**Problem Statement**

The Chief Operating Officer of a Software Service Provider company is looking to evaluate the efficacy of their incident/issue resolution process and have shared the details of the incident log data. They would like to perform the following analysis to improve their operations to drive better customer satisfaction.

1. Understand the distribution of incidents to identify the spread by key attributes.
2. Understand the alignment between urgency/priority of incidents against the resolution parameters/statistics.
3. Build a predictive model using the data that can estimate the resolution time for incident raised in the future.
4. Build a classification model that would bucket the incidents into high priority/ urgency buckets.
5. Suggest recommendations to reduce resolution time.

**Response**: Candidate is expected to respond through a Jupyter notebook or a .py file along with responses on the qualitative questions embedded in the code as comments

**Data**: Incident Log Data; Data Dictionary

**Evaluation Criteria:** The candidate will be evaluated on the following parameters:

1. Python Knowledge and Quality of code (20%)
2. Data exploration and processing – with a primary focus on points 1 and 2 above (20%)
3. Modeling (20%)
4. Model Evaluation (20%)
5. Presentation of Results (20%)