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| **Project Title** | Retail Industry |
| **Technologies** | Machine Learning Technology |
| **Domain** | Machine learning |

# Problem Statement:

The sales team at a retail company wanted to create a product profile to suggest products to customers. Sales team members turned to their data science team to recommend products to customers with machine learning applications (MLOps).

In a meeting with the management team of the retail company, it was suggested that the machine learning model be trained and tested with a variety of data sets as needed. As a result, business users should be able to upload training data to MLOps and select features through the user interface (UI). Users should also be able to upload and preview test data to test the model. Explanations AI functionality should be implemented by MLOps to help business users understand what the model outcomes mean. To simplify and better understand model outcomes, business users requested visual data analysis functionality.

**Approach:** Tasks related to classic machine learning such as collecting data, cleaning it, defining features, building models, and testing them. You can experiment with different machine learning algorithms to see which is the best fit for the above case.

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eepsphere.AI

# Dataset:

Dataset Link: <https://github.com/dipanjanS/practical-machine-learning-with-python/blob/master/notebooks/Ch08_Customer_Segmentation_and_Effective_Cross_Selling/Online%20Retail.xlsx>

# Project Evaluation metrics:

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| **Sn.No** | **Develiable** | **Format** |
| 1 | Document | Link: https://github.com/asharsha/hackathon/blob/main/Hackathon\_Document%20(1).docx |
| 2 | Code | 1. Code should be written in a modular manner to make sure it is organized and easy to maintain. 2. Prioritize safety in your code to prevent harm. 3. Ensure your code is testable at the code level to facilitate effective testing. 4. Maintainability is crucial, so design your code to handle growth as your project expands. 5. Aim for portability, ensuring your code works consistently across different environments and operating systems. |

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|  |  | 1. Host your code on GitHub for version control and collaboration. 2. Set your GitHub repository to be public to allow others to review your code. 3. Create a comprehensive README file for each project you develop. 4. Include essential information in the README, such as basic workflows and project execution instructions. 5. Adhere to Python's coding standards outlined in PEP 8: [link](https://www.python.org/dev/peps/pep-0008/) |
| 3 | User Interface | User interfaces should be included in your model testing. Anything will be fine with us. For example, Flask, Streamlit, etc. |
| 4 | Deployment | The deployment process for your code can be done using any cloud platform like:AWS, GCP, Azure and Streamlit Share. |