Lead Scoring Case Study

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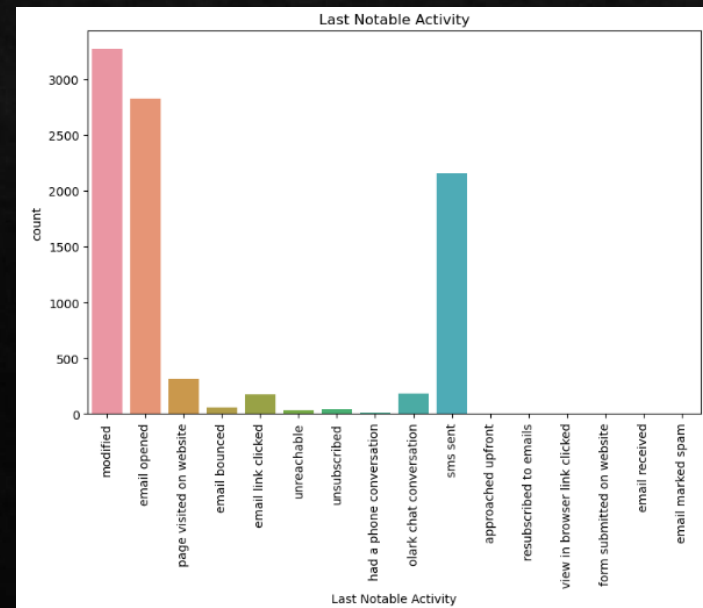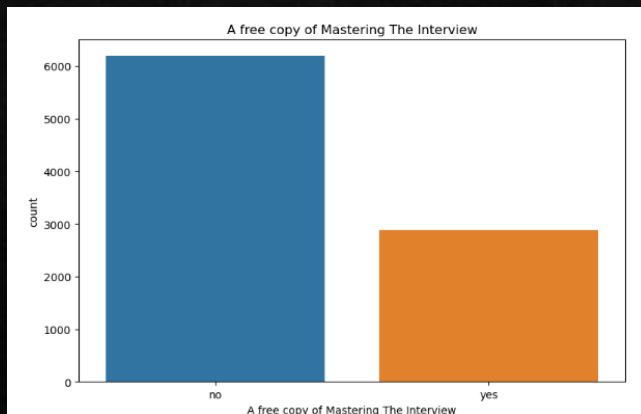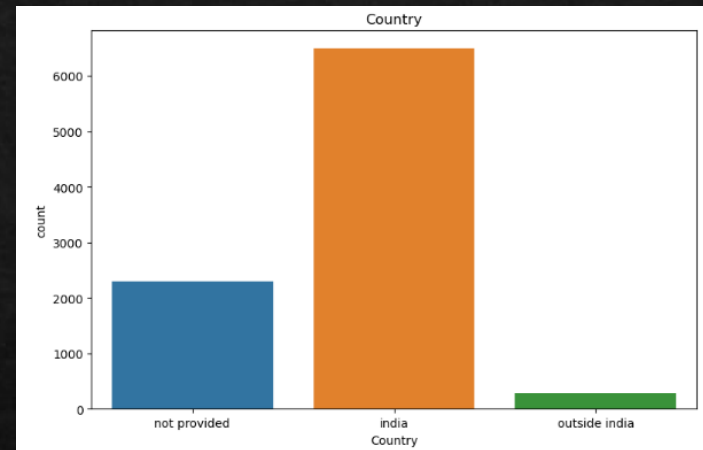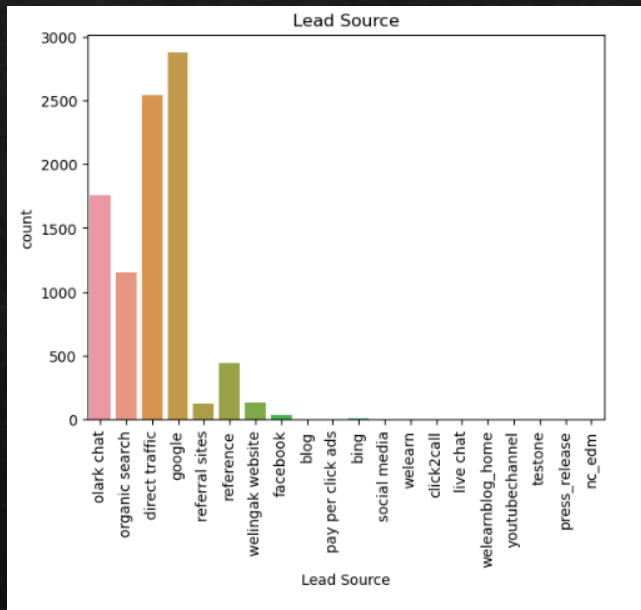4. Model Evaluation
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Problem Statement

