### PROBLEM STATEMENT

# **MACHINE LEARNING**

One often misses events of interest sheerly due to a lack of awareness at the right time. Cloud Counselage also receives invites for events in multiple domains that need to be forwarded to people with relevant interests.

The aim is to create a Recommender System that recommends only relevant events to each employee and intern based on their preferences, whenever the company receives invites for said events. The system should read new events and autonomously classify them into various domains. It should then match the event with all of those in the company database who have given said domains as a preference. Finally, for each event, the system should output the list of people whose preferences match with the event's detected domain. Create a report documenting your approach and methodology followed.

#### **OBJECTIVES -**

- To read a set of events as input.
- To classify each event into one or more domains.
- To fetch the employee database with domain and event preferences.
- To match each event with all interested employees.
- To output the list of matching employees per event.

### **CONSTRAINTS** –

- The system is to be created in Python 3.6 or above.
- The events and employee list to be read shall be provided as a [txt] with 1 element per line.
- You are allowed to use any ML approach, publicly available resources, and additional training data, but the final output should be on the provided list.
- The output shall be in the form of a spreadsheet having a column for event name and another for the names of people to recommend said event to.
- The output spreadsheet should be auto-generated by the system you create.

# POINTS FOR THE OUTPUT -

- The system should handle I/O only as mentioned in order to be evaluated correctly.
- Submission of the complete working code of the designed system to be done.
- Report:
  - o Methodology of the overall system.
  - o Tools & libraries used for the system.
  - o ML approach utilized.
  - o Recommended future improvements.