase** | **Tasks** | **Estimated Time** |
| **Project Development**  **Data Acquisition and Cleaning** | Research and identify datasets to use  Download data, clean, merge and preprocess | Tues, Nov 5  Thur, Nov 7 |
| **Visualization Development** | Create static and interactive visualizations | Tue, Nov 12 |
| **Storytelling & Communication** | Develop narrative and design user interface | Thur, Nov 14 |
| **Project Simulation**  **Public Engagement** | Final testing and presentation rehearsal  Share visualizations with class | Mon, Nov 18  Tues, Nov 19 |

**Methodology**

1. **Data Acquisition and Cleaning:**
   * Download and import the necessary datasets.
   * Handle missing values and outliers.
   * Format and preprocess the data for visualization.
2. **Visualization Creation:**
   * Utilize data visualization libraries to create:
     + Line charts to show trends over time.
     + Heatmaps to visualize spatial patterns.
     + Scatter plots to identify correlations between variables.
     + Interactive dashboards to enable user exploration.
3. **Storytelling and Communication:**
   * Develop a clear and concise narrative to accompany the visualizations.
   * Design an intuitive user interface for the interactive dashboards.
   * Create a powerpoint presentation