- An education company named X Education sells online courses to industry professionals. On any given day, many professionals who are interested in the courses land on their website and browse for courses. They have process of form filling on their website after which the company that individual as a lead.

- Once these leads are acquired, employees from the sales team start making calls, writing emails, etc. Through this process, some of the leads get converted while most do not.

- The typical lead conversion rate at X education is around 30%. Now, this means if, say, they acquire 100 leads in a day, only about 30 of them are converted. To make this process more efficient, the company wishes to identify the most potential leads, also known as Hot Leads.

- If they successfully identify this set of leads, the lead conversion rate should go up as the sales team will now be focusing more on communicating with the potential leads rather than making calls to everyone
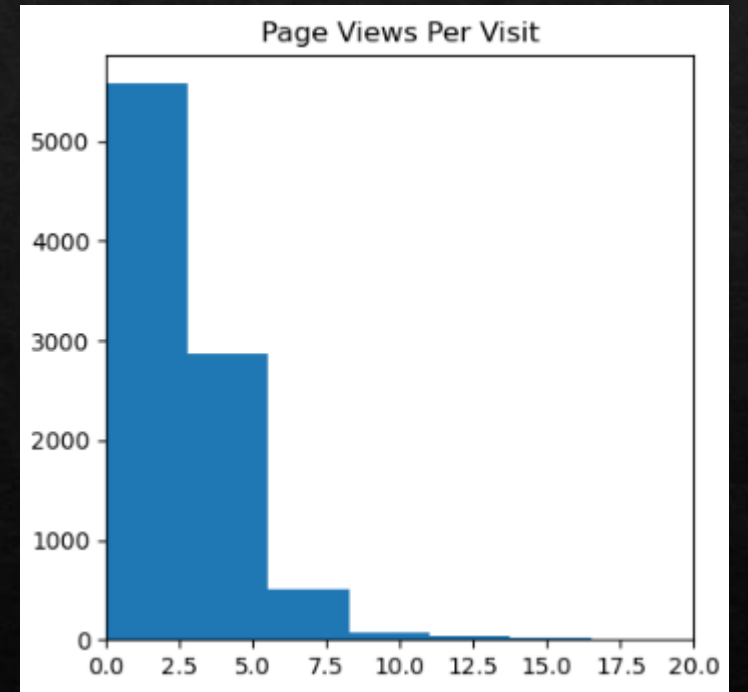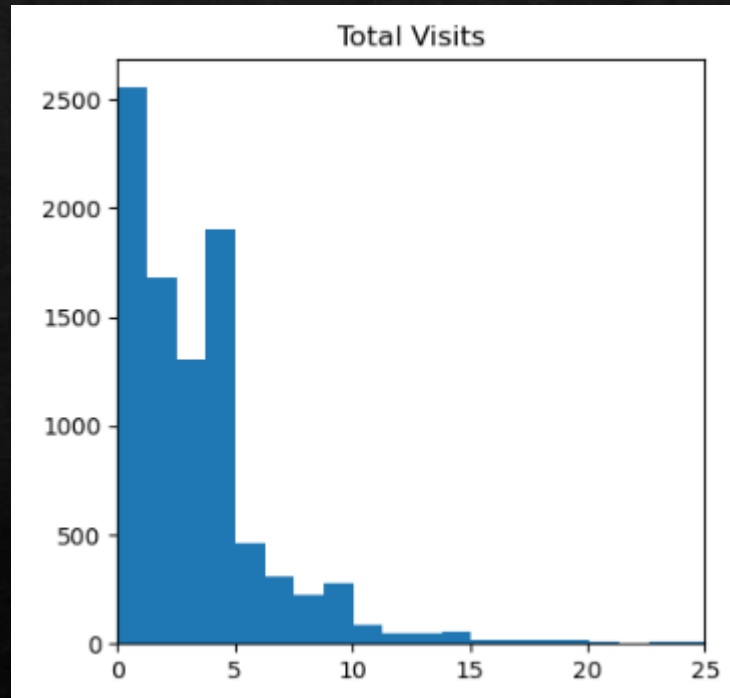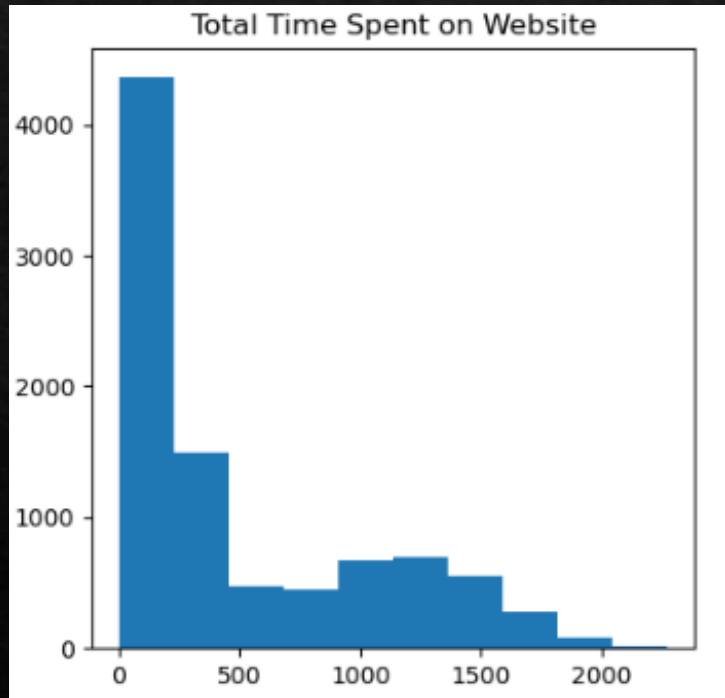
EDA

