

Sample Mini-Project Proposal

Note that I expect more detail than this example in your project proposal and it should be tailored to your specific project

Your proposal should be around 1 page in length

1. **Who: Proposed client** – Meteorologist
2. **Why: Question/Topic being investigated** – Using different weather parameters in order to predict the air temperature
3. **How: Plan of attack** – We will find the weather dataset online and will implement three different ML models on the preprocessed dataset to determine which model gives us the highest accuracy. Preprocessing may include scaling and encoding the original data and implementing a form of hyperparameter tuning.
4. **What: Dataset, models, framework, components**
 - a. **Dataset:** Weather data (where will you find this dataset?)
 - b. **Models:** Three regression models
 - c. **Framework:** Preprocessing -> Data splitting -> Hyperparameter tuning -> Model implementation -> Validation -> Visualization
 - d. **Components:** Here is where you would list the specific components (types of preprocessing, method for hyperparameter tuning, etc.) of your solution

Potential dataset locations:

- UCI Machine Learning Repository
 - <https://archive.ics.uci.edu/ml/index.php>
- Kaggle
 - <https://www.kaggle.com/datasets?fileType=csv>
- Yellowbrick
 - <https://www.scikit-yb.org/en/latest/index.html>
- Scikit-learn datasets
 - <https://scikit-learn.org/stable/datasets.html>