**Proposed Project Name:** Online Shoppers Purchase Intention

**Due Date:** October 20, 2018

**Problem Statement:**

Shopping online has opened up a new realm in the world of business which has been expanding at a constant rate. People nowadays are more prone to opening up the various websites or apps to look up the new inventory or the required essentials they might be in need of rather than going up to the stores. At this time, it has become a great ordeal for the various sellers and the online platforms to delve deeper into the shopping habits and behavior of their customers to assess their customers. This pattern in the customers purchase intention can be easily predicted by analyzing the history of the customers.

**Source(s) of Datasets:**

With e-commerce becoming ever present in today's economy, it is providing a wider range of products and services being offered with the comfort of never leaving your house. Online shoppers purchase intention is a diverse dataset with numerical and categorical features describing the behavior of the shoppers while they use online websites which can be then used to predict their propensity towards using such online platforms. The dataset which we will use doesn't have any instance from a specific sale, special day, user, or any particular time period repeating which will prevent from any particular trend being dominant in the data.

- *http://archive.ics.uci.edu/ml/datasets/Online+Shoppers+Purchasing+Intention+Dataset*

**Implementation Plan:**

The online shoppers purchase intention project will consist of three important phases: **1) Exploratory Data Analysis**, **2) Data Preprocessing**, **3) Model Building** and **4) Model Tuning and Comparison** Below is a brief description of the phases that will form our timeline of the online shoppers purchase intention predictor:

- 
- **Exploratory Data Analysis –** We will use various visualization methods to try to understand the connection between the various features present in the dataset with the class label and select the best ones that will make our predictor more well-informed.
- **Data Preprocessing –** Cleaning the dataset of any spurious instances and augmenting the data to make it ready for feeding into the various models.
- **Model Building –** 3 or more models will be built to predict the shopper's intention of whether they are more likely to use e-commerce platforms or not
- **Model Tuning and Comparison-** The best parameters for the built models will be found to build an efficient one and then their accuracy will be compared to understand which model does better.

**Team Members and Task Allocation:**

**Apoorv Lunkad**

**Kasyap Rayalacheruvu**

**Ayush Ashutosh Panigrahi**

The following tasks will be equally split between the team members:

- Literature review
- Exploratory Data Analysis
- Data Preprocessing
- Coding algorithm
- Project report write-up