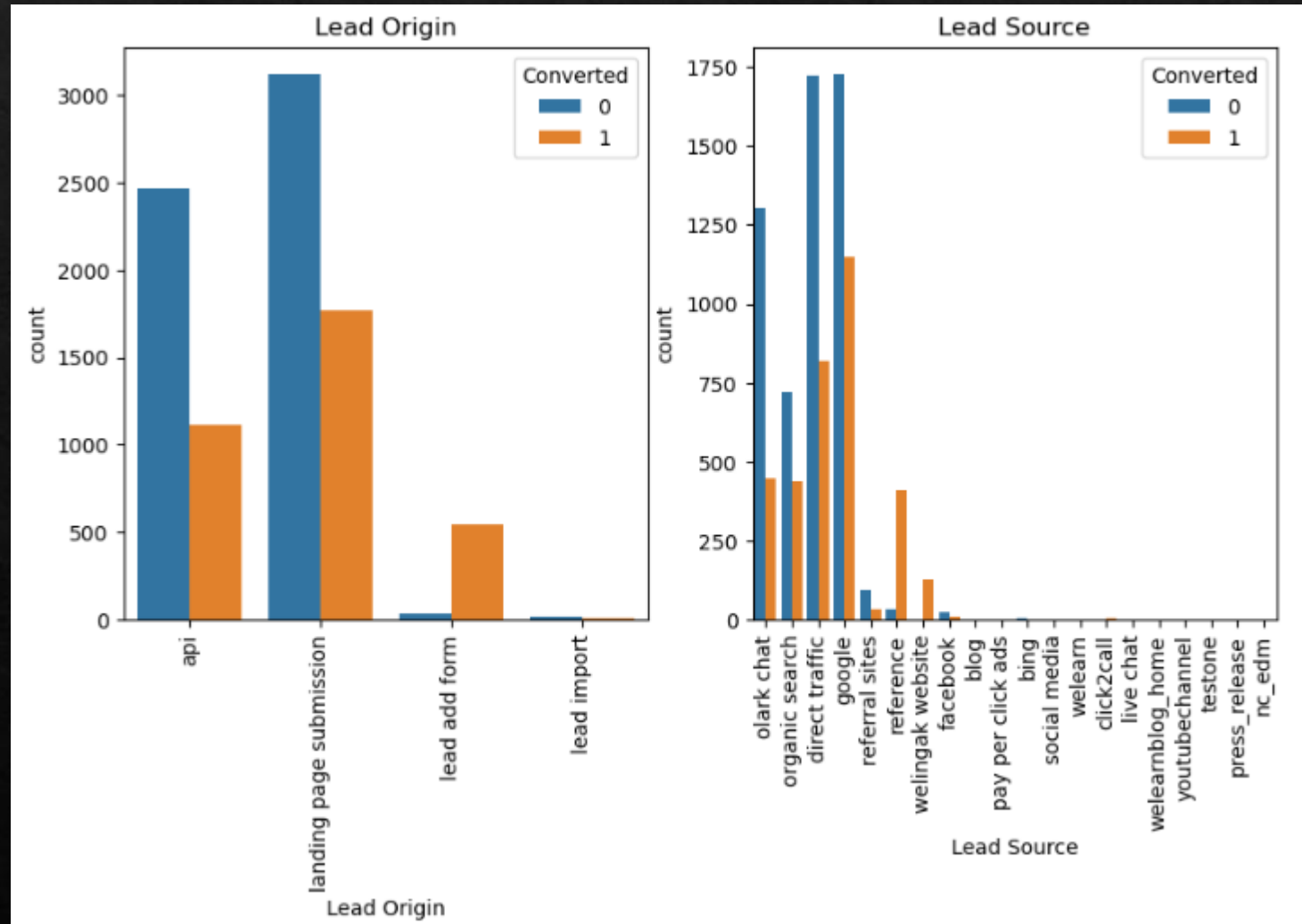- Univariate Analysis – Categorical Variables

