Problem statement:

People often spend a lot of time browsing through online shopping websites, but the conversion rate into purchases is low. Determine the likelihood of purchase based on the given features in the dataset. The dataset consists of feature vectors belonging to 12,330 online sessions.

The purpose of this project is to identify user behaviour patterns to effectively understand features that influence the sales.

Data Description:

The dataset contains the following features:

|  |  |  |  |
| --- | --- | --- | --- |
| **Index** | **Features** | **Description** | **Data Type** |
| 1 | Administrative | Number of pages visited by the user for user account management related activities | Discrete : Range - 0 to 27 |
| 2 | Administrative\_Duration | Time spent on Admin pages by the user | Continuous : Time in seconds |
| 3 | Informational | Number of pages visited by the user about the website | Discrete : Range - 0 to 24 |
| 4 | Informational\_Duration | Time spent on Informational pages by the user | Continuous : Time in seconds |
| 5 | ProductRelated | Number of product related pages visited by the user | Discrete : Range - 0 to 705 |
| 6 | ProductRelated\_Duration | Time spent on Product related pages by the user | Continuous : Time in seconds |
| 7 | BounceRates | Average bounce rate of the pages visited by the user | Continuous |
| 8 | ExitRates | Average exit rate of the pages visited by the user | Continuous |
| 9 | PageValues | Average page value of the pages visited by the user | Continuous |
| 10 | SpecialDay | Closeness of the visiting day to a special event like Mother’s Day or festivals like Christmas | Discrete : Range – (0.0 to 1.0) |
| 11 | Month | Month of the visit from Jan to Dec | Categorical |
| 12 | OperatingSystems | Operating Systems of the visitor | Discrete : Range - 0 to 7 |
| 13 | Browser | Browser of the visitor | Discrete : Range - 0 to 12 |
| 14 | Region | Geographic region from which the session has been started by the visitor | Discrete : Range - 0 to 8 |
| 15 | TrafficType | Traffic source through which user has entered the website | Discrete : Range - 0 to 19 |
| 16 | VisitorType | Visitor type as New visitor, Returning user or Others | Categorical |
| 17 | Weekend | If the user visited on a weekend or not | Boolean |
| 18 | Revenue | If the user visit resulted with a transaction | Boolean |