## Title:

Online Shoppers' Purchasing Intention

# **Group Members:**

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## Aim:

In today's world of e-commerce and online shopping, it is critical for businesses to know about the intention of users towards buying their products on their websites. The objective of this project is to determine whether a user session on a website will culminate in a final purchase or not.

# **Description (Dataset):**

The dataset comprises 12,330 sessions of unique users over a period of one year. There are 18 feature vectors with 10 of them being numerical and 8 categorical. The "Revenue" field shows whether a successful purchase was made or not. Out of 8 categorical variables, 4 variables are already converted to numeric values and information regarding these 4 variables is not disclosed in the description. For example, a feature named Region has values from 1 to 9 in the dataset, but there is no information regarding what each number is referred to.

## **Research Questions to be addressed:**

- ❖ Analyse the different kinds of sessions, viz. Administrative, Informational, Product related which will lead to a purchase
- ❖ Develop a live dashboard for decision-makers that will display, including, but not limited to, the breakup of successful purchases based on the types of visitors, purchase months, the occurrence of special days
- Perform predictive analysis to determine whether a user will make a purchase or not.

#### **References:**

Dataset URL: archive.ics.uci.edu/ml/datasets/Online+Shoppers+Purchasing+Intention+Dataset

Real-time prediction of online shoppers' purchasing intention using multilayer perceptron and LSTM recurrent neural networks.

Sakar, C.O., Polat, S.O., Katircioglu, M. et al. Neural Comput & Applic (2018). [Web Link]