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Predictive Modeling for Categorical Targets Using IBM SPSS Modeler (v18.1.1)  
Information

**Length:** 8.0 Hours  
**Ref:** 0A0U8G □  
**Delivery method:** Classroom  
**Price:** AUD

Overview

This course focuses on using analytical models to predict a categorical field, such as churn, fraud, response to a mailing, pass/fail exams, and machine break-down. Students are introduced to decision trees such as CHAID and C&R Tree, traditional statistical models such as Logistic Regression, and machine learning models such as Neural Networks. Students will learn about important options in dialog boxes, how to interpret the results, and explain the major differences between the models.

Public

- Analytics business users who have completed the Introduction to IBM SPSS Modeler and Data Mining course and who want to become familiar with analytical models to predict a categorical field (yes/no churn, yes/no fraud, yes/no response to a mailing, pass/fail exams, yes/no machine break-down, and so forth).

Prerequisites

- Experience using IBM SPSS Modeler including familiarity with the Modeler environment, creating streams, reading data files, exploring data, setting the unit of analysis, combining datasets, deriving and reclassifying fields, and a basic knowledge of modeling.
- Prior completion of Introduction to IBM SPSS Modeler and Data Science (v18.1) is recommended.

Topics

- 1: Introduction to predictive models for categorical targets
- Identify three modeling objectives
  - Explain the concept of field measurement level and its implications for selecting a modeling technique
  - List three types of models to predict categorical targets
- 2: Building decision trees interactively with CHAID
- Explain how CHAID grows decision trees
  - Build a customized model with CHAID
  - Evaluate a model by means of accuracy, risk, response and gain

- Use the model nugget to score records

3: Building decision trees interactively with C&R Tree and Quest

- Explain how C&R Tree grows a tree
- Explain how Quest grows a tree
- Build a customized model using C&R Tree and Quest
- List two differences between CHAID, C&R Tree, and Quest

4: Building decision trees directly

- Customize two options in the CHAID node
- Customize two options in the C&R Tree node
- Customize two options in the Quest node
- Customize two options in the C5.0 node
- Use the Analysis node and Evaluation node to evaluate and compare models
- List two differences between CHAID, C&R Tree, Quest, and C5.0

5: Using traditional statistical models

- Explain key concepts for Discriminant
- Customize one option in the Discriminant node
- Explain key concepts for Logistic
- Customize one option in the Logistic node

6: Using machine learning models

- Explain key concepts for Neural Net
- Customize one option in the Neural Net node