

**IHC – Artificial Intelligence for Real World Application**

**Industry Assignment No. 2**

**Problem Statement**

The Meteorological Department of Australia has compiled an extensive data about the rainfall in major cities of Australia. The data includes value – date, location, minimum temperature, maximum temperature, rainfall, evaporation, sunshine, wind direction, wind speed, humidity, pressure, cloud, temperature, rain today, risk, rain tomorrow. The dataset is a time-series data.

**Data Set**

CSV dataset – weatherAUS.csv

**What is expected**

Create a prediction model that will predict whether it will rain the next day or not.

**Rubrics**

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| 1 | Data Collection - Completeness and correctness of data collection | 10 |
| 2 | Data preparation - cleansing and preparing data for the next steps of model development | 10 |
| 3 | Algorithm Understanding - Knowledge of the algorithm used for model development | 15 |
| 4 | Model Development - Building the model with the right selection of the parameters | 20 |
| 5 | Model Tuning - Improving the model performance by tuning the hyper parameters | 15 |
| 6 | Model Evaluation - Testing the model on sufficient sample for correctness | 10 |
| 7 | i) Final Presentation and QA ii) Demonstration of the Working Demo of the system. | 20 |

Students are also given a logical flow as a skeleton to the overall project, but they are advised to add further steps where they feel necessary based on the rubrics defined above for maximum marks.

Developing a predictive model that predicts whether it will rain the next day or not.