

# Greetings from ResoluteAI.in!

Thank you for your interest in our internship opening. As a next step in the screening process, you are required to complete the below mentioned assignment.

Data Link: Data set link for all tasks

Role: Data Science - Intern

**Dataset: PFA** 

Task 1: Machine Learning - Clustering

Task: Use any clustering technique to extract patterns or segregate data into groups.

User Story: User should be able to provide a data point (a row) and program should be able to identify

to which cluster given data point belongs to and why?

Hint: Clustering

#### Task 2: Machine Learning - Classification

Task: Train any classification model(s) on the train sheet and test your algorithm on the test sheet.

Share target values for the test, we will evaluate from our end.

If using multiple algorithms, plz share target values for each algorithm.

Also share your algorithm's train accuracy and mention the reason behind choosing your algorithm.

### Task 3: Python

Task: Use rawdata as input and derive

- 1. Datewise total duration for each inside and outside.
- 2. Datewise number of picking and placing activity done.

Sample output shared in output sheet.

### Task 4: Basic Streamlit/Flask

Task: Represent output of above 3 tasks either in streamlit or flask page.

# Important points to consider before submission:

- 1. You are free to choose open-source models and codes. Please ensure that there is no complete copy paste done.
- 2. Please share **only screen recorded videos** and not the code files.
- 3. Rename your screen recorded file with your name.
- 4. Videos without the applicant's name in filename would not be considered for evaluation.
- 5. Fill the google form while submitting your assignment, without fail. Google Form Link
- 6. Need to complete all 4 tasks mentioned. However, if stuck at any one task, please move to next and complete as much as possible before the deadline.
- 7. Approach for all tasks and reading of instructions will be given higher preference over accuracy and code.

Good Luck!!