

## Job Oriented Specialisation in Data Science

### Course 6: Clustering

#### Project: Segmenting customers into clusters

Perform Customer Segmentation on the transactional data to build an efficient marketing model. This is a transactional data set that contains all the transactions occurring between 01/12/2010 and 09/12/2011 for a registered non-store online retail.

Invoice No: Invoice number. Nominal, a 6-digit integral number uniquely assigned to each transaction. If this code starts with the letter 'c', it indicates a cancellation.

StockCode: Product (item) code. Nominal, a 5-digit integral number uniquely assigned to each distinct product.

Description: Product (item) name. Nominal.

Quantity: The quantities of each product (item) per transaction. Numeric.

Invoice Date: Invoice Date and time. Numeric, the day and time when each transaction was generated.

UnitPrice: Unit price. Numeric, Product price per unit in sterling.

CustomerID: Customer number. Nominal, a 5-digit integral number uniquely assigned to each customer.

Country: Country name. Nominal, the name of the country where each customer resides.

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#### Guidelines:

- a. The code should be submitted in the form of pdf format of the jupyter notebook. The option could be found in the "*File > Download as*" section in the notebook.
- b. Make sure the pdf format notebook contains all the relevant output of the code cells. Notebooks that have not been run for displaying the outputs will be marked as incomplete.
- c. The code should be well commented on and documented.
- d. All project files should be added in a folder with your name and then compressed. (Right-click on the folder> Send to > Compressed (zipped) folder) and give the file your name. Then you may upload this zipped file on the project submission page.