Project: Analyses of Customer Service Data using Microsoft Excel

iVision is a well-known analytics firm. ***iVision*** does analytics on the data shared by their clients. Recently, ***iVision*** collaborated with ***Nile,*** an E-commerce company. ***Nile*** intends to improve their customer service, but before doing so, ***Nile*** wants to get some insights on their customer service request data. To help ***Nile*** make better business decisions and improve their services, ***iVision*** is engaged to provide ***Nile*** access to the analytics dashboard and report.

Nile has shared its customer service data with ***iVision***. As an employee of ***iVision***, you are responsible for creating this analytics report.

Data Description:

- **Id:** Unique Customer id
- **customer_name**: Name of the customer
- **sentiment**: Sentiment of the customer (Neutral, Positive, Very Positive, Negative, Very Negative)
- **csat_score**: Customer Satisfaction Score (Scale of 1 to 10, 1 being lowest and 10 being Highest)
- **call_timestamp**: Date on which the call was made by the customer.
- **call_day**: Day of the Call (1 represents call was made on 1st of the month, similarly for other numbers)
- **reason**: Reason why the customer called (Billing Question, Service Outage & Payments)
- **city**: City to which the customer belongs
- **state**: State to which the customer belongs
- **channel**: Mode of communication that customer used (Call-center, Chatbot, Email, Web)
- **response_time**: How fast the customer request was serviced (SLA level Above SLA, Below SLA, Within SLA)
- **call duration in minutes**: Duration of the call
- **call_center:** Location of the call center where service request was handled.

Software/Tools:

- Microsoft Excel

Business Objective:

The analysis aims to leverage data-driven approaches to optimize customer service processes, enhance customer experience, and drive overall business growth. By examining historical customer service data, the project seeks to identify patterns, trends, and opportunities for improvement, ultimately leading to enhanced customer loyalty and increased operational efficiency.

Project Goals:

- **Customer Sentiment Analysis:** Perform sentiment analysis on customer interactions. Identify positive, negative, and neutral sentiments expressed by customers to understand overall satisfaction levels.
- **Root Cause Analysis:** Investigate common customer complaints. Pinpoint recurring problems to address them proactively and prevent future escalations.
- **Service Response Time Analysis:** Analyze response times for customer queries and support requests to assess the efficiency of the customer service team.
- **Customer Segmentation:** Segment customers based on their demographics, behavior, and preferences. Understand different customer segments' needs and pain points to tailor services and communications accordingly.
- **Trends and Patterns Identification:** Identify patterns and trends in customer service data to uncover opportunities for process improvements and innovative service offerings.

Expected Deliverables:

- Data-driven insights and actionable recommendations based on sentiment analysis and root cause identification.
- Real-time monitoring dashboard for tracking all the Project Goals

Artifacts to be generated (For Learners):

- MS Excel File (.xlsx)
- Presentation (Slides) summarizing the project:
  - Learner needs to present this to Faculty (Viva-Voice)
  - Presentation time: 10 Mins
- Artifacts generated needs to be submitted in vLearn on or before deadline.
- Create a zip file of Excel and Presentation file:
  - Zip file name: <LearnerName>_ABADS_<Batch>.zip
  - E.g., KartikMudaliar_ABADS_B10.zip

Grading Criteria (For Faculty & Learners):

Learners will be graded on below mentioned parameters (20 points for each):

1. **Relevance and approach of Analysis**
2. **Quality of Output**
3. **Overall presentation**
4. **Response to Questions**
5. **Creativity & Innovation**

Total Points: 100