EDA

- Univariate Analysis – Numerical Variables
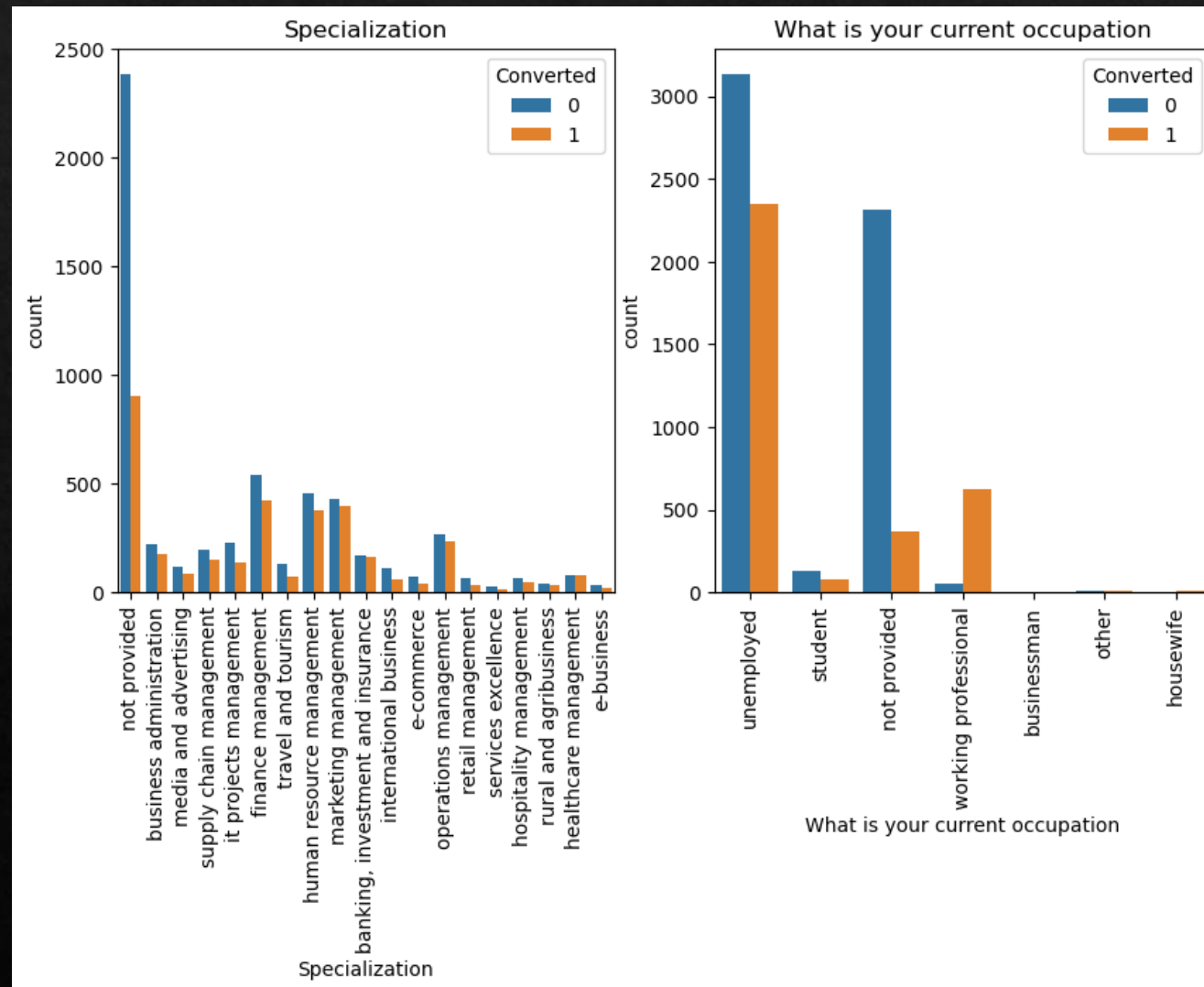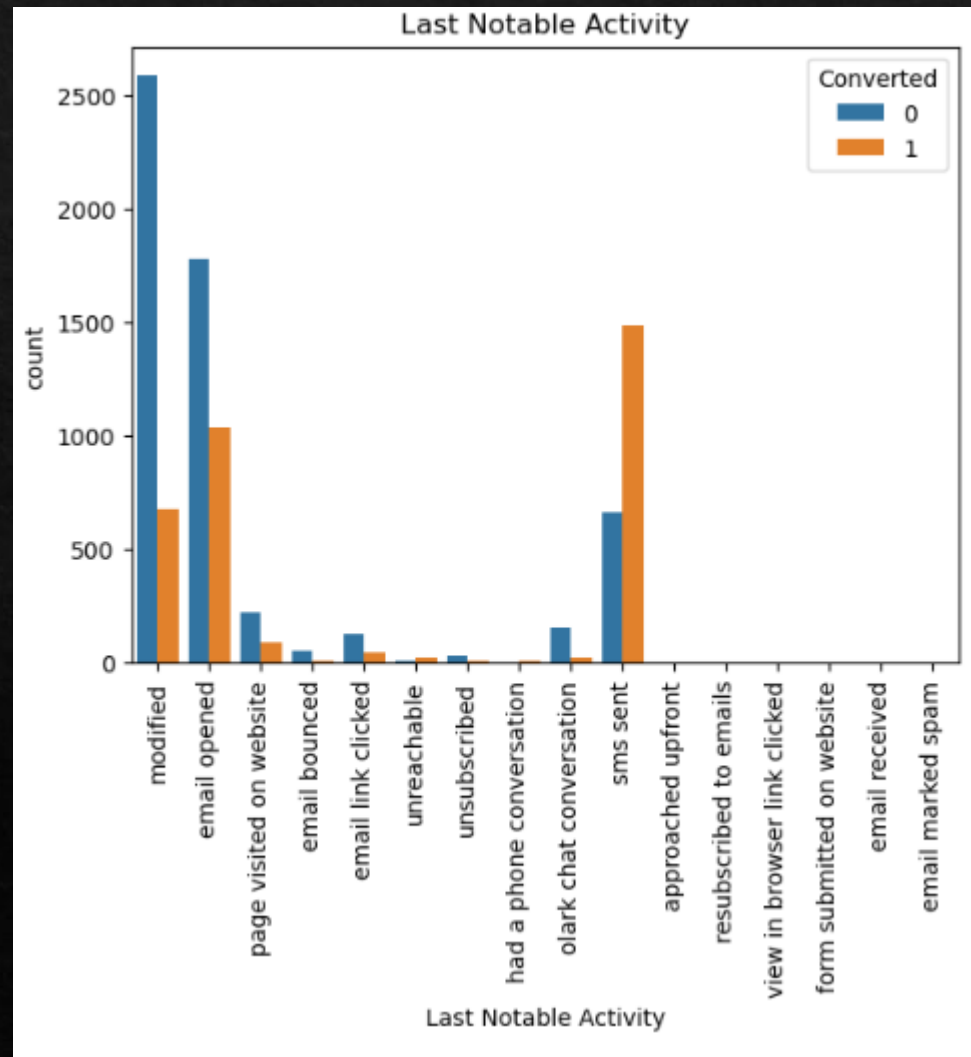
EDA

