IE 413 - Information Systems Assignment #1

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| --- | --- | --- | --- |
|  | Accuracy\_score | Recall Score | Precision Score |
| Decision Tree | 0.4871569855371435 | 0.4717858371418743 | 0.50101555261088 |
| Logistics  Regression | 0.5037254038579213 | 0.4767336232738709 | 0.5034244895427772 |
| MLP | 0.5661766093688285 | 0.5403777826920242 | 0.5889353509357995 |
| Gaussian Naive Bayes | 0.46502167663328764 | 0.4762139417170377 | 0.4638881055221159 |
| SVC | 0.4995299219912367 | 0.4496911396137403 | 0.5198783545057882 |
| Gaussian  Process  Classifier | 0.43759388539102095 | 0.41370104182023687 | 0.43410577412160734 |

According to the accuracy scores, MLP has the best accuracy performance in terms of all accuracy metrics, hence we can choose this model.

Beyond that, for the first time, we behaved the all attributes as nominal, and we converted them as ordinal. However, we cannot change the age attribute because it is naturally ordinal. Also, we cannot convert the customer ID’s.

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