

## Session Plan

### Feature Engineering

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#### Learning Objective

- To have a collaborative and interactive flipped classroom session to establish an understanding of the topics of the week through doubts clarification and hands on exercise.

#### Agenda of the session:

- Gauging learners' understanding on the topics of the week.
- Understanding the concepts clarity of the learners on:
  - Introduction to Feature engineering
  - Model tuning and Performance
  - Up sampling and down sampling
- Clarifying doubts.
- Case study hands on.
- Extended Doubts clearing, industry perspective and practices.
- Summary of the session's learning.

#### Structure of the Session:

<u>Duration</u>	<u>Topic</u>	<u>Details</u>
10 min	<ul style="list-style-type: none"> <li>• <b>Gauge learner's understanding</b></li> </ul>	<ul style="list-style-type: none"> <li>• Ask the learners in the group about the understanding of the week's topics.</li> <li>• Identify the important concepts majority of the group is facing doubts on.</li> </ul>
20 min	<ul style="list-style-type: none"> <li>• Concepts clarity</li> </ul>	<ul style="list-style-type: none"> <li>• Clarify the concepts on the doubts raised/identified.</li> </ul>
60 min	<ul style="list-style-type: none"> <li>• <b>Case Study</b> Hands on - credit dataset</li> </ul>	<ul style="list-style-type: none"> <li>• Use the case study provided to have a hands on session to demonstrate topics covered in the week. Explain the problem statement, attributes and the steps to follow.</li> <li>• Dataset used: credit data set</li> </ul>
25 min	<ul style="list-style-type: none"> <li>• <b>Extended Doubts Clearing</b> and <b>Industry perspective</b> discussion</li> </ul>	<ul style="list-style-type: none"> <li>• Use this time to clarify additional doubts.</li> <li>• Also, explain the industry practices as per your experience.</li> </ul>
5 min	<ul style="list-style-type: none"> <li>• Summarize the session</li> </ul>	<ul style="list-style-type: none"> <li>• Provide a summary of the session</li> </ul>