**PRCP-1013-WalkRunClass**

**Problem Statement**

Task 1:-Prepare a complete data analysis report on the given data.

Task 2:-Create a predictive model to classify whether a person is running or walking based on the given predictor variables.

**Dataset Link:**

Multi-layer neural networks will be trained and evaluated based on data from [Run or Walk Reduced dataset](https://www.kaggle.com/vmalyi/run-or-walk-reduced). Note that this Run or Walk Final dataset uses only the subset of data from the original [Run or Walk dataset](https://www.kaggle.com/vmalyi/run-or-walk).

Link: <https://d3ilbtxij3aepc.cloudfront.net/projects/CDS-Capstone-Projects/PRCP-1013-WalkRunClass.zip>

**Attribute Information:**

The dataset comprises the readings of motion sensors recorded while users executed typical daily activities. The detailed format is described in the package. The attributes correspond to raw sensor readings. There are a total of 11 attributes.

1. date
2. time
3. username
4. wrist
5. activity
6. acceleration\_x
7. acceleration\_y
8. acceleration\_z
9. gyro\_x
10. gyro\_y
11. gyro\_z

**Model Comparison Report**

Create a report stating the performance of multiple models on this data and suggest the best model for production.

**Report on Challenges faced**

Create a report which should include challenges you faced on data and what technique used with proper reason.

Note:-All above task has been created on single jupyter notebook and share the same while final submission of project.