Phase 3

Team 2: DAK

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**Challenges:**

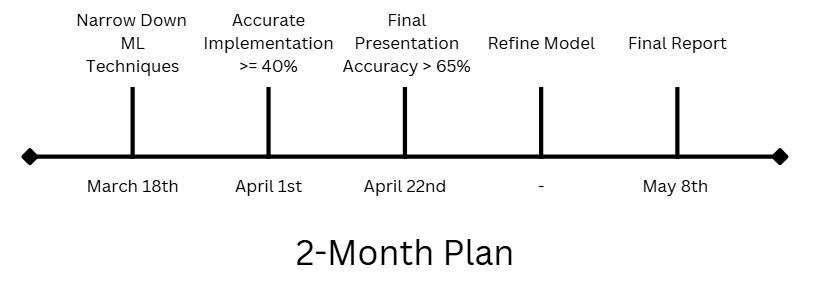
* Data Challenges - Since extreme weather events are rare, the overall data are scarce, which can lead to a drop in quality and accuracy.
* Computational Challenges - Climate datasets are massive, so we need a lot of resources to process them.
* Data-Driven Models - Feeding different datasets becomes a constraint based on various inputs, narrowing down and filtering such inputs would prove to be beneficial for the model.
* Geographic Region - Various temperatures, elevation, and overall climate differences come with each region. Narrowing down to an extremely weather-dense region would further the acceleration of the weather prediction model.

**Method:**

* Significance of the Dataset - Try to pinpoint datasets that will give us valuable information that deals with extreme weather predictions such as Temperature, Precipitation, Humidity, and Atmospheric Pressure.
* Training - Use Logistic Regression, a supervised learning algorithm, to learn from specific historical data and make predictions for newer data.

**Proposed Method Techniques:**

* Method - Logistic Regression (Supervised)
* Framework - PyTorch
* Datasets - Weather Query Builder (Specific Climate Data) and TorNET (Extreme)
* Geographic Region/s - “Tornado Alley” (Texas, Louisiana, Oklahoma, Kansas, South Dakota, Iowa)

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