- Lead Origin vs Lead Source

EDA

- Specialization vs Occupation

EDA
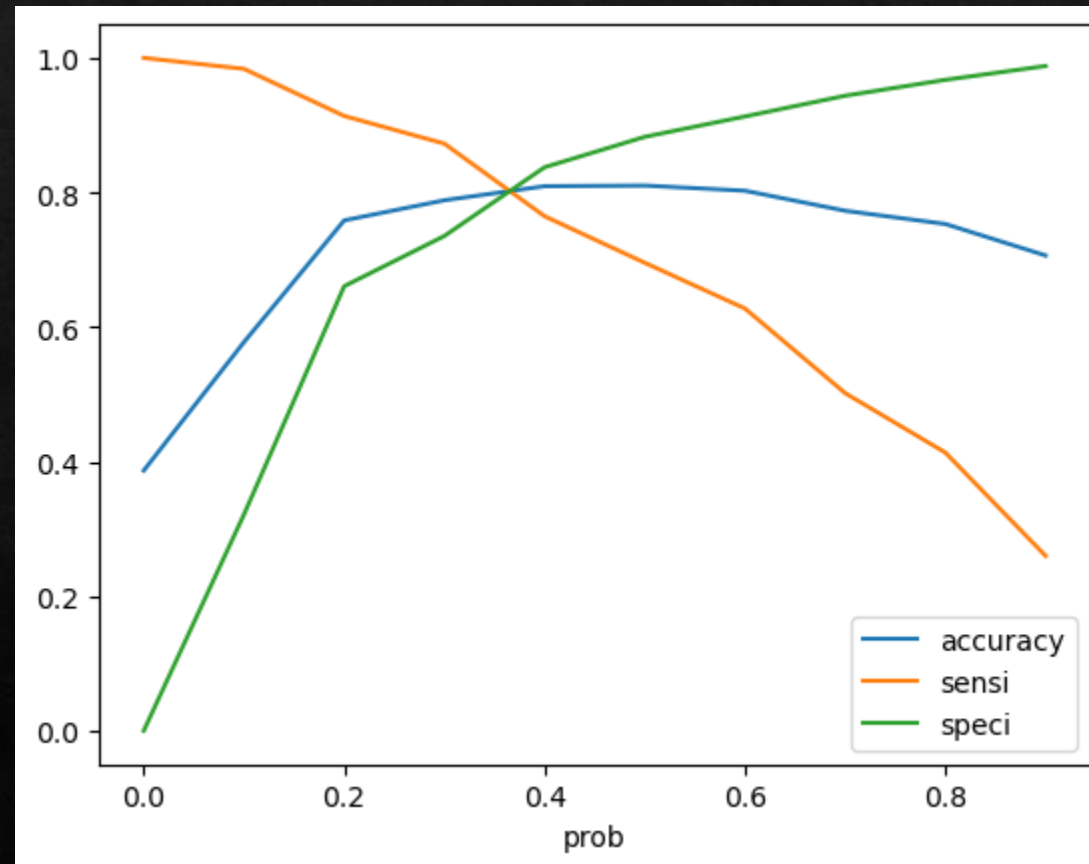
- Last Lead Activity

Correlation

Model Evaluation

- ROC Curve: 0.35 is trade-off between Precision and Recall.

Observation

- Train Data
  1. Accuracy: 81.02%
  2. Sensitivity: 69.54%
  3. Specificity: 88.26%

- Test Data
  1. Accuracy: 80.31%
  2. Sensitivity: 80.41 %
  3. Specificity: 80.02%

Conclusion

- We see that the conversion rate is 30-35% (close to average) for API and Landing page submission. But very low for Lead Add form and Lead import. Therefore we can intervene that we need to focus more on the leads originated from API and Landing page submission.

- We see max number of leads are generated by google / direct traffic. Max conversion ratio is by reference and website.

- Leads who spent more time on website, more likely to convert.

- Most common last activity is email opened. highest rate = SMS Sent. Max are unemployed. Max conversion with